GRAIN TRADE AUSTRALIA

Section 2 – WHEAT TRADING STANDARDS

2021/22 SEASON

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SECTION 1 INTRODUCTION

General

Since 1999 Grain Trade Australia (GTA) has on an annual basis reviewed, produced and published on behalf of industry Wheat Trading Standards (Standards) through its Standards Committee (Committee).

In order to provide a consistent message to both domestic industry and international buyers, GTA encourages input into development of these Standards. Additionally, we urge industry to use the Standards contained within this Manual as applicable when buying and trading Australian wheat.

Considerations to the Standards

This section of the Manual relating to wheat has been produced following the annual review by GTA of Standards. There are various sections of this Manual relating to Standards and associated procedures and industry is encouraged to take account of all relevant sections when applying these Standards to wheat bought and traded domestically or internationally.

The Grades referred to in this document are a combination of:

- Grades commonly introduced across the country on an annual basis and are generally the same in each State where wheat is grown or traded.
- Grades that may not be introduced every season or only introduced in a regional area. These grades may be created for various reasons including to meet the specific quality requirements of a customer, as specific variety segregations or to deal with specific quality issues with harvested grain in a localised area.

Industry should note the list of Grades in this Manual is not exhaustive.

Variations to Standards

Whilst the information in this Manual is current at time of publication, you will need to monitor the GTA Member Updates, the GTA website (www.graintrade.org.au) and other applicable information to ensure that you are aware of the changes to the Standards and the impact on your own trading arrangements.

Varieties

Approved and recommended varieties to be grown and acceptable within each class are listed within this document. The approval of each variety within a class is determined by a group external to GTA.

Variety integrity and correct variety assessment is an integral part of the grain classification and Standards application process. GTA endorses the variety classifications as listed in this Manual and encourages all industry to follow the approved variety Masterlist as listed in this Manual where relevant.

Changes to variety classifications may occur at any time during the season following the publication of this Manual. As these changes will not necessarily be included in this Manual industry should implement their own procedures for monitoring the variety classification process.

Timing of Standards Development

The Standards outlined in this Manual are applicable for the entire season of 2021/22. Standards apply to grain assessed as per these Standards from 1 August 2021 to 31 July 2022.

SECTION 2 DEFINITIONS

The following Defect definitions are to be read in conjunction with the images displayed in the GTA Visual Recognition Standards Guide for Grain Commodity Sampling and Assessment located on the GTA website at www.graintrade.org.au. The images in that document display the minimum and/or maximum coverage and attributes of the Defective Grain types as defined in these Standards.

As Is

In terms of sample assessment, is the representative sample as taken from the load tendered for delivery without any interference to the sample. That is, there has been no cleaning or screening of the sample prior to analysis. The sample may also be referred to as a "dirty" sample.

Bread Wheat

This refers to those wheats of bread making varieties (*Triticum aestivum*) which contaminate durum deliveries, and for which a specific tolerance applies. Bread wheat can be visually distinguished from durum by the fine hairs on the brush end which are usually only associated with bread wheat varieties.

Cereals

In the context of these Standards, cereals refer to wheat, barley, oats, cereal rye, triticale, sorghum, maize and rice.

Cereal Smuts

Cereal Smuts include all smuts on all cereal grains. This includes but is not limited to:

Ball Smut

Are those infected by the spores of the fungus *Tilletia caries*. They have the appearance of pale, plump, slightly oversized grains. These grains are easily crushed between the fingers and contain a mass of black powder (spores) with a distinctive rotten egg smell. This may also be called Stinking Smut or Bunt.

Covered Smut

Covered smut is caused by various fungi of the *Ustilago spp.*

Loose Smut

Loose smut is the result of the fungus *Ustilago tritici* developing in the head during the growing phase. The tolerance applies to the number of blackened pieces of backbone in the sample.

Chemicals not Approved for Wheat

Refers to the following:

- Chemicals used on the growing crop in the State or Territory where the wheat was grown in contravention of the label.
- Chemicals used on stored wheat in contravention of the label.
- Chemicals not registered for use on wheat.
- Wheat containing any artificial colouring, pickling compound or marker dye commonly used during crop spraying operations that has stained the wheat.
- Wheat treated with or contaminated by Carbaryl, Organochloride chemicals, or diatomaceous earth.

- Chemical residues in excess of Australian Commonwealth, State or Territory legal limits (see Maximum Residue Limit and National Residue Survey).

For further information on this topic, refer to the document "Australian Grains Industry Post Harvest Chemical Usage Recommendations and Outturn Tolerances 2021/22" - see GTA website http://www.graintrade.org.au/nwpgp.

Contaminants

Contaminants are defined individually in these Standards and consist of the following:

- Bread wheat (in durum deliveries only)
- Cereal Ergot
- Chemicals not Approved for Wheat
- Chemicals in excess of the MRL
- Earcockle
- Earth
- Foreign Seeds
- Insects – Large
- Insects – Small
- Loose Smut
- Objectionable Material
- Other Foreign Material
- Pickling Compounds or Artificial Colouring
- Ryegrass Ergot
- Sand
- Snails
- Stones
- Stored Grain Insects and Pea Weevil – Live

Contaminants may be referred to as foreign material, being all material other than whole or broken seeds or hulls of the wheat being assessed.

Defective Grains

Defective grains refer to wheat that has been damaged to some degree, as outlined in these Standards. They include the following:

- Distorted
- Dry Green or Sappy
- Field Fungi
- Insect Damaged
- Non vitreous kernels (Durum only)
- Over-Dried Damaged
- Pink Stained
- Severely Damaged
- Smut
- Sprouted
- Stained
- White Grain Disorder / Head Scab

An individual kernel may only have one defect, being the defect type with the tightest tolerance in the Standard.

Distorted

Grains generally have the appearance of full sized kernels with little or no structure on both dorsal sides of the grain, and are typically grey to blue in colour.

The definition does not include pinched grain.

This definition is to be read in conjunction with the photo in the Visual Recognition Standards Guide which depicts the minimum affected standard for a grain to be classified as Distorted.

Dry Green or Sappy

Dry Green grains are those whose surface is distinctively green. Dry green grains are usually dry and hard.

Sappy grains are generally soft when pressed. They may or may not be green. Any level of sappiness is classified as defective.

This definition is to be read in conjunction with the photo in the Visual Recognition Standards Guide which depicts the minimum affected standard for a grain to be classified as Dry Green or Sappy.

Durum

Durum includes grains of the species *Triticum durum*.

Vitreous

Vitreous in the context of durum includes grains of a uniform colour which are bright and semi translucent in appearance and which exhibit no trace of mottling. Distorted grains, Dry Green grains, grains of other cereals and grains of the species *Triticum aestivum* are also not considered to be vitreous grain for the purposes of this definition. Grains that display any signs of sprouting are not automatically classified as non vitreous. Instead, these grains are classified depending on their appearance.

Mottled

Mottled grains in the context of durum are those that contain opaque, starchy areas within an otherwise vitreous grain. Mottled areas are normally of a dull yellow appearance and are easily identified visually against the amber coloured background of the otherwise vitreous grain.

Non-Vitreous

Non-vitreous grains in the context of durum include Mottled grains, Distorted grains, Dry Green grains, grains of other cereals and grains of the species *Triticum aestivum*. Grains are assessed as non-vitreous irrespective of the size of any mottled area that may be present. Grains that are entirely starchy and opaque are non-vitreous.

Bleached

Bleached in the context of durum are those grains that have become dull and pale, or "washed out in appearance" as a result of pre harvest weather damage. These grains may appear opaque and therefore non vitreous however this may be purely an external effect. Bleached grains may still be classified as vitreous providing there is no evidence of mottling.

Earcockle

Earcockles are darkened seed-like nematode galls. These galls displace kernels in diseased heads and are caused by infection from the nematode *Anguina tritici*. The tolerance applies to the number of galls in the sample.

Earth

Earth is defined as a clod of dirt, being 5mm or less in diameter.

Ergot

Ergot is a purplish black fungal body, which contaminates cereal and ryegrass kernels when they are infected by the fungus *Claviceps purpurea*.

Ryegrass Ergot

Ryegrass ergot is *Claviceps purpurea* infection of ryegrass kernels. Tolerances are defined in terms of overall length in cm when pieces found in the sample are aligned end on end.

Cereal Ergot

Cereal ergot is *Claviceps purpurea* infection of any cereal kernels. Tolerances are defined in terms of the total number of pieces or whole affected kernels of any cereal found in the sample.

Falling Number

Falling Number is a grain quality test which measures the degree of weather damage in wheat and is based on the unique ability of alpha amylase (an enzyme released during seed germination) to liquefy a starch gel. Strength of the enzyme is measured by Falling Number defined as the time in seconds required to stir plus the time it takes to allow the stirrer to fall a measured distance through a hot aqueous flour or meal gel undergoing liquefaction.

The Falling Number test is an alternative to visual assessment for sprouted grains. Where sprouted grain is detected, it is recommended that load by load testing using the Falling Number unit occur.

The Falling Number test may be conducted at any time, even if no visual sprouting is evident. Where conducted, the Falling Number test always overrides the visual grain assessment.

Field Fungi

Field Fungi refers to individual kernels where more than half the seed coat is discoloured. The visible discolouration of affected grains can vary from dark grey, brown to black in colour.

Grains that are approximately 50 percent or less discoloured are to be classified as Stained.

This definition is to be read in conjunction with the photo in the Visual Recognition Standards Guide which depicts the minimum affected standard for a grain to be classified as Field Fungi.

Foreign Seeds

Foreign Seeds are defined as seeds of any plant, other than the species of crop being tendered for delivery. Foreign Seeds are classified into two broad groups; those with specific tolerances listed in the Standards, and those without. The latter are termed “Small Foreign Seeds”.

Seeds with specific tolerances have been categorised into several groups. These are:

Type 1

Colocynth *(Citrullus colocynthis)*
Double Gees / Spiny Emex / Three Cornered Jack *(Emex australis*)
Jute *(Corchorus olitorius*)
Long Head Poppy *(Papaver dubium*)
Mexican Poppy *(Argemone mexicana*)
Opium Poppy *(Papaver somniferum*)
Poppy (Field) *(Papaver rhoeas)*
Poppy (Horned) *(Glaucium flavum)*
Wild Poppy *(Papaver hybridum)*
Parthenium Weed *(Parthenium hysterophorus*) *
New Zealand Spinach *(Tetragonia tetragonoides)*

* QLD only. A NIL tolerance applies in NSW/VIC/SA

Type 2

Castor Oil Plant *(Ricinus communis)*
Coriander *(Coriandrum sativum*)
Crow Garlic/Wild Garlic *(Allium vineale*)
Darling Pea *(Swainsona spp*)
Peanut seeds and pods *(Arachis hypogaea)*
Ragweed *(Ambrosia sp)*
Rattlepods *(Crotalaria sp)*
Starburr *(Acanthospermum hispidum*)
St. Johns Wort *(Hypericum perforatum)*

Type 3a

Bathurst Burr *(Xanthium spinosum*)
Bellvine (*Ipomoea plebeia*)
Branched Broomrape *(Orobanche ramosa*)
Bulls Head / Caltrop / Cats Head *(Tribulus terrestris*)
Cape Tulip *(Homeria spp)*
Cottonseed *(Gossypium spp*)
Dodder *(Cuscuta spp*)
Noogoora Burr *(Xanthium pungens*)
Thornapple *(Datura spp)*

Type 3b

Vetch (Commercial) *(Vicia spp)*
Vetch (Tare) *(Vicia sativa*)

Type 3c

Heliotrope (Blue) *(Heliotropium amplexicaule*)
Heliotrope (Common) *(Heliotropium europaeum)*

Note included in this Type are tolerances for seeds or pods.

Type 4

Bindweed (Field) *(Convolvulus arvensis*)
Cutleaf Mignonette seeds *(Reseda lutea)*
Darnel (Drake Seed) *(Lolium temulentum*)
Hexham Scent / King Island Melilot *(Melilotus indicus)* - only acceptable if no tainting odour is present
Hoary Cress *(Cardaria draba*)
Mintweed *(Salvia reflexa*)
Nightshades *(Solanum spp)*
Paddy Melon *(Cucumis myriocarpus)*
Skeleton Weed *(Chondrilla juncea*) *
Variegated Thistle *(Silybum marianum)*

Note: *Skeleton Weed Flowers (Seed Heads) are included in Unmillable Material above the Screen.
Any Cutleaf Mignonette Pods are to be broken open and the seeds counted.

Type 5

Knapweed (Creeping/Russian) *(Acroptilon repens)*
Sesbania Pea *(Sesbania cannabina)*
Paterson's Curse / Salvation Jane *(Echium plantagineum)*

Type 6

Colombus Grass *(Sorghum almum*)
Johnson Grass *(Sorghum halepense*)
Saffron Thistle *(Carthamus lanatus)*

Type 7a

Adzuki Beans *(Vigna angularis)*
Broad Beans (*Vicia faba*)
Chickpeas *(Cicer arietinum)*
Corn (Maize)(*Zea mays*)
Cowpea *(Vigna unguiculata)*
Faba Beans *(Vicia faba*)
Lentils *(Lens culinaris*)
Lupin *(Lupinus spp*)
Medic Pods (*Medicago spp*)
Peas (Field) *(Pisum sativum*)
Safflower *(Carthamus tinctorius)*
Soybean *(Glycine max*)
Sunflower *(Helianthus annuus)*

And any other seeds or pods greater than 5mm in diameter. Includes all Onion Weed pods regardless of size.

Type 7b

Barley (2 row) *(Hordeum distichon*)
Barley (6 row) *(Hordeum vulgare)*
Bindweed (Australian) *(Convolvulus erubescens)*
Bindweed (Black) *(Polygonum convolvulus*)
Brome Grass (*Bromus spp*)
Carrot Weed (*Daucus carota*)
Durum *(Triticum durum*)
Red / Spring Feed Wheats (Various)
Oats (Black or Wild) *(Avena fatua*) *
Oats (Sand) *(Avena strigosa*)
Oats (Common) *(Avena sativa)*
Rice *(Oryza sativa*)
Rye (Cereal) *(Secale cereale*)
Ryegrass on Stalk *(Lolium spp)*
Sorghum (Grain) *(Sorghum bicolor)*
Triticale *(Triticosecale spp)*
Turnip Weed *Pods (Rapistrum rugosum)* – regardless of size

Type 7b includes any other Foreign Seeds not specified in Types 1 - 7a or elsewhere in Small Foreign Seeds or Unmillable Material Above the Screen.
* Individual seeds to be counted if present in a cluster.

Note that Wild Radish pods and Milk Thistle pods are not classified as Foreign Seeds but are defined as Unmillable Material Above the Screen. All other Foreign Seed Pods not listed and that are not greater than 5mm in diameter (Type 7a) are included as Unmillable Material Above the Screen, whether whole pods or part thereof.

Grade

Grade refers to the classification given to the load after it has been sampled and tested and has been classified according to these Standards.

The following lists the more commonly used grades (note this is not a comprehensive list of grades):

AGP1	Various Varieties except FEED (General Purpose Grade)
ANW1	Australian Standard White Noodle Varieties
ANW2	Australian Standard White Noodle Varieties
APH1	Australian Prime Hard Varieties
APH2	Australian Prime Hard Varieties
APW1	Australian Premium White Varieties
APW2	Australian Premium White Varieties
APWN	Australian Premium White Noodle Varieties
ASW1	Australian Standard White Varieties
ASWS	Australian Standard White Soft Varieties
AUH2	Australian Hard Varieties (Utility Grade)
AUN1	Australian Utility Noodle Varieties (ANW, ASF1 varieties only)
AUW1	Various Varieties except FEED (Utility Grade)
DR1	Australian Durum Varieties
DR2	Australian Durum Varieties
DR3	Australian Durum Varieties
FED1	Various Varieties (Feed Grade)
H1	Australian Hard Varieties
H2	Australian Hard Varieties
HPS1	Australian Hard Varieties (High Screenings, High Protein Grade)
SFE1	Australian Soft Varieties
SFE2	Australian Soft Varieties
SFT1	Australian Soft Varieties
SFT2	Australian Soft Varieties
SFW1	Various varieties (Stockfeed Wheat Grade)
SFWR	Red Wheat Varieties
SGP1	Australian Soft General Purpose Varieties
SGP2	Australian Soft General Purpose Varieties

The Grade into which a load is classified shall be determined by its variety, and then by the various physical quality specifications detailed in these Standards.

Hit and Miss

In relation to screen slots, refers to the sequence of slots on the screen when viewing along a row facing the direction of the slots. That is, the screen is made of a series of slots and “no slots” in sequence equidistant.

Insect Damaged

Any visible insect damage penetrating through to the white endosperm is to be classified as defective.

This definition is to be read in conjunction with the photo in the Visual Recognition Standards Guide which depicts the minimum affected standard for a grain to be classified as Insect Damaged.

Insects – Large and Small

These are insect contaminants of grain that do not cause damage to stored grains. There are separate tolerances for Large and Small Insects. They include but are not restricted to:

Large Insects	Small Insects
Desiantha Weevil (*Desiantha spp*)	Aphids
Grasshoppers, Locusts	Minute Mould Beetle (Corticaria spp)
Ladybirds	Mites (*Acarina spp.*)
Pea Weevil (*Bruchus pisorum*) (dead only)	Stored Grain Insects (dead only)
Sitona Weevil (*Sitona spp*)	
Wood Bugs	

Tolerances apply to either Live or Dead whole Insects for most species, however note for Live Pea Weevil and Live Stored Grain Insects, a nil tolerance applies – refer to the definition of Stored Grain Insects.

For all Insects, pieces are included in Other Foreign Material.

Load

A load is a bulk unit tendered for delivery.

Maximum Residue Limits

Maximum Residue Limits (MRLs) are the maximum amount of a chemical residue or its metabolite that is legally permitted on or in an agricultural commodity. The Australian Pesticides and Veterinary Medicines Authority (APVMA) sets MRLs. These MRLs are set at levels which are not likely to be exceeded if the agricultural or veterinary chemicals are used in accordance with approved label instructions and can be found on the ComLaw website at https://www.legislation.gov.au/Series/F2019L01105

Australian MRLs may differ significantly from those prescribed by foreign countries and the International Codex Alimentarius Commission. Consequently, grain exporters must be aware of MRLs of importing countries and which countries accept Codex MRLs. Foreign country MRLs may be accessed directly from foreign government websites.

Industry should always confirm the accuracy of these MRL listings through their own means.

Moisture

This is the amount of water present in the sample as determined by the appropriate analytical method.

N/A

In these Standards means not applicable. That is, no minimum or maximum tolerance exists. The quality parameter may exist at unlimited levels in the sample.

National Residue Survey

The National Residue Survey (NRS) gathers information and supplies chemical residue results on domestic and export grain commodities. The NRS results show Australian grain is of a high quality with respect to residues and contaminants. All grain exporters, container packers, bulk export terminal operators, Bulk Handling Companies and processors are encouraged to actively participate in the NRS grains residue monitoring program. Contravention of an overseas MRL may cause the rejection of cargoes resulting in severe financial cost being incurred and potentially jeopardising Australian grain into that market. Information about the NRS is located at: http://www.agriculture.gov.au/ag-farm-food/food/nrs.

Nil

Nil in these Standards means a level of zero in a half litre sample representative of the entire load (or parcel of grain being assessed) and/or not detected in the load or in/on the delivery vessel at any stage of the receival process.

Objectionable Material

Objectionable Material refers to objectionable foreign matter that may or may not be otherwise stated in these Standards which has the ability to degrade the hygiene of wheat, become a food safety issue of concern or has a commercially unacceptable odour. This includes but is not limited to the following:

Animal Material

This refers to meat meal, bone meal, poultry offal, meal or any other animal proteins. Animal Material also includes carcasses of dead animals such as rats and mice.

Odour

A commercially unacceptable Odour is defined as a sour, musty or other objectionable odour emanating from the wheat which is not natural or normally associated with wheat. Odour may be caused by various means which may or may not be physically discernable in the sample being assessed.

Stick / Stubble

A Stick is defined as ligneous material with dimensions of greater than 3cm in length and 1cm in diameter. Smaller material is classified as Screenings or Unmillable material above the screen.

Tainting Agents

A Tainting Agent is any contaminant that imparts a smell or taint to wheat. It includes but is not limited to plant parts and seeds of *Eucalyptus spp*.

Water

The addition of water to grain prior to delivery is a prohibited practice.

Other

This refers to any other commercially unacceptable contaminant such as animal excreta, glass, concrete, fertiliser, metal, stones or other contaminants greater than the tolerance or specifications as allowed in the Standards.

Other Foreign Material

Refers to other material not otherwise specified as having a tolerance in these Standards that has the ability to degrade the quality of wheat. It includes, but is not limited to the following:

Fine Material

This refers to material such as dust and soil (<0.06mm in diameter) and minerals.

Snail Shell and Stored Grain Insects

This includes pieces of Snail Shell (less than half an entire shell), pieces of Stored Grain Insects (not whole) and pieces of Insects Large and Small.

Other

This includes any other non-vegetative material not listed.

Over-Dried Damaged

This refers to defective grains caused by overheating during artificial drying. It can be detected where grain is hot, exhibits an unusual odour, exhibits significant sprouting (greater than 10%) or other evidence of weather damage but no corresponding reduction in Falling Number has occurred. Loads affected in this way should only be classified as the maximum grade of Feed. This definition includes a maximum temperature of grain tendered for delivery of 50^{0}C for all Grades including Feed.

Pea Weevil

Pea Weevil refers to all life stages of insects of the species *Bruchus pisorum*.

Note that a separate tolerance applies to Live and Dead Pea Weevils:

Live

- A nil tolerance applies to all live Pea Weevils.

Dead

- Dead Pea Weevil are included in the definition for Insects – Large.
- Pieces of Pea Weevils are classified as Other Foreign Material.

As Pea Weevils are commonly found inside field pea seeds, it is recommended that a number of field peas present in a load of grain should be broken and assessed for the presence of this insect.

Pickling Compounds or Artificial Colouring

Grains contaminated in this way may be identified by an unnatural surface colour and/or a colour that rubs off. Any grains that are artificially coloured regardless of intensity, coverage or colour are defective.

Pink Stained

This is a grain that has a distinct pink discolouration. Grains that are pink but also contain a white to light grey fungal like discolouration over more than approximately 50% of the seed coat surface are to be classified as "White Grain Disorder/Head Scab".

This definition is to be read in conjunction with the photo in the Visual Recognition Standards Guide which depicts the minimum affected standard for a grain to be classified as Pink Stained.

Protein

Proteins (amino acids arranged in a linear chain) form a large component part of grains. These structures are responsible for the quality expressions in end use products made from wheat.

Sand

A grain of sand is defined as a particle of unconsolidated (loose), rounded to angular rock fragment or mineral grain larger than 0.06mm that falls below the 2.0mm screen during the screening process. Includes Earth or Stones within these dimensions. Smaller material is classified under Other Foreign Material. Material that is retained above the 2.0mm screen is classified as Earth or Stones.

Screenings

This is the total material passing through a 2.00mm screen after a sample of grain is subjected to the screening process. It includes Small Foreign Seeds.

Severely Damaged

Damage to the grain causing it to become severely discoloured. A grain exhibits one or more of the following characteristics:

Heat Damaged or Burnt

Heat damaged or burnt refers to those kernels that have become severely discoloured. Affected grains appear reddish brown, dark brown or in severe cases, blackened.

Mould

Affected grains appear discoloured and visibly affected by mould.

Other Serious Visual Defects

Refers to those kernels that have become discoloured and / or have a serious visual defect that is not otherwise listed in these Standards. Affected grains may have a range of visual appearances.

Tolerances apply to only those grains that remain above the screen after a sample of grain is subjected to the screening process. Grains falling below the screen are to be assessed as Screenings.

Does not include Field Fungi affected grains, refer to Field Fungi.

This definition is to be read in conjunction with the photo in the Visual Recognition Standards Guide which depicts the minimum affected standard for a grain to be classified as Severely Damaged.

Small Foreign Seeds

These are all small foreign seeds in the material which have fallen below the screen during the screening process, except those specifically mentioned in the Foreign Seeds definition. A list of the more common Small Foreign Seeds is below. Note that not all Small Foreign Seeds may be listed.

Common Name	Scientific Name
Amsinckia	*Amsinckia spp*
Australian Phalaris	*Phalaris aquatica*
Ball Clover	*Trifolium glomeratum*
Bladder Soapwort	*Vaccaria hispanica*
Broomrape (clover/common)	*Orobanche minor*
Burrweed (Yellow)	*Amsinckia spp*
Canary Grass (Australian)	*Phalaris aquatica*
Canary Grass (Lesser)	*Phalaris minor*
Canary Grass (Wild)	*Phalaris canariensis*
Canola	*Brassica rapa*
Celery (Slender)	*Apium leptophyllum*
Charlock	*Sinapis arvensis*
Clover (Ball)	*Trifolium glomeratum*
Clover Broomrape (common)	*Orobanche minor*
Cockspur (Maltese)	*Centaurea melitensis*
Dock	*Rumex spp*
Evening Primrose	*Oenethera stricta*
Fat Hen	*Chenopodium album*
Fescue	*Festuca spp*
Hares Ear	*Conringia orientalis*
Hedge Mustard	*Sisymbrium officinale*
Horehound	*Marrubium vulgare*
Juncea Canola	*Brassica juncea*
Knotweed	*Polygonum aviculare*
Lesser Canary Grass	*Phalaris minor*
Lettuce	*Lactuca spp*
Lucerne	*Medicago sativa*
Maltese Cockspur	*Centaurea melitensis*
Medics	*Medicago spp*
Milk Thistle (Seeds)	*Sonchus oleraceus*

Common Name	Scientific Name
Mustard (Wild)	*Sisymbrium spp*
Mustard (Indian Hedge)	*Sisymbrium orientale*
Paradoxa Grass (Seeds)	*Phalaris paradoxa*
Peppercress	*Lepidium spp*
Phalaris (Australian) (Seeds)	*Phalaris aquatica*
Radish (Wild) (Seeds)	*Raphanus raphanistrum*
Rapeseed	*Brassica rapa*
Ryegrass	*Lolium spp*
Sage (Wild)	*Salvia verbenaca*
Saltbush	*Atriplex spp*
Slender Celery	*Apium leptophyllum*
Sorrel	*Rumex acetosella*
Sowthistle	*Sonchus spp*
Thistle Milk (Seeds)	*Sonchus oleraceus*
Turnip (Mediterranean)	*Brassica tournefortii*
Turnip (Wild)	*Brassica rapa*
Urochloa Grass	*Urochloa panicoides*
Verbena	*Verbena spp*
Wild Canary Grass	*Phalaris canariensis*
Wild Radish (Seeds)	*Raphanus raphanistrum*
Wild Sage	*Salvia verbenace*
Wild Turnip	*Brassica rapa*
Wireweed	*Polygonum aviculare*
Yellow Burrweed	*Amsinckia spp*

Snails

This refers to whole or substantially whole (more than half) Snail shells or bodies, irrespective of size. These include but are not limited to:

- Common White Snail (*Cernuella virgata)*
- White Italian Snail (*Theba pisana)*
- Pointed Snail (*Cochlicella actua)*
- Small Pointed Snail (*Cochlicella abarbara)*
- Any other snail

Pieces of Snail Shell or bodies that are less than half an entire shell or body are classified under Other Foreign Material.

Sprouted

Sprouted grains are those in which the covering of the germ is split. It includes early and any further advanced stage of growth of the germ.

Kernels exhibiting early stages of sprouting are those where the covering of the germ is split, but without further development of the shoot.

Grains that have had the germ knocked off or scalloped out due to header damage or grains with pin holes are not included in this definition.

This definition is to be read in conjunction with the photo in the Visual Recognition Standards Guide which depicts the minimum affected standard for a grain to be classified as Sprouted.

Standards

Standards means all the test parameters listed in this Manual. Loads presented for delivery or samples to be assessed under these Standards must be analysed for all the parameters listed in the Standards, unless otherwise specified in individual Storage and Handling Agreements.

Stained

The definition includes kernels that display one or more of the following:

- A distinct dark brown to black discolouration on the germ end that, in severe cases, may progress to other parts of the grain such as the crease. These grains are commonly referred to as "black point" or "black tip". Discolouration must be more than 50% of the germ in length to be classified as defective. Discolouration equal to or less than 50% of the germ in length is classified as sound.

- Includes grains that show streaking anywhere on the surface of the grain, and brush-end staining beyond the minimum that does not cover more than approximately 50% of the entire grain surface.

- Adherence of contaminants such as soil, dust, plant parts and other material, commonly referred to as "Staining due to moist plant material".

For grains showing more than approximately 50% coverage of the entire grain surface refer to "Field Fungi".

This definition is to be read in conjunction with the photo in the Visual Recognition Standards Guide which depicts the minimum affected standard for a grain to be classified as Stained.

Stone

A Stone or gravel is defined as a lump or mass of hard consolidated mineral matter that is retained above the 2.0mm screen during the screening process. Material falling through the 2.0mm screen is defined as Sand.

Note a maximum weight of 4.0g applies to the total weight of all Stones per 2.5L retained above the 2.0mm screen.

Stored Grain Insects

These are insects which cause damage to stored grain and the tolerance applies to all life stages of the insect.

These include the following:

Common Name	Scientific Name
Bean Weevil	*Acanthoscelides obtectus*
Flour mite	*Acarus siro*
Murky meal caterpillar	*Aglossa caprealis*
Foreign grain beetle	*Ahasverus advena*
Lesser mealworm	*Alphitobius diaperinus*
Pea and bean beetle – Southern cowpea weevil	*Callosobruchus chinensis*
Pea and Bean Weevil – Cowpea weevil	*Callosobruchus maculatus*
Cowpea weevil	*Callosobruchus phaseoli*
Dried fruit beetle	*Carpophilus dimidiatus*

Common Name	Scientific Name
Dried fruit beetle	*Carpophilus hemipterus*
Dried fruit beetle	*Carpophilus ligneus*
Dried fruit beetle	*Carpophilus obsoletus*
Rice Moth	*Corcyra cephalonica*
Flat Grain Beetle	*Cryptolestes spp*
White-shouldered house moth	*Endrosis sarcitrella*
Tropical Warehouse Moth	*Ephestia cautella*
Cacao moth/warehouse moth	*Ephestia elutella*
Mediterranean flour moth	*Ephestia kuehniella*
Broad-horned flour beetle	*Gnatocerus cornutus*
Tobacco beetle/cigarette beetle	*Lasioderma serricorne*
Long-headed flour beetle	*Latheticus oryzae*
Spider beetle black	*Mezium affine*
Spider beetle	*Mezium americanum*
Mottled grain moth	*Nemapogon granella*
Merchant grain beetle	*Oryzaephilus mercator*
Saw Tooth Grain Beetle	*Oryzaephilus surinamensis*
Small-eyed flour beetle	*Palorus ratzeburgi*
Depressed flour beetle	*Palorus subdepressus*
Indian Meal Moth	*Plodia interpunctella*
Psocids/Book lice	*Psocoptera sp*
White-marked spider beetle	*Ptinus fur*
Australian spider beetle	*Ptinus tectus*
Meal moth	*Pyralis farinalis*
Lesser Grain Borer	*Rhyzopertha dominica*
Granary Weevil	*Sitophilus granarius*
Rice Weevil	*Sitophilus oryzae*
Maize Weevil	*Sitophilus zeamais*
Angoumois Grain Moth	*Sitrotroga cerealella*
Yellow mealworm	*Tenebrio molitor*
Dark mealworm	*Tenebrio obscurus*
Cadelle	*Tenebroides mauritanicus*
Rust-red Flour Beetle	*Tribolium castaneum*
Confused Flour Beetle	*Tribolium confusum*
Warehouse Beetle	*Trogoderma variable*
Hairy fungus beetle	*Typhaea stercorea*

Note that a separate tolerance exists for dead and live Stored Grain Insects.

Live

- A nil tolerance applies to all live Stored Grain Insects.

Dead

- Dead Stored Grain Insects are included in the definition for Insects – Small.
- Pieces of Stored Grain Insects are classified as Other Foreign Material.

Temperature - Maximum

The maximum temperature of grain tendered for delivery when sourced direct from a grain dryer is 35^{0}C for all Grades.

Test Weight

Test Weight is a measure of the density of grain.

Unmillable Material Above the Screen

This consists of whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods, Skeleton Weed Flowers (Seed Heads), other seedpods and other light material which

remains above the 2.00mm screen after a sample of grain is subjected to the screening process. It excludes contaminants for which tolerances have been stated in these Standards.

For the category of Unmillable Material above the screen, if the weed seed listed in this category (i.e., wild radish pods, milk thistle pods) falls through a sieve then it is classified as Screenings as opposed to Unmillable Material above the screen.

It includes pieces of Stick / Stubble that are not defined as Objectionable Material i.e., that are less than 3cm in length and 1cm in diameter.

Chaff is defined as the protective material surrounding the mature seed prior to thrashing or harvesting. Backbone is the material to which seeds are attached to the plant stem.

Variety

This is the next lowest level taxonomic rank of a plant below that of the term "species". Wheats of differing varieties have differing genetic compositions which may endow them with differing agronomic characteristics, and/or differing end product quality characteristics. For this reason, varieties are best segregated into groups which have similar quality characteristics and/or are best suited to particular end product uses.

Variety Masterlist

This list designates the varietal group into which each variety may be assigned, for each of the four geographical crop growing zones of Australia. The varietal zones designated by geographical region are:

Northern Classification Zone
South Eastern Classification Zone
Southern Classification Zone
Western Classification Zone

The Variety Masterlist appears in Section 4 of these Standards.

Variety Restrictions

Restrictions apply to the varieties able to be received into each grade. Refer to the Variety Masterlist for the maximum classification of each variety.

Visual Recognition Standards Guide

The Visual Recognition Standards Guide (VRSG) for Wheat contains a range of photographs and illustrations to supplement the wheat Standards as outlined in this booklet. The most recent VRSG for wheat was released in August 2021.

The Defective Grain definitions listed in this Standards Booklet are to be read in conjunction with the images displayed in the VRSG. The images in that document display the minimum and/or maximum coverage and attributes of the Defective Grain types as defined in these Standards.

Wheat

Wheat includes grains of the species *Triticum aestivum* (bread wheat), *Triticum tauschii* (soft wheat) and *Triticum durum* (durum).

White Grain Disorder / Head Scab

Grains appear white to light grey but may also contain a pink discolouration. Grains are only to be classified as "White Grain Disorder / Head Scab" if the discolouration is over more than approximately 50% of the seed coat surface. If the discolouration is approximately 50% or less of the seed coat surface, grains may be classified as Sound.

Grains may also appear flaky with a white discolouration or resemble tombstones.

This definition is to be read in conjunction with the photo in the Visual Recognition Standards Guide which depicts the minimum affected standard for a grain to be classified as White Grain Disorder / Head Scab.

SECTION 3 GRAIN QUALITY STANDARDS

The following tables represent the grades of wheat as defined in this Manual.

To fully understand and accurately implement the wheat Standards, reference should be made to other relevant sections in this Manual, including:

- Definitions
- Variety Masterlist
- Methods & Procedures
- Reference Materials such as the Visual Recognition Standards Guide

Other sections of the GTA Standards Manual should also be perused for general guidance on activities associated with implementation of these Standards.

As stated previously, the following Standards are applicable at the time of publishing of this Manual. Variations and new Grades may exist and industry is encouraged to keep updated with changes via reviewing the GTA website and other relevant industry information sources.

Commodity: Wheat		**Season: 2021/22**	
Grade: APH1™		**Standard Reference No.: CSG-110**	
QUALITY PARAMETER	**SPECIFICATION**	**COMMENT**	
Variety Restrictions	Yes	Approved varieties only	
Protein Min (%)	14.0	N X 5.7 @ 11% Moisture Basis	
Protein Max (%)	n/a		
Moisture Max (%)	12.5		
Test Weight Min (kg/hl)	76.0		
Unmillable Material Above the Screen Max (% by weight)	0.6	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods, Skeleton Weed Flowers (Seed Heads) or other seedpods not otherwise listed. Excludes contaminants where tolerances already exist	
Screenings Max (% by weight)	5.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
Falling Number Min (sec)	350	Falling Number result overrides the visual assessment for Sprouted grains	
Defective Grains Max - (% by count, 300 grain sample [500 grain sample for WA], unless otherwise stated)			
Sprouted	Nil	Distorted	1.0
Stained	5.0	Severely Damaged (count per half litre, grain remaining above the screen)	1.0
Pink Stained	2.0	All Smuts except Loose Smut (entire load)	Nil
White Grain Disorder / Head Scab	1.0	Insect Damaged	1.0
Field Fungi (count per half litre)	10.0	Over-Dried Damaged	Nil
Dry Green or Sappy	1.0		
Foreign Seed Contaminants Max - (count of seeds in total per half litre, unless otherwise stated)			
Type 1 (individual seeds)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Head Poppy, Mexican Poppy, Opium Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (QLD only)	
Type 2	Nil	Castor Oil Plant, Coriander, Crow Garlic/ Wild Garlic, Darling Pea, Parthenium Weed (NSW/VIC/SA), Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3a	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple	
Type 3b	4	Vetch (Tare), Vetch (Commercial)	
Type 3c	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4	20	Bindweed (Field), Cutleaf Mignonette, Darnel (Drake Seed), Hexham Scent/Meliot (only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Sesbania Pea, Patterson's Curse/ Salvation Jane	
Type 6	10	Colombus Grass, Johnson Grass, Saffron Thistle	
Type 7a	1	Adzuki Beans, Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Medic Pods, Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter. Includes Onion Weed Pods regardless of size	
Type 7b	50	Barley (2 & 6 row), Bindweed (Australian), Bindweed (Black), Brome Grass, Carrot Weed, Durum, Red/Spring Feed Wheats, Oats (Black/Wild), Oats (Sand), Oats (Common), Rice, Rye (Cereal), Ryegrass on Stalk, Sorghum (Grain), Triticale, Turnip Weed Pods and any other Foreign Seeds not specified in Types 1-7(a), in SFS or in Unmillable Material Above the Screen that remain above the 2.0mm screen following the Screenings process	
Small Foreign Seeds (% by weight)	0.6	All Foreign Seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
Other Contaminants Max - (count per half litre, unless otherwise stated)			
Pickling Compounds (entire load)	Nil	Pickled grain or artificial colouring	
Chemicals Not Approved for Wheat (entire load)	Nil	Residues of any chemical compound not approved for wheat, used in contravention of the labelled instructions or chemicals in excess of the MRL	
Ryegrass Ergot (length in cm)	2.0	Length of all pieces present aligned end on end	
Cereal Ergot	1	Pieces or whole affected kernel	
Stored Grain Insects & Pea Weevil – Live (entire load)	Nil	All life stages	
Insects – Large, dead or alive	3	Includes Rutherglen bugs, ladybirds, grasshoppers, locusts, sitona weevils, wood bugs & pea weevil (dead only)	
Insects – Small, dead or alive	10	Includes all species of aphid, mites & stored grain insects (dead only)	
Earcockle	10	Number of galls	
Snails	1	Dead or alive	
Loose Smut	3	Pieces of backbone	
Sand	20	Individual grains	
Earth	1	5mm maximum in diameter	
Stones (g per 2.5L)	4.0	Maximum weight of all Stones retained above a 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Presence of meat meal, blood meal, fish meal, poultry offal meal or other animal proteins. Stick/Stubble (>3cm in length and 1cm in diameter), glass, concrete, metal, animal excreta, animal carcasses, tainting agents or any other commercially unacceptable contaminant, smell or taste.	
Other Foreign Material (% by weight)	0.1	Fine material (eg., Soil, dust and minerals), pieces of snail shell (< half), pieces of stored grain insects	

Commodity: Wheat		**Season: 2021/22**	
Grade: APH2™		**Standard Reference No.: CSG-100**	
QUALITY PARAMETER	**SPECIFICATION**	**COMMENT**	
Variety Restrictions	Yes	Approved varieties only	
Protein Min (%)	13.0	N X 5.7 @ 11% Moisture Basis	
Protein Max (%)	n/a		
Moisture Max (%)	12.5		
Test Weight Min (kg/hl)	76.0		
Unmillable Material Above the Screen Max (% by weight)	0.6	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods, Skeleton Weed Flowers (Seed Heads) or other seedpods not otherwise listed. Excludes contaminants where tolerances already exist	
Screenings Max (% by weight)	5.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
Falling Number Min (sec)	350	Falling Number result overrides the visual assessment for Sprouted grains	
Defective Grains Max - (% by count, 300 grain sample [500 grain sample for WA], unless otherwise stated)			
Sprouted	Nil	Distorted	1.0
Stained	5.0	Severely Damaged (count per half litre, grain remaining above the screen)	1.0
Pink Stained	2.0	All Smuts except Loose Smut (entire load)	Nil
White Grain Disorder / Head Scab	1.0	Insect Damaged	1.0
Field Fungi (count per half litre)	10.0	Over-Dried Damaged	Nil
Dry Green or Sappy	1.0		
Foreign Seed Contaminants Max - (count of seeds in total per half litre, unless otherwise stated)			
Type 1 (individual seeds)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Head Poppy, Mexican Poppy, Opium Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (QLD only)	
Type 2	Nil	Castor Oil Plant, Coriander, Crow Garlic/ Wild Garlic, Darling Pea, Parthenium Weed (NSW/VIC/SA), Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3a	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple	
Type 3b	4	Vetch (Tare), Vetch (Commercial)	
Type 3c	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4	20	Bindweed (Field), Cutleaf Mignonette, Darnel (Drake Seed), Hexham Scent/Meliot (only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Sesbania Pea, Patterson's Curse/ Salvation Jane	
Type 6	10	Colombus Grass, Johnson Grass, Saffron Thistle	
Type 7a	1	Azuki Beans, Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Medic Pods, Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter. Includes Onion Weed Pods regardless of size	
Type 7b	50	Barley (2 & 6 row), Bindweed (Australian), Bindweed (Black), Brome Grass, Carrot Weed, Durum, Red/Spring Feed Wheats, Oats (Black/Wild), Oats (Sand), Oats (Common), Rice, Rye (Cereal), Ryegrass on Stalk, Sorghum (Grain), Triticale, Turnip Weed Pods and any other Foreign Seeds not specified in Types 1-7(a), in SFS or in Unmillable Material Above the Screen that remain above the 2.0mm screen following the Screenings process	
Small Foreign Seeds (% by weight)	0.6	All Foreign Seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
Other Contaminants Max - (count per half litre, unless otherwise stated)			
Pickling Compounds (entire load)	Nil	Pickled grain or artificial colouring	
Chemicals Not Approved for Wheat (entire load)	Nil	Residues of any chemical compound not approved for wheat, used in contravention of the labelled instructions or chemicals in excess of the MRL	
Ryegrass Ergot (length in cm)	2.0	Length of all pieces present aligned end on end	
Cereal Ergot	1	Pieces or whole affected kernel	
Stored Grain Insects & Pea Weevil – Live (entire load)	Nil	All life stages	
Insects – Large, dead or alive	3	Includes Rutherglen bugs, ladybirds, grasshoppers, locusts, sitona weevils, wood bugs & pea weevil (dead only)	
Insects – Small, dead or alive	10	Includes all species of aphid, mites & stored grain insects (dead only)	
Earcockle	10	Number of galls	
Snails	1	Dead or alive	
Loose Smut	3	Pieces of backbone	
Sand	20	Individual grains	
Earth	1	5mm maximum in diameter	
Stones (g per 2.5L)	4.0	Maximum weight of all Stones retained above a 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Presence of meat meal, blood meal, fish meal, poultry offal meal or other animal proteins. Stick/Stubble (>3cm in length and 1cm in diameter), glass, concrete, metal, animal excreta, animal carcasses, tainting agents or any other commercially unacceptable contaminant, smell or taste.	
Other Foreign Material (% by weight)	0.1	Fine material (eg., Soil, dust and minerals), pieces of snail shell (< half), pieces of stored grain insects	

Commodity: Wheat		**Season: 2021/22**	
Grade: H1™		**Standard Reference No.: CSG-101**	
QUALITY PARAMETER	**SPECIFICATION**	**COMMENT**	
Variety Restrictions	Yes	Approved varieties only	
Protein Min (%)	13.0	N X 5.7 @ 11% Moisture Basis	
Protein Max (%)	n/a		
Moisture Max (%)	12.5		
Test Weight Min (kg/hl)	76.0		
Unmillable Material Above the Screen Max (% by weight)	0.6	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods, Skeleton Weed Flowers (Seed Heads) or other seedpods not otherwise listed. Excludes contaminants where tolerances already exist.	
Screenings Max (% by weight)	5.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
Falling Number Min (sec)	300	Falling Number result overrides the visual assessment for Sprouted grains	
Defective Grains Max - (% by count, 300 grain sample [500 grain sample for WA], unless otherwise stated)			
Sprouted	Nil	Distorted	1.0
Stained	5.0	Severely Damaged (count per half litre, grain remaining above the screen)	1.0
Pink Stained	2.0	All Smuts except Loose Smut (entire load)	Nil
White Grain Disorder / Head Scab	1.0	Insect Damaged	1.0
Field Fungi (count per half litre)	10.0	Over-Dried Damaged	Nil
Dry Green or Sappy	1.0		
Foreign Seed Contaminants Max - (count of seeds in total per half litre, unless otherwise stated)			
Type 1 (individual seeds)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Head Poppy, Mexican Poppy, Opium Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (QLD only)	
Type 2	Nil	Castor Oil Plant, Coriander, Crow Garlic/ Wild Garlic, Darling Pea, Parthenium Weed (NSW/VIC/SA), Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3a	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple	
Type 3b	4	Vetch (Tare), Vetch (Commercial)	
Type 3c	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4	20	Bindweed (Field), Cutleaf Mignonette, Darnel (Drake Seed), Hexham Scent/Meliot (only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Sesbania Pea, Patterson's Curse/ Salvation Jane	
Type 6	10	Colombus Grass, Johnson Grass, Saffron Thistle	
Type 7a	1	Adzuki Beans, Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Medic Pods, Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter. Includes Onion Weed Pods regardless of size	
Type 7b	50	Barley (2 & 6 row), Bindweed (Australian), Bindweed (Black), Brome Grass, Carrot Weed, Durum, Red/Spring Feed Wheats, Oats (Black/Wild), Oats (Sand), Oats (Common), Rice, Rye (Cereal), Ryegrass on Stalk, Sorghum (Grain), Triticale, Turnip Weed Pods and any other Foreign Seeds not specified in Types 1-7(a), in SFS or in Unmillable Material Above the Screen that remain above the 2.0mm screen following the Screenings process	
Small Foreign Seeds (% by weight)	0.6	All Foreign Seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
Other Contaminants Max - (count per half litre, unless otherwise stated)			
Pickling Compounds (entire load)	Nil	Pickled grain or artificial colouring	
Chemicals Not Approved for Wheat (entire load)	Nil	Residues of any chemical compound not approved for wheat, used in contravention of the labelled instructions or chemicals in excess of the MRL	
Ryegrass Ergot (length in cm)	2.0	Length of all pieces present aligned end on end	
Cereal Ergot	1	Pieces or whole affected kernel	
Stored Grain Insects & Pea Weevil – Live (entire load)	Nil	All life stages	
Insects – Large, dead or alive	3	Includes Rutherglen bugs, ladybirds, grasshoppers, locusts, sitona weevils, wood bugs & pea weevil (dead only)	
Insects – Small, dead or alive	10	Includes all species of aphid, mites & stored grain insects (dead only)	
Earcockle	10	Number of galls	
Snails	1	Dead or alive	
Loose Smut	3	Pieces of backbone	
Sand	20	Individual grains	
Earth	1	5mm maximum in diameter	
Stones (g per 2.5L)	4.0	Maximum weight of all Stones retained above a 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Presence of meat meal, blood meal, fish meal, poultry offal meal or other animal proteins. Stick/Stubble (>3cm in length and 1cm in diameter), glass, concrete, metal, animal excreta, animal carcasses, tainting agents or any other commercially unacceptable contaminant, smell or taste.	
Other Foreign Material (% by weight)	0.1	Fine material (eg., Soil, dust and minerals), pieces of snail shell (< half), pieces of stored grain insects	

Commodity: Wheat		**Season: 2021/22**	
Grade: H2™		**Standard Reference No.: CSG-102**	
QUALITY PARAMETER	**SPECIFICATION**	**COMMENT**	
Variety Restrictions	Yes	Approved varieties only	
Protein Min (%)	11.5	N X 5.7 @ 11% Moisture Basis	
Protein Max (%)	n/a		
Moisture Max (%)	12.5		
Test Weight Min (kg/hl)	76.0		
Unmillable Material Above the Screen Max (% by weight)	0.6	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods, Skeleton Weed Flowers (Seed Heads) or other seedpods not otherwise listed. Excludes contaminants where tolerances already exist.	
Screenings Max (% by weight)	5.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
Falling Number Min (sec)	300	Falling Number result overrides the visual assessment for Sprouted grains	
Defective Grains Max - (% by count, 300 grain sample [500 grain sample for WA], unless otherwise stated)			
Sprouted	Nil	Distorted	1.0
Stained	5.0	Severely Damaged (count per half litre, grain remaining above the screen)	1.0
Pink Stained	2.0	All Smuts except Loose Smut (entire load)	Nil
White Grain Disorder / Head Scab	1.0	Insect Damaged	1.0
Field Fungi (count per half litre)	10.0	Over-Dried Damaged	Nil
Dry Green or Sappy	1.0		
Foreign Seed Contaminants Max - (count of seeds in total per half litre, unless otherwise stated)			
Type 1 (individual seeds)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Head Poppy, Mexican Poppy, Opium Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (QLD only)	
Type 2	Nil	Castor Oil Plant, Coriander, Crow Garlic/ Wild Garlic, Darling Pea, Parthenium Weed (NSW/VIC/SA), Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3a	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple	
Type 3b	4	Vetch (Tare), Vetch (Commercial)	
Type 3c	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4	20	Bindweed (Field), Cutleaf Mignonette, Darnel (Drake Seed), Hexham Scent/Meliot (only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Sesbania Pea, Patterson's Curse/ Salvation Jane	
Type 6	10	Colombus Grass, Johnson Grass, Saffron Thistle	
Type 7a	1	Adzuki Beans, Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Medic Pods, Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter. Includes Onion Weed Pods regardless of size	
Type 7b	50	Barley (2 & 6 row), Bindweed (Australian), Bindweed (Black), Brome Grass, Carrot Weed, Durum, Red/Spring Feed Wheats, Oats (Black/Wild), Oats (Sand), Oats (Common), Rice, Rye (Cereal), Ryegrass on Stalk, Sorghum (Grain), Triticale, Turnip Weed Pods and any other Foreign Seeds not specified in Types 1-7(a), in SFS or in Unmillable Material Above the Screen that remain above the 2.0mm screen following the Screenings process	
Small Foreign Seeds (% by weight)	0.6	All Foreign Seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
Other Contaminants Max - (count per half litre, unless otherwise stated)			
Pickling Compounds (entire load)	Nil	Pickled grain or artificial colouring	
Chemicals Not Approved for Wheat (entire load)	Nil	Residues of any chemical compound not approved for wheat, used in contravention of the labelled instructions or chemicals in excess of the MRL	
Ryegrass Ergot (length in cm)	2.0	Length of all pieces present aligned end on end	
Cereal Ergot	1	Pieces or whole affected kernel	
Stored Grain Insects & Pea Weevil – Live (entire load)	Nil	All life stages	
Insects – Large, dead or alive	3	Includes Rutherglen bugs, ladybirds, grasshoppers, locusts, sitona weevils, wood bugs & pea weevil (dead only)	
Insects – Small, dead or alive	10	Includes all species of aphid, mites & stored grain insects (dead only)	
Earcockle	10	Number of galls	
Snails	1	Dead or alive	
Loose Smut	3	Pieces of backbone	
Sand	20	Individual grains	
Earth	1	5mm maximum in diameter	
Stones (g per 2.5L)	4.0	Maximum weight of all Stones retained above a 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Presence of meat meal, blood meal, fish meal, poultry offal meal or other animal proteins. Stick/Stubble (>3cm in length and 1cm in diameter), glass, concrete, metal, animal excreta, animal carcasses, tainting agents or any other commercially unacceptable contaminant, smell or taste.	
Other Foreign Material (% by weight)	0.1	Fine material (eg., Soil, dust and minerals), pieces of snail shell (< half), pieces of stored grain insects	

Commodity: Wheat		**Season: 2021/22**	
Grade: APW1™		**Standard Reference No.: CSG-103**	
QUALITY PARAMETER	**SPECIFICATION**	**COMMENT**	
Variety Restrictions	Yes	Approved varieties only	
Protein Min (%)	10.5	N X 5.7 @ 11% Moisture Basis	
Protein Max (%)	n/a		
Moisture Max (%)	12.5		
Test Weight Min (kg/hl)	76.0		
Unmillable Material Above the Screen Max (% by weight)	0.6	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods, Skeleton Weed Flowers (Seed Heads) or other seedpods not otherwise listed. Excludes contaminants where tolerances already exist.	
Screenings Max (% by weight)	5.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
Falling Number Min (sec)	300	Falling Number result overrides the visual assessment for Sprouted grains	
Defective Grains Max - (% by count, 300 grain sample [500 grain sample for WA], unless otherwise stated)			
Sprouted	Nil	Distorted	1.0
Stained	5.0	Severely Damaged (count per half litre, grain remaining above the screen)	1.0
Pink Stained	2.0	All Smuts except Loose Smut (entire load)	Nil
White Grain Disorder / Head Scab	1.0	Insect Damaged	1.0
Field Fungi (count per half litre)	10.0	Over-Dried Damaged	Nil
Dry Green or Sappy	1.0		
Foreign Seed Contaminants Max - (count of seeds in total per half litre, unless otherwise stated)			
Type 1 (individual seeds)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Head Poppy, Mexican Poppy, Opium Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (QLD only)	
Type 2	Nil	Castor Oil Plant, Coriander, Crow Garlic/ Wild Garlic, Darling Pea, Parthenium Weed (NSW/VIC/SA), Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3a	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple	
Type 3b	4	Vetch (Tare), Vetch (Commercial)	
Type 3c	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4	20	Bindweed (Field), Cutleaf Mignonette, Darnel (Drake Seed), Hexham Scent/Meliot (only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Sesbania Pea, Patterson's Curse/ Salvation Jane	
Type 6	10	Colombus Grass, Johnson Grass, Saffron Thistle	
Type 7a	1	Adzuki Beans, Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Medic Pods, Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter. Includes Onion Weed Pods regardless of size	
Type 7b	50	Barley (2 & 6 row), Bindweed (Australian), Bindweed (Black), Brome Grass, Carrot Weed, Durum, Red/Spring Feed Wheats, Oats (Black/Wild), Oats (Sand), Oats (Common), Rice, Rye (Cereal), Ryegrass on Stalk, Sorghum (Grain), Triticale, Turnip Weed Pods and any other Foreign Seeds not specified in Types 1-7(a), in SFS or in Unmillable Material Above the Screen that remain above the 2.0mm screen following the Screenings process	
Small Foreign Seeds (% by weight)	0.6	All Foreign Seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
Other Contaminants Max - (count per half litre, unless otherwise stated)			
Pickling Compounds (entire load)	Nil	Pickled grain or artificial colouring	
Chemicals Not Approved for Wheat (entire load)	Nil	Residues of any chemical compound not approved for wheat, used in contravention of the labelled instructions or chemicals in excess of the MRL	
Ryegrass Ergot (length in cm)	2.0	Length of all pieces present aligned end on end	
Cereal Ergot	1	Pieces or whole affected kernel	
Stored Grain Insects & Pea Weevil – Live (entire load)	Nil	All life stages	
Insects – Large, dead or alive	3	Includes Rutherglen bugs, ladybirds, grasshoppers, locusts, sitona weevils, wood bugs & pea weevil (dead only)	
Insects – Small, dead or alive	10	Includes all species of aphid, mites & stored grain insects (dead only)	
Earcockle	10	Number of galls	
Snails	1	Dead or alive	
Loose Smut	3	Pieces of backbone	
Sand	20	Individual grains	
Earth	1	5mm maximum in diameter	
Stones (g per 2.5L)	4.0	Maximum weight of all Stones retained above a 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Presence of meat meal, blood meal, fish meal, poultry offal meal or other animal proteins. Stick/Stubble (>3cm in length and 1cm in diameter), glass, concrete, metal, animal excreta, animal carcasses, tainting agents or any other commercially unacceptable contaminant, smell or taste.	
Other Foreign Material (% by weight)	0.1	Fine material (eg., Soil, dust and minerals), pieces of snail shell (< half), pieces of stored grain insects	

Commodity: Wheat		**Season: 2021/22**	
Grade: APW2		**Standard Reference No.: CSG-104**	
QUALITY PARAMETER	**SPECIFICATION**	**COMMENT**	
Variety Restrictions	Yes	Approved varieties only	
Protein Min (%)	10.0	N X 5.7 @ 11% Moisture Basis	
Protein Max (%)	n/a		
Moisture Max (%)	12.5		
Test Weight Min (kg/hl)	76.0		
Unmillable Material Above the Screen Max (% by weight)	0.6	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods, Skeleton Weed Flowers (Seed Heads) or other seedpods not otherwise listed. Excludes contaminants where tolerances already exist.	
Screenings Max (% by weight)	5.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
Falling Number Min (sec)	300	Falling Number result overrides the visual assessment for Sprouted grains	
Defective Grains Max - (% by count, 300 grain sample [500 grain sample for WA], unless otherwise stated)			
Sprouted	Nil	Distorted	1.0
Stained	5.0	Severely Damaged (count per half litre, grain remaining above the screen)	1.0
Pink Stained	2.0	All Smuts except Loose Smut (entire load)	Nil
White Grain Disorder / Head Scab / Flaked Grain	1.0	Insect Damaged	1.0
Field Fungi (count per half litre)	10.0	Over-Dried Damaged	Nil
Dry Green or Sappy	1.0		
Foreign Seed Contaminants Max - (count of seeds in total per half litre, unless otherwise stated)			
Type 1 (individual seeds)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Head Poppy, Mexican Poppy, Opium Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (QLD only)	
Type 2	Nil	Castor Oil Plant, Coriander, Crow Garlic/ Wild Garlic, Darling Pea, Parthenium Weed (NSW/VIC/SA), Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3a	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple	
Type 3b	4	Vetch (Tare), Vetch (Commercial)	
Type 3c	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4	20	Bindweed (Field), Cutleaf Mignonette, Darnel (Drake Seed), Hexham Scent/Meliot (only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Sesbania Pea, Patterson's Curse/ Salvation Jane	
Type 6	10	Colombus Grass, Johnson Grass, Saffron Thistle	
Type 7a	1	Adzuki Beans, Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Medic Pods, Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter. Includes Onion Weed Pods regardless of size	
Type 7b	50	Barley (2 & 6 row), Bindweed (Australian), Bindweed (Black), Brome Grass, Carrot Weed, Durum, Red/Spring Feed Wheats, Oats (Black/Wild), Oats (Sand), Oats (Common), Rice, Rye (Cereal), Ryegrass on Stalk, Sorghum (Grain), Triticale, Turnip Weed Pods and any other Foreign Seeds not specified in Types 1-7(a), in SFS or in Unmillable Material Above the Screen that remain above the 2.0mm screen following the Screenings process	
Small Foreign Seeds (% by weight)	0.6	All Foreign Seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
Other Contaminants Max - (count per half litre, unless otherwise stated)			
Pickling Compounds (entire load)	Nil	Pickled grain or artificial colouring	
Chemicals Not Approved for Wheat (entire load)	Nil	Residues of any chemical compound not approved for wheat, used in contravention of the labelled instructions or chemicals in excess of the MRL	
Ryegrass Ergot (length in cm)	2.0	Length of all pieces present aligned end on end	
Cereal Ergot	1	Pieces or whole affected kernel	
Stored Grain Insects & Pea Weevil – Live (entire load)	Nil	All life stages	
Insects – Large, dead or alive	3	Includes Rutherglen bugs, ladybirds, grasshoppers, locusts, sitona weevils, wood bugs & pea weevil (dead only)	
Insects – Small, dead or alive	10	Includes all species of aphid, mites & stored grain insects (dead only)	
Earcockle	10	Number of galls	
Snails	1	Dead or alive	
Loose Smut	3	Pieces of backbone	
Sand	20	Individual grains	
Earth	1	5mm maximum in diameter	
Stones (g per 2.5L)	4.0	Maximum weight of all Stones retained above a 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Presence of meat meal, blood meal, fish meal, poultry offal meal or other animal proteins. Stick/Stubble (>3cm in length and 1cm in diameter), glass, concrete, metal, animal excreta, animal carcasses, tainting agents or any other commercially unacceptable contaminant, smell or taste.	
Other Foreign Material (% by weight)	0.1	Fine material (eg., Soil, dust and minerals), pieces of snail shell (< half), pieces of stored grain insects	

Commodity: Wheat		**Season: 2021/22**	
Grade: ASW1™		**Standard Reference No.: CSG-105**	
QUALITY PARAMETER	**SPECIFICATION**	**COMMENT**	
Variety Restrictions	Yes	Approved varieties only	
Protein Min (%)	No Min.	N X 5.7 @ 11% Moisture Basis	
Protein Max (%)	n/a		
Moisture Max (%)	12.5		
Test Weight Min (kg/hl)	76.0		
Unmillable Material Above the Screen Max (% by weight)	0.6	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods, Skeleton Weed Flowers (Seed Heads) or other seedpods not otherwise listed. Excludes contaminants where tolerances already exist.	
Screenings Max (% by weight)	5.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
Falling Number Min (sec)	300	Falling Number result overrides the visual assessment for Sprouted grains	
Defective Grains Max - (% by count, 300 grain sample [500 grain sample for WA], unless otherwise stated)			
Sprouted	Nil	Distorted	1.0
Stained	5.0	Severely Damaged (count per half litre, grain remaining above the screen)	1.0
Pink Stained	2.0	All Smuts except Loose Smut (entire load)	Nil
White Grain Disorder / Head Scab	1.0	Insect Damaged	1.0
Field Fungi (count per half litre)	10.0	Over-Dried Damaged	Nil
Dry Green or Sappy	1.0		
Foreign Seed Contaminants Max - (count of seeds in total per half litre, unless otherwise stated)			
Type 1 (individual seeds)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Head Poppy, Mexican Poppy, Opium Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (QLD only)	
Type 2	Nil	Castor Oil Plant, Coriander, Crow Garlic/ Wild Garlic, Darling Pea, Parthenium Weed (NSW/VIC/SA), Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3a	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple	
Type 3b	4	Vetch (Tare), Vetch (Commercial)	
Type 3c	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4	20	Bindweed (Field), Cutleaf Mignonette, Darnel (Drake Seed), Hexham Scent/Meliot (only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Sesbania Pea, Patterson's Curse/ Salvation Jane	
Type 6	10	Colombus Grass, Johnson Grass, Saffron Thistle	
Type 7a	1	Adzuki Beans, Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Medic Pods, Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter. Includes Onion Weed Pods regardless of size	
Type 7b	50	Barley (2 & 6 row), Bindweed (Australian), Bindweed (Black), Brome Grass, Carrot Weed, Durum, Red/Spring Feed Wheats, Oats (Black/Wild), Oats (Sand), Oats (Common), Rice, Rye (Cereal), Ryegrass on Stalk, Sorghum (Grain), Triticale, Turnip Weed Pods and any other Foreign Seeds not specified in Types 1-7(a), in SFS or in Unmillable Material Above the Screen that remain above the 2.0mm screen following the Screenings process	
Small Foreign Seeds (% by weight)	0.6	All Foreign Seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
Other Contaminants Max - (count per half litre, unless otherwise stated)			
Pickling Compounds (entire load)	Nil	Pickled grain or artificial colouring	
Chemicals Not Approved for Wheat (entire load)	Nil	Residues of any chemical compound not approved for wheat, used in contravention of the labelled instructions or chemicals in excess of the MRL	
Ryegrass Ergot (length in cm)	2.0	Length of all pieces present aligned end on end	
Cereal Ergot	1	Pieces or whole affected kernel	
Stored Grain Insects & Pea Weevil – Live (entire load)	Nil	All life stages	
Insects – Large, dead or alive	3	Includes Rutherglen bugs, ladybirds, grasshoppers, locusts, sitona weevils, wood bugs & pea weevil (dead only)	
Insects – Small, dead or alive	10	Includes all species of aphid, mites & stored grain insects (dead only)	
Earcockle	10	Number of galls	
Snails	1	Dead or alive	
Loose Smut	3	Pieces of backbone	
Sand	20	Individual grains	
Earth	1	5mm maximum in diameter	
Stones (g per 2.5L)	4.0	Maximum weight of all Stones retained above a 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Presence of meat meal, blood meal, fish meal, poultry offal meal or other animal proteins. Stick/Stubble (>3cm in length and 1cm in diameter), glass, concrete, metal, animal excreta, animal carcasses, tainting agents or any other commercially unacceptable contaminant, smell or taste.	
Other Foreign Material (% by weight)	0.1	Fine material (eg., Soil, dust and minerals), pieces of snail shell (< half), pieces of stored grain insects	

Commodity: Wheat		**Season: 2021/22**	
Grade: AUH2™		**Standard Reference No.: CSG-106**	
QUALITY PARAMETER	**SPECIFICATION**	**COMMENT**	
Variety Restrictions	Yes	Approved varieties only	
Protein Min (%)	11.5	N X 5.7 @ 11% Moisture Basis	
Protein Max (%)	n/a		
Moisture Max (%)	12.5		
Test Weight Min (kg/hl)	71.0		
Unmillable Material Above the Screen Max (% by weight)	1.2	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods, Skeleton Weed Flowers (Seed Heads) or other seedpods not otherwise listed. Excludes contaminants where tolerances already exist.	
Screenings Max (% by weight)	10.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
Falling Number Min (sec)	250	Falling Number result overrides the visual assessment for Sprouted grains	
Defective Grains Max - (% by count, 300 grain sample [500 grain sample for WA], unless otherwise stated)			
Sprouted	Nil	Distorted	2.0
Stained	15.0	Severely Damaged (count per half litre, grain remaining above the screen)	1.0
Pink Stained	2.0	All Smuts except Loose Smut (entire load)	Nil
White Grain Disorder / Head Scab	1.0	Insect Damaged	1.0
Field Fungi (count per half litre)	10.0	Over-Dried Damaged	Nil
Dry Green or Sappy	2.0		
Foreign Seed Contaminants Max - (count of seeds in total per half litre, unless otherwise stated)			
Type 1 (individual seeds)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Head Poppy, Mexican Poppy, Opium Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (QLD only)	
Type 2	Nil	Castor Oil Plant, Coriander, Crow Garlic/ Wild Garlic, Darling Pea, Parthenium Weed (NSW/VIC/SA), Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3a	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple	
Type 3b	4	Vetch (Tare), Vetch (Commercial)	
Type 3c	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4	20	Bindweed (Field), Cutleaf Mignonette, Darnel (Drake Seed), Hexham Scent/Meliot (only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Sesbania Pea, Patterson's Curse/ Salvation Jane	
Type 6	50	Colombus Grass, Johnson Grass, Saffron Thistle	
Type 7a	10	Adzuki Beans, Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Medic Pods, Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter. Includes Onion Weed Pods regardless of size	
Type 7b	150	Barley (2 & 6 row), Bindweed (Australian), Bindweed (Black), Brome Grass, Carrot Weed, Durum, Red/Spring Feed Wheats, Oats (Black/Wild), Oats (Sand), Oats (Common), Rice, Rye (Cereal), Ryegrass on Stalk, Sorghum (Grain), Triticale, Turnip Weed Pods and any other Foreign Seeds not specified in Types 1-7(a), in SFS or in Unmillable Material Above the Screen that remain above the 2.0mm screen following the Screenings process	
Small Foreign Seeds (% by weight)	1.2	All Foreign Seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
Other Contaminants Max - (count per half litre, unless otherwise stated)			
Pickling Compounds (entire load)	Nil	Pickled grain or artificial colouring	
Chemicals Not Approved for Wheat (entire load)	Nil	Residues of any chemical compound not approved for wheat, used in contravention of the labelled instructions or chemicals in excess of the MRL	
Ryegrass Ergot (length in cm)	2.0	Length of all pieces present aligned end on end	
Cereal Ergot	1	Pieces or whole affected kernel	
Stored Grain Insects & Pea Weevil – Live (entire load)	Nil	All life stages	
Insects – Large, dead or alive	3	Includes Rutherglen bugs, ladybirds, grasshoppers, locusts, sitona weevils, wood bugs & pea weevil (dead only)	
Insects – Small, dead or alive	10	Includes all species of aphid, mites & stored grain insects (dead only)	
Earcockle	10	Number of galls	
Snails	1	Dead or alive	
Loose Smut	3	Pieces of backbone	
Sand	50	Individual grains	
Earth	3	5mm maximum in diameter	
Stones (g per 2.5L)	4.0	Maximum weight of all Stones retained above a 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Presence of meat meal, blood meal, fish meal, poultry offal meal or other animal proteins. Stick/Stubble (>3cm in length and 1cm in diameter), glass, concrete, metal, animal excreta, animal carcasses, tainting agents or any other commercially unacceptable contaminant, smell or taste.	
Other Foreign Material (% by weight)	0.1	Fine material (eg., Soil, dust and minerals), pieces of snail shell (< half), pieces of stored grain insects	

Commodity: Wheat		**Season: 2021/22**	
Grade: AGP1™		**Standard Reference No.: CSG-107**	
QUALITY PARAMETER	**SPECIFICATION**	**COMMENT**	
Variety Restrictions	Yes	Approved varieties only	
Protein Min (%)	No Min.	N X 5.7 @ 11% Moisture Basis	
Protein Max (%)	n/a		
Moisture Max (%)	12.5		
Test Weight Min (kg/hl)	68.0		
Unmillable Material Above the Screen Max (% by weight)	1.2	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods, Skeleton Weed Flowers (Seed Heads) or other seedpods not otherwise listed. Excludes contaminants where tolerances already exist.	
Screenings Max (% by weight)	10.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
Falling Number Min (sec)	200	Falling Number result overrides the visual assessment for Sprouted grains	
Defective Grains Max - (% by count, 300 grain sample [500 grain sample for WA], unless otherwise stated)			
Sprouted	Nil	Distorted	10.0
Stained	15.0	Severely Damaged (count per half litre, grain remaining above the screen)	1.0
Pink Stained	5.0	All Smuts except Loose Smut (entire load)	Nil
White Grain Disorder / Head Scab	1.0	Insect Damaged	2.0
Field Fungi (count per half litre)	10.0	Over-Dried Damaged	Nil
Dry Green or Sappy	5.0		
Foreign Seed Contaminants Max - (count of seeds in total per half litre, unless otherwise stated)			
Type 1 (individual seeds)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Head Poppy, Mexican Poppy, Opium Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (QLD only)	
Type 2	Nil	Castor Oil Plant, Coriander, Crow Garlic/ Wild Garlic, Darling Pea, Parthenium Weed (NSW/VIC/SA), Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3a	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple	
Type 3b	4	Vetch (Tare), Vetch (Commercial)	
Type 3c	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4	20	Bindweed (Field), Cutleaf Mignonette, Darnel (Drake Seed), Hexham Scent/Meliot (only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Sesbania Pea, Patterson's Curse/ Salvation Jane	
Type 6	50	Colombus Grass, Johnson Grass, Saffron Thistle	
Type 7a	10	Adzuki Beans, Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Medic Pods, Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter. Includes Onion Weed Pods regardless of size	
Type 7b	150	Barley (2 & 6 row), Bindweed (Australian), Bindweed (Black), Brome Grass, Carrot Weed, Durum, Red/Spring Feed Wheats, Oats (Black/Wild), Oats (Sand), Oats (Common), Rice, Rye (Cereal), Ryegrass on Stalk, Sorghum (Grain), Triticale, Turnip Weed Pods and any other Foreign Seeds not specified in Types 1-7(a), in SFS or in Unmillable Material Above the Screen that remain above the 2.0mm screen following the Screenings process	
Small Foreign Seeds (% by weight)	1.2	All Foreign Seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
Other Contaminants Max - (count per half litre, unless otherwise stated)			
Pickling Compounds (entire load)	Nil	Pickled grain or artificial colouring	
Chemicals Not Approved for Wheat (entire load)	Nil	Residues of any chemical compound not approved for wheat, used in contravention of the labelled instructions or chemicals in excess of the MRL	
Ryegrass Ergot (length in cm)	2.0	Length of all pieces present aligned end on end	
Cereal Ergot	1	Pieces or whole affected kernel	
Stored Grain Insects & Pea Weevil – Live (entire load)	Nil	All life stages	
Insects – Large, dead or alive	3	Includes Rutherglen bugs, ladybirds, grasshoppers, locusts, sitona weevils, wood bugs & pea weevil (dead only)	
Insects – Small, dead or alive	10	Includes all species of aphid, mites & stored grain insects (dead only)	
Earcockle	15	Number of galls	
Snails	10	Dead or alive	
Loose Smut	3	Pieces of backbone	
Sand	50	Individual grains	
Earth	3	5mm maximum in diameter	
Stones (g per 2.5L)	4.0	Maximum weight of all Stones retained above a 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Presence of meat meal, blood meal, fish meal, poultry offal meal or other animal proteins. Stick/Stubble (>31cm in length and 1cm in diameter), glass, concrete, metal, animal excreta, animal carcasses, tainting agents or any other commercially unacceptable contaminant, smell or taste.	
Other Foreign Material (% by weight)	0.1	Fine material (eg., Soil, dust and minerals), pieces of snail shell (< half), pieces of stored grain insects	

Commodity: Wheat		**Season: 2021/22**	
Grade: AUW1™		**Standard Reference No.: CSG-108**	
QUALITY PARAMETER	**SPECIFICATION**	**COMMENT**	
Variety Restrictions	Yes	Approved varieties only	
Protein Min (%)	10.5	N X 5.7 @ 11% Moisture Basis	
Protein Max (%)	n/a		
Moisture Max (%)	12.5		
Test Weight Min (kg/hl)	68.0		
Unmillable Material Above the Screen Max (% by weight)	2.6	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods, Skeleton Weed Flowers (Seed Heads) or other seedpods not otherwise listed. Excludes contaminants where tolerances already exist.	
Screenings Max (% by weight)	25.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
Falling Number Min (sec)	250	Falling Number result overrides the visual assessment for Sprouted grains	
Defective Grains Max - (% by count, 300 grain sample [500 grain sample for WA], unless otherwise stated)			
Sprouted	Nil	Distorted	10.0
Stained	15.0	Severely Damaged (count per half litre, grain remaining above the screen)	1.0
Pink Stained	5.0	All Smuts except Loose Smut (entire load)	Nil
White Grain Disorder / Head Scab	1.0	Insect Damaged	2.0
Field Fungi (count per half litre)	20.0	Over-Dried Damaged	Nil
Dry Green or Sappy	5.0		
Foreign Seed Contaminants Max - (count of seeds in total per half litre, unless otherwise stated)			
Type 1 (individual seeds)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Head Poppy, Mexican Poppy, Opium Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (QLD only)	
Type 2	Nil	Castor Oil Plant, Coriander, Crow Garlic/ Wild Garlic, Darling Pea, Parthenium Weed (NSW/VIC/SA), Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3a	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple	
Type 3b	4	Vetch (Tare), Vetch (Commercial)	
Type 3c	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4	20	Bindweed (Field), Cutleaf Mignonette, Darnel (Drake Seed), Hexham Scent/Meliot (only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Sesbania Pea, Patterson's Curse/ Salvation Jane	
Type 6	50	Colombus Grass, Johnson Grass, Saffron Thistle	
Type 7a	10	Adzuki Beans, Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Medic Pods, Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter. Includes Onion Weed Pods regardless of size	
Type 7b	150	Barley (2 & 6 row), Bindweed (Australian), Bindweed (Black), Brome Grass, Carrot Weed, Durum, Red/Spring Feed Wheats, Oats (Black/Wild), Oats (Sand), Oats (Common), Rice, Rye (Cereal), Ryegrass on Stalk, Sorghum (Grain), Triticale, Turnip Weed Pods and any other Foreign Seeds not specified in Types 1-7(a), in SFS or in Unmillable Material Above the Screen that remain above the 2.0mm screen following the Screenings process	
Small Foreign Seeds (% by weight)	1.2	All Foreign Seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
Other Contaminants Max - (count per half litre, unless otherwise stated)			
Pickling Compounds (entire load)	Nil	Pickled grain or artificial colouring	
Chemicals Not Approved for Wheat (entire load)	Nil	Residues of any chemical compound not approved for wheat, used in contravention of the labelled instructions or chemicals in excess of the MRL	
Ryegrass Ergot (length in cm)	2.0	Length of all pieces present aligned end on end	
Cereal Ergot	1	Pieces or whole affected kernel	
Stored Grain Insects & Pea Weevil – Live (entire load)	Nil	All life stages	
Insects – Large, dead or alive	3	Includes Rutherglen bugs, ladybirds, grasshoppers, locusts, sitona weevils, wood bugs & pea weevil (dead only)	
Insects – Small, dead or alive	10	Includes all species of aphid, mites & stored grain insects (dead only)	
Earcockle	15	Number of galls	
Snails	10	Dead or alive	
Loose Smut	3	Pieces of backbone	
Sand	50	Individual grains	
Earth	3	5mm maximum in diameter	
Stones (g per 2.5L)	4.0	Maximum weight of all Stones retained above a 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Presence of meat meal, blood meal, fish meal, poultry offal meal or other animal proteins. Stick/Stubble (>3cm in length and 1cm in diameter), glass, concrete, metal, animal excreta, animal carcasses, tainting agents or any other commercially unacceptable contaminant, smell or taste.	
Other Foreign Material (% by weight)	0.1	Fine material (eg., Soil, dust and minerals), pieces of snail shell (< half), pieces of stored grain insects	

Commodity: Wheat		**Season: 2021/22**	
Grade: HPS1™		**Standard Reference No.: CSG-109**	
QUALITY PARAMETER	**SPECIFICATION**	**COMMENT**	
Variety Restrictions	Yes	Approved varieties only	
Protein Min (%)	11.5	N X 5.7 @ 11% Moisture Basis	
Protein Max (%)	n/a		
Moisture Max (%)	12.5		
Test Weight Min (kg/hl)	68.0		
Unmillable Material Above the Screen Max (% by weight)	2.6	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods, Skeleton Weed Flowers (Seed Heads) or other seedpods not otherwise listed. Excludes contaminants where tolerances already exist.	
Screenings Max (% by weight)	25.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
Falling Number Min (sec)	250	Falling Number result overrides the visual assessment for Sprouted grains	
Defective Grains Max - (% by count, 300 grain sample [500 grain sample for WA], unless otherwise stated)			
Sprouted	Nil	Distorted	2.0
Stained	10.0	Severely Damaged (count per half litre, grain remaining above the screen)	1.0
Pink Stained	3.0	All Smuts except Loose Smut (entire load)	Nil
White Grain Disorder / Head Scab	1.0	Insect Damaged	2.0
Field Fungi (count per half litre)	20.0	Over-Dried Damaged	Nil
Dry Green or Sappy	2.0		
Foreign Seed Contaminants Max - (count of seeds in total per half litre, unless otherwise stated)			
Type 1 (individual seeds)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Head Poppy, Mexican Poppy, Opium Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (QLD only)	
Type 2	Nil	Castor Oil Plant, Coriander, Crow Garlic/ Wild Garlic, Darling Pea, Parthenium Weed (NSW/VIC/SA), Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3a	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple	
Type 3b	4	Vetch (Tare), Vetch (Commercial)	
Type 3c	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4	20	Bindweed (Field), Cutleaf Mignonette, Darnel (Drake Seed), Hexham Scent/Meliot (only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Sesbania Pea, Patterson's Curse/ Salvation Jane	
Type 6	50	Colombus Grass, Johnson Grass, Saffron Thistle	
Type 7a	10	Adzuki Beans, Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Medic Pods, Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter. Includes Onion Weed Pods regardless of size	
Type 7b	150	Barley (2 & 6 row), Bindweed (Australian), Bindweed (Black), Brome Grass, Carrot Weed, Durum, Red/Spring Feed Wheats, Oats (Black/Wild), Oats (Sand), Oats (Common), Rice, Rye (Cereal), Ryegrass on Stalk, Sorghum (Grain), Triticale, Turnip Weed Pods and any other Foreign Seeds not specified in Types 1-7(a), in SFS or in Unmillable Material Above the Screen that remain above the 2.0mm screen following the Screenings process	
Small Foreign Seeds (% by weight)	1.2	All Foreign Seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
Other Contaminants Max - (count per half litre, unless otherwise stated)			
Pickling Compounds (entire load)	Nil	Pickled grain or artificial colouring	
Chemicals Not Approved for Wheat (entire load)	Nil	Residues of any chemical compound not approved for wheat, used in contravention of the labelled instructions or chemicals in excess of the MRL	
Ryegrass Ergot (length in cm)	2.0	Length of all pieces present aligned end on end	
Cereal Ergot	1	Pieces or whole affected kernel	
Stored Grain Insects & Pea Weevil – Live (entire load)	Nil	All life stages	
Insects – Large, dead or alive	3	Includes Rutherglen bugs, ladybirds, grasshoppers, locusts, sitona weevils, wood bugs & pea weevil (dead only)	
Insects – Small, dead or alive	10	Includes all species of aphid, mites & stored grain insects (dead only)	
Earcockle	10	Number of galls	
Snails	5	Dead or alive	
Loose Smut	3	Pieces of backbone	
Sand	50	Individual grains	
Earth	1	5mm maximum in diameter	
Stones (g per 2.5L)	4.0	Maximum weight of all Stones retained above a 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Presence of meat meal, blood meal, fish meal, poultry offal meal or other animal proteins. Stick/Stubble (>3cm in length and 1cm in diameter), glass, concrete, metal, animal excreta, animal carcasses, tainting agents or any other commercially unacceptable contaminant, smell or taste.	
Other Foreign Material (% by weight)	0.1	Fine material (eg., Soil, dust and minerals), pieces of snail shell (< half), pieces of stored grain insects	

Commodity: Wheat		**Season: 2021/22**	
Grade: AUN1		**Standard Reference No.: CSG-111**	
QUALITY PARAMETER	**SPECIFICATION**	**COMMENT**	
Variety Restrictions	Yes	Approved varieties only	
Protein Min (%)	n/a		
Protein Max (%)	n/a		
Moisture Max (%)	12.5		
Test Weight Min (kg/hl)	68.0		
Unmillable Material Above the Screen Max (% by weight)	2.6	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods, Skeleton Weed Flowers (Seed Heads) or other seedpods not otherwise listed. Excludes contaminants where tolerances already exist.	
Screenings Max (% by weight)	25.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
Falling Number Min (sec)	250	Falling Number result overrides the visual assessment for Sprouted grains	
Defective Grains Max - (% by count, 300 grain sample [500 grain sample for WA], unless otherwise stated)			
Sprouted	Nil	Distorted	10.0
Stained	15.0	Severely Damaged (count per half litre, grain remaining above the screen)	1.0
Pink Stained	5.0	All Smuts except Loose Smut (entire load)	Nil
White Grain Disorder / Head Scab	1.0	Insect Damaged	2.0
Field Fungi (count per half litre)	20.0	Over-Dried Damaged	Nil
Dry Green or Sappy	5.0		
Foreign Seed Contaminants Max - (count of seeds in total per half litre, unless otherwise stated)			
Type 1 (individual seeds)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Head Poppy, Mexican Poppy, Opium Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (QLD only)	
Type 2	Nil	Castor Oil Plant, Coriander, Crow Garlic/ Wild Garlic, Darling Pea, Parthenium Weed (NSW/VIC/SA), Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3a	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple	
Type 3b	4	Vetch (Tare), Vetch (Commercial)	
Type 3c	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4	20	Bindweed (Field), Cutleaf Mignonette, Darnel (Drake Seed), Hexham Scent/Meliot (only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Sesbania Pea, Patterson's Curse/ Salvation Jane	
Type 6	50	Colombus Grass, Johnson Grass, Saffron Thistle	
Type 7a	10	Adzuki Beans, Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Medic Pods, Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter. Includes Onion Weed Pods regardless of size	
Type 7b	150	Barley (2 & 6 row), Bindweed (Australian), Bindweed (Black), Brome Grass, Carrot Weed, Durum, Red/Spring Feed Wheats, Oats (Black/Wild), Oats (Sand), Oats (Common), Rice, Rye (Cereal), Ryegrass on Stalk, Sorghum (Grain), Triticale, Turnip Weed Pods and any other Foreign Seeds not specified in Types 1-7(a), in SFS or in Unmillable Material Above the Screen that remain above the 2.0mm screen following the Screenings process	
Small Foreign Seeds (% by weight)	1.2	All Foreign Seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
Other Contaminants Max - (count per half litre, unless otherwise stated)			
Pickling Compounds (entire load)	Nil	Pickled grain or artificial colouring	
Chemicals Not Approved for Wheat (entire load)	Nil	Residues of any chemical compound not approved for wheat, used in contravention of the labelled instructions or chemicals in excess of the MRL	
Ryegrass Ergot (length in cm)	2.0	Length of all pieces present aligned end on end	
Cereal Ergot	1	Pieces or whole affected kernel	
Stored Grain Insects & Pea Weevil – Live (entire load)	Nil	All life stages	
Insects – Large, dead or alive	3	Includes Rutherglen bugs, ladybirds, grasshoppers, locusts, sitona weevils, wood bugs & pea weevil (dead only)	
Insects – Small, dead or alive	10	Includes all species of aphid, mites & stored grain insects (dead only)	
Earcockle	15	Number of galls	
Snails	10	Dead or alive	
Loose Smut	3	Pieces of backbone	
Sand	50	Individual grains	
Earth	3	5mm maximum in diameter	
Stones (g per 2.5L)	4.0	Maximum weight of all Stones retained above a 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Presence of meat meal, blood meal, fish meal, poultry offal meal or other animal proteins. Stick/Stubble (>3cm in length and 1cm in diameter), glass, concrete, metal, animal excreta, animal carcasses, tainting agents or any other commercially unacceptable contaminant, smell or taste.	
Other Foreign Material (% by weight)	0.1	Fine material (eg., Soil, dust and minerals), pieces of snail shell (< half), pieces of stored grain insects	

Commodity: Wheat		**Season: 2021/22**	
Grade: ANW1™		**Standard Reference No.: CSG-120**	
QUALITY PARAMETER	**SPECIFICATION**	**COMMENT**	
Variety Restrictions	Yes	Approved varieties only	
Protein Min (%)	9.5	N X 5.7 @ 11% Moisture Basis	
Protein Max (%)	11.5		
Moisture Max (%)	12.5		
Test Weight Min (kg/hl)	76.0		
Unmillable Material Above the Screen Max (% by weight)	0.6	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods, Skeleton Weed Flowers (Seed Heads) or other seedpods not otherwise listed. Excludes contaminants where tolerances already exist.	
Screenings Max (% by weight)	5.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
Falling Number Min (sec)	300	Falling Number result overrides the visual assessment for Sprouted grains	
Defective Grains Max - (% by count, 300 grain sample [500 grain sample for WA], unless otherwise stated)			
Sprouted	Nil	Distorted	1.0
Stained	5.0	Severely Damaged (count per half litre, grain remaining above the screen)	1.0
Pink Stained	2.0	All Smuts except Loose Smut (entire load)	Nil
White Grain Disorder / Head Scab	1.0	Insect Damaged	1.0
Field Fungi (count per half litre)	10.0	Over-Dried Damaged	Nil
Dry Green or Sappy	1.0		
Foreign Seed Contaminants Max - (count of seeds in total per half litre, unless otherwise stated)			
Type 1 (individual seeds)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Head Poppy, Mexican Poppy, Opium Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (QLD only)	
Type 2	Nil	Castor Oil Plant, Coriander, Crow Garlic/ Wild Garlic, Darling Pea, Parthenium Weed (NSW/VIC/SA), Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3a	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple	
Type 3b	4	Vetch (Tare), Vetch (Commercial)	
Type 3c	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4	20	Bindweed (Field), Cutleaf Mignonette, Darnel (Drake Seed), Hexham Scent/Meliot (only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Sesbania Pea, Patterson's Curse/ Salvation Jane	
Type 6	10	Colombus Grass, Johnson Grass, Saffron Thistle	
Type 7a	1	Adzuki Beans, Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Medic Pods, Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter. Includes Onion Weed Pods regardless of size	
Type 7b	50	Barley (2 & 6 row), Bindweed (Australian), Bindweed (Black), Brome Grass, Carrot Weed, Durum, Red/Spring Feed Wheats, Oats (Black/Wild), Oats (Sand), Oats (Common), Rice, Rye (Cereal), Ryegrass on Stalk, Sorghum (Grain), Triticale, Turnip Weed Pods and any other Foreign Seeds not specified in Types 1-7(a), in SFS or in Unmillable Material Above the Screen that remain above the 2.0mm screen following the Screenings process	
Small Foreign Seeds (% by weight)	0.6	All Foreign Seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
Other Contaminants Max - (count per half litre, unless otherwise stated)			
Pickling Compounds (entire load)	Nil	Pickled grain or artificial colouring	
Chemicals Not Approved for Wheat (entire load)	Nil	Residues of any chemical compound not approved for wheat, used in contravention of the labelled instructions or chemicals in excess of the MRL	
Ryegrass Ergot (length in cm)	2.0	Length of all pieces present aligned end on end	
Cereal Ergot	1	Pieces or whole affected kernel	
Stored Grain Insects & Pea Weevil – Live (entire load)	Nil	All life stages	
Insects – Large, dead or alive	3	Includes Rutherglen bugs, ladybirds, grasshoppers, locusts, sitona weevils, wood bugs & pea weevil (dead only)	
Insects – Small, dead or alive	10	Includes all species of aphid, mites & stored grain insects (dead only)	
Earcockle	10	Number of galls	
Snails	1	Dead or alive	
Loose Smut	3	Pieces of backbone	
Sand	20	Individual grains	
Earth	1	5mm maximum in diameter	
Stones (g per 2.5L)	4.0	Maximum weight of all Stones retained above a 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Presence of meat meal, blood meal, fish meal, poultry offal meal or other animal proteins. Stick/Stubble (>3cm in length and 1cm in diameter), glass, concrete, metal, animal excreta, animal carcasses, tainting agents or any other commercially unacceptable contaminant, smell or taste.	
Other Foreign Material (% by weight)	0.1	Fine material (eg., Soil, dust and minerals), pieces of snail shell (< half), pieces of stored grain insects	

Commodity: Wheat		**Season: 2021/22**	
Grade: ANW2		**Standard Reference No.: CSG-122**	
QUALITY PARAMETER	**SPECIFICATION**	**COMMENT**	
Variety Restrictions	Yes	Approved varieties only	
Protein Min (%)	No Min.	N X 5.7 @ 11% Moisture Basis	
Protein Max (%)	No Max.		
Moisture Max (%)	12.5		
Test Weight Min (kg/hl)	72.0		
Unmillable Material Above the Screen Max (% by weight)	0.6	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods, Skeleton Weed Flowers (Seed Heads) or other seed pods not otherwise listed. Excludes contaminants where tolerances already exist.	
Screenings Max (% by weight)	10.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
Falling Number Min (sec)	300	Falling Number result overrides the visual assessment for Sprouted grains	
Defective Grains Max - (% by count, 300 grain sample [500 grain sample for WA], unless otherwise stated)			
Sprouted	Nil	Distorted	1.0
Stained	15.0	Severely Damaged (count per half litre, grain remaining above the screen)	1.0
Pink Stained	5.0	All Smuts except Loose Smut (entire load)	Nil
White Grain Disorder / Head Scab	1.0	Insect Damaged	2.0
Field Fungi (count per half litre)	10.0	Over-Dried Damaged	Nil
Dry Green or Sappy	1.0		
Foreign Seed Contaminants Max - (count of seeds in total per half litre, unless otherwise stated)			
Type 1 (individual seeds)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Head Poppy, Mexican Poppy, Opium Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (QLD only)	
Type 2	Nil	Castor Oil Plant, Coriander, Crow Garlic/ Wild Garlic, Darling Pea, Parthenium Weed (NSW/VIC/SA), Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3a	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple	
Type 3b	4	Vetch (Tare), Vetch (Commercial)	
Type 3c	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4	20	Bindweed (Field), Cutleaf Mignonette, Darnel (Drake Seed), Hexham Scent/Meliot (only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Sesbania Pea, Patterson's Curse/ Salvation Jane	
Type 6	50	Colombus Grass, Johnson Grass, Saffron Thistle	
Type 7a	10	Adzuki Beans, Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Medic Pods, Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter. Includes Onion Weed Pods regardless of size	
Type 7b	150	Barley (2 & 6 row), Bindweed (Australian), Bindweed (Black), Brome Grass, Carrot Weed, Durum, Red/Spring Feed Wheats, Oats (Black/Wild), Oats (Sand), Oats (Common), Rice, Rye (Cereal), Ryegrass on Stalk, Sorghum (Grain), Triticale, Turnip Weed Pods and any other Foreign Seeds not specified in Types 1-7(a), in SFS or in Unmillable Material Above the Screen that remain above the 2.0mm screen following the Screenings process	
Small Foreign Seeds (% by weight)	0.6	All Foreign Seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
Other Contaminants Max - (count per half litre, unless otherwise stated)			
Pickling Compounds (entire load)	Nil	Pickled grain or artificial colouring	
Chemicals Not Approved for Wheat (entire load)	Nil	Residues of any chemical compound not approved for wheat, used in contravention of the labelled instructions or chemicals in excess of the MRL	
Ryegrass Ergot (length in cm)	2.0	Length of all pieces present aligned end on end	
Cereal Ergot	1	Pieces or whole affected kernel	
Stored Grain Insects & Pea Weevil – Live (entire load)	Nil	All life stages	
Insects – Large, dead or alive	3	Includes Rutherglen bugs, ladybirds, grasshoppers, locusts, sitona weevils, wood bugs & pea weevil (dead only)	
Insects – Small, dead or alive	10	Includes all species of aphid, mites & stored grain insects (dead only)	
Earcockle	15	Number of galls	
Snails	10	Dead or alive	
Loose Smut	3	Pieces of backbone	
Sand	50	Individual grains	
Earth	3	5mm maximum in diameter	
Stones (g per 2.5L)	4.0	Maximum weight of all Stones retained above a 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Presence of meat meal, blood meal, fish meal, poultry offal meal or other animal proteins. Stick/Stubble (>3cm in length and 1cm in diameter), glass, concrete, metal, animal excreta, animal carcasses, tainting agents or any other commercially unacceptable contaminant, smell or taste.	
Other Foreign Material (% by weight)	0.1	Fine material (eg., Soil, dust and minerals), pieces of snail shell (< half), pieces of stored grain insects	

Commodity: Wheat		**Season: 2021/22**	
Grade: ASWS		**Standard Reference No.: CSG-126**	
QUALITY PARAMETER	**SPECIFICATION**	**COMMENT**	
Variety Restrictions	Yes	Approved varieties only	
Protein Min (%)	n/a	N X 5.7 @ 11% Moisture Basis	
Protein Max (%)	9.5		
Moisture Max (%)	12.5		
Test Weight Min (kg/hl)	76.0		
Unmillable Material Above the Screen Max (% by weight)	0.6	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods, Skeleton Weed Flowers (Seed Heads) or other seedpods not otherwise listed. Excludes contaminants where tolerances already exist.	
Screenings Max (% by weight)	5.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
Falling Number Min (sec)	300	Falling Number result overrides the visual assessment for Sprouted grains	
Defective Grains Max - (% by count, 300 grain sample [500 grain sample for WA], unless otherwise stated)			
Sprouted	Nil	Distorted	1.0
Stained	5.0	Severely Damaged (count per half litre, grain remaining above the screen)	1.0
Pink Stained	2.0	All Smuts except Loose Smut (entire load)	Nil
White Grain Disorder / Head Scab	1.0	Insect Damaged	1.0
Field Fungi (count per half litre)	10.0	Over-Dried Damaged	Nil
Dry Green or Sappy	1.0		
Foreign Seed Contaminants Max - (count of seeds in total per half litre, unless otherwise stated)			
Type 1 (individual seeds)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Head Poppy, Mexican Poppy, Opium Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (QLD only)	
Type 2	Nil	Castor Oil Plant, Coriander, Crow Garlic/ Wild Garlic, Darling Pea, Parthenium Weed (NSW/VIC/SA), Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3a	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple	
Type 3b	4	Vetch (Tare), Vetch (Commercial)	
Type 3c	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4	20	Bindweed (Field), Cutleaf Mignonette, Darnel (Drake Seed), Hexham Scent/Meliot (only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Sesbania Pea, Patterson's Curse/ Salvation Jane	
Type 6	10	Colombus Grass, Johnson Grass, Saffron Thistle	
Type 7a	1	Adzuki Beans, Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Medic Pods, Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter. Includes Onion Weed Pods regardless of size	
Type 7b	50	Barley (2 & 6 row), Bindweed (Australian), Bindweed (Black), Brome Grass, Carrot Weed, Durum, Red/Spring Feed Wheats, Oats (Black/Wild), Oats (Sand), Oats (Common), Rice, Rye (Cereal), Ryegrass on Stalk, Sorghum (Grain), Triticale, Turnip Weed Pods and any other Foreign Seeds not specified in Types 1-7(a), in SFS or in Unmillable Material Above the Screen that remain above the 2.0mm screen following the Screenings process	
Small Foreign Seeds (% by weight)	0.6	All Foreign Seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
Other Contaminants Max - (count per half litre, unless otherwise stated)			
Pickling Compounds (entire load)	Nil	Pickled grain or artificial colouring	
Chemicals Not Approved for Wheat (entire load)	Nil	Residues of any chemical compound not approved for wheat, used in contravention of the labelled instructions or chemicals in excess of the MRL	
Ryegrass Ergot (length in cm)	2.0	Length of all pieces present aligned end on end	
Cereal Ergot	1	Pieces or whole affected kernel	
Stored Grain Insects & Pea Weevil – Live (entire load)	Nil	All life stages	
Insects – Large, dead or alive	3	Includes Rutherglen bugs, ladybirds, grasshoppers, locusts, sitona weevils, wood bugs & pea weevil (dead only)	
Insects – Small, dead or alive	10	Includes all species of aphid, mites & stored grain insects (dead only)	
Earcockle	10	Number of galls	
Snails	1	Dead or alive	
Loose Smut	3	Pieces of backbone	
Sand	20	Individual grains	
Earth	1	5mm maximum in diameter	
Stones (g per 2.5L)	4.0	Maximum weight of all Stones retained above a 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Presence of meat meal, blood meal, fish meal, poultry offal meal or other animal proteins. Stick/Stubble (>3cm in length and 1cm in diameter), glass, concrete, metal, animal excreta, animal carcasses, tainting agents or any other commercially unacceptable contaminant, smell or taste.	
Other Foreign Material (% by weight)	0.1	Fine material (eg., Soil, dust and minerals), pieces of snail shell (< half), pieces of stored grain insects	

Commodity: Wheat		**Season: 2021/22**	
Grade: APWN™		**Standard Reference No.: CSG-127**	
QUALITY PARAMETER	**SPECIFICATION**	**COMMENT**	
Variety Restrictions	Yes	Approved varieties only	
Protein Min (%)	10.0	N X 5.7 @ 11% Moisture Basis	
Protein Max (%)	11.5		
Moisture Max (%)	12.5		
Test Weight Min (kg/hl)	76.0		
Unmillable Material Above the Screen Max (% by weight)	0.6	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods, Skeleton Weed Flowers (Seed Heads) or other seedpods not otherwise listed. Excludes contaminants where tolerances already exist.	
Screenings Max (% by weight)	5.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
Falling Number Min (sec)	300	Falling Number result overrides the visual assessment for Sprouted grains	
Defective Grains Max - (% by count, 300 grain sample [500 grain sample for WA], unless otherwise stated)			
Sprouted	Nil	Distorted	1.0
Stained	5.0	Severely Damaged (count per half litre, grain remaining above the screen)	1.0
Pink Stained	2.0	All Smuts except Loose Smut (entire load)	Nil
White Grain Disorder / Head Scab	1.0	Insect Damaged	1.0
Field Fungi (count per half litre)	10.0	Over-Dried Damaged	Nil
Dry Green or Sappy	1.0		
Foreign Seed Contaminants Max - (count of seeds in total per half litre, unless otherwise stated)			
Type 1 (individual seeds)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Head Poppy, Mexican Poppy, Opium Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (QLD only)	
Type 2	Nil	Castor Oil Plant, Coriander, Crow Garlic/ Wild Garlic, Darling Pea, Parthenium Weed (NSW/VIC/SA), Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3a	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple	
Type 3b	4	Vetch (Tare), Vetch (Commercial)	
Type 3c	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4	20	Bindweed (Field), Cutleaf Mignonette, Darnel (Drake Seed), Hexham Scent/Meliot (only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Sesbania Pea, Patterson's Curse/ Salvation Jane	
Type 6	10	Colombus Grass, Johnson Grass, Saffron Thistle	
Type 7a	1	Adzuki Beans, Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Medic Pods, Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter. Includes Onion Weed Pods regardless of size	
Type 7b	50	Barley (2 & 6 row), Bindweed (Australian), Bindweed (Black), Brome Grass, Carrot Weed, Durum, Red/Spring Feed Wheats, Oats (Black/Wild), Oats (Sand), Oats (Common), Rice, Rye (Cereal), Ryegrass on Stalk, Sorghum (Grain), Triticale, Turnip Weed Pods and any other Foreign Seeds not specified in Types 1-7(a), in SFS or in Unmillable Material Above the Screen that remain above the 2.0mm screen following the Screenings process	
Small Foreign Seeds (% by weight)	0.6	All Foreign Seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
Other Contaminants Max - (count per half litre, unless otherwise stated)			
Pickling Compounds (entire load)	Nil	Pickled grain or artificial colouring	
Chemicals Not Approved for Wheat (entire load)	Nil	Residues of any chemical compound not approved for wheat, used in contravention of the labelled instructions or chemicals in excess of the MRL	
Ryegrass Ergot (length in cm)	2.0	Length of all pieces present aligned end on end	
Cereal Ergot	1	Pieces or whole affected kernel	
Stored Grain Insects & Pea Weevil – Live (entire load)	Nil	All life stages	
Insects – Large, dead or alive	3	Includes Rutherglen bugs, ladybirds, grasshoppers, locusts, sitona weevils, wood bugs & pea weevil (dead only)	
Insects – Small, dead or alive	10	Includes all species of aphid, mites & stored grain insects (dead only)	
Earcockle	10	Number of galls	
Snails	1	Dead or alive	
Loose Smut	3	Pieces of backbone	
Sand	20	Individual grains	
Earth	1	5mm maximum in diameter	
Stones (g per 2.5L)	4.0	Maximum weight of all Stones retained above a 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Presence of meat meal, blood meal, fish meal, poultry offal meal or other animal proteins. Stick/Stubble (>3cm in length and 1cm in diameter), glass, concrete, metal, animal excreta, animal carcasses, tainting agents or any other commercially unacceptable contaminant, smell or taste.	
Other Foreign Material (% by weight)	0.1	Fine material (eg., Soil, dust and minerals), pieces of snail shell (< half), pieces of stored grain insects	

Commodity: Wheat		**Season: 2021/22**	
Grade: DR1™		**Standard Reference No.: CSG-130**	
QUALITY PARAMETER	**SPECIFICATION**	**COMMENT**	
Variety Restrictions	Yes	Approved varieties only	
Protein Min (%)	13.0	N X 5.7 @ 11% Moisture Basis	
Protein Max (%)	n/a		
Moisture Max (%)	12.5		
Test Weight Min (kg/hl)	76.0		
Unmillable Material Above the Screen Max (% by weight)	0.6	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods, Skeleton Weed Flowers (Seed Heads) or other seedpods not otherwise listed. Excludes contaminants where tolerances already exist.	
Screenings Max (% by weight)	5.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
Falling Number Min (sec)	300	Falling Number result overrides the visual assessment for Sprouted grains	
Defective Grains Max - (% by count, 300 grain sample [500 grain sample for WA], unless otherwise stated)			
Sprouted	Nil	Distorted	1.0
Stained	3.0	Severely Damaged (count per half litre, grain remaining above the screen)	1.0
Pink Stained	2.0	All Smuts except Loose Smut (entire load)	Nil
White Grain Disorder / Head Scab	1.0	Insect Damaged	1.0
Field Fungi (count per half litre)	10.0	Over-Dried Damaged	Nil
Dry Green or Sappy	1.0	Vitreous Kernels Min (using an approved method)	80
Foreign Seed Contaminants Max - (count of seeds in total per half litre, unless otherwise stated)			
Type 1 (individual seeds)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Head Poppy, Mexican Poppy, Opium Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (QLD only)	
Type 2	Nil	Castor Oil Plant, Coriander, Crow Garlic/ Wild Garlic, Darling Pea, Parthenium Weed (NSW/VIC/SA), Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3a	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple	
Type 3b	4	Vetch (Tare), Vetch (Commercial)	
Type 3c	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4	20	Bindweed (Field), Cutleaf Mignonette, Darnel (Drake Seed), Hexham Scent/Meliot (only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Sesbania Pea, Patterson's Curse/ Salvation Jane	
Type 6	10	Colombus Grass, Johnson Grass, Saffron Thistle	
Type 7a	1	Adzuki Beans, Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Medic Pods, Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter. Includes Onion Weed Pods regardless of size	
Type 7b	50	Barley (2 & 6 row), Bindweed (Australian), Bindweed (Black), Bread wheat, Brome Grass, Carrot Weed, Red/Spring Feed Wheats, Oats (Black/Wild), Oats (Sand), Oats (Common), Rice, Rye (Cereal), Ryegrass on Stalk, Sorghum (Grain), Triticale, Turnip Weed Pods and any other Foreign Seeds not specified in Types 1-7(a), in SFS or in Unmillable Material Above the Screen that remain above the 2.0mm screen following the Screenings process	
Small Foreign Seeds (% by weight)	0.6	All Foreign Seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
Other Contaminants Max - (count per half litre, unless otherwise stated)			
Pickling Compounds (entire load)	Nil	Pickled grain or artificial colouring	
Chemicals Not Approved for Wheat (entire load)	Nil	Residues of any chemical compound not approved for wheat, used in contravention of the labelled instructions or chemicals in excess of the MRL	
Ryegrass Ergot (length in cm)	2.0	Length of all pieces present aligned end on end	
Cereal Ergot	1	Pieces or whole affected kernel	
Stored Grain Insects & Pea Weevil – Live (entire load)	Nil	All life stages	
Insects – Large, dead or alive	3	Includes Rutherglen bugs, ladybirds, grasshoppers, locusts, sitona weevils, wood bugs & pea weevil (dead only)	
Insects – Small, dead or alive	10	Includes all species of aphid, mites & stored grain insects (dead only)	
Earcockle	10	Number of galls	
Snails	1	Dead or alive	
Loose Smut	3	Pieces of backbone	
Sand	20	Individual grains	
Earth	1	5mm maximum in diameter	
Stones (g per 2.5L)	4.0	Maximum weight of all Stones retained above a 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Presence of meat meal, blood meal, fish meal, poultry offal meal or other animal proteins. Stick/Stubble (>3cm in length and 1cm in diameter), glass, concrete, metal, animal excreta, animal carcasses, tainting agents or any other commercially unacceptable contaminant, smell or taste.	
Other Foreign Material (% by weight)	0.1	Fine material (eg., Soil, dust and minerals), pieces of snail shell (< half), pieces of stored grain insects	
Bread Wheat (% by count)	3.0	300 grain sample (500 grain sample for WA)	

Commodity: Wheat		**Season: 2021/22**	
Grade: DR2		**Standard Reference No.: CSG-131**	
QUALITY PARAMETER	**SPECIFICATION**	**COMMENT**	
Variety Restrictions	Yes	Approved varieties only	
Protein Min (%)	11.5	N X 5.7 @ 11% Moisture Basis	
Protein Max (%)	n/a		
Moisture Max (%)	12.5		
Test Weight Min (kg/hl)	76.0		
Unmillable Material Above the Screen Max (% by weight)	0.6	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods, Skeleton Weed Flowers (Seed Heads) or other seedpods not otherwise listed. Excludes contaminants where tolerances already exist.	
Screenings Max (% by weight)	5.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
Falling Number Min (sec)	300	Falling Number result overrides the visual assessment for Sprouted grains	
Defective Grains Max - (% by count, 300 grain sample [500 grain sample for WA], unless otherwise stated)			
Sprouted	Nil	Distorted	2.0
Stained	5.0	Severely Damaged (count per half litre, grain remaining above the screen)	1.0
Pink Stained	2.0	All Smuts except Loose Smut (entire load)	Nil
White Grain Disorder / Head Scab	1.0	Insect Damaged	1.0
Field Fungi (count per half litre)	10.0	Over-Dried Damaged	Nil
Dry Green or Sappy	2.0	Vitreous Kernels Min (using an approved method)	70
Foreign Seed Contaminants Max - (count of seeds in total per half litre, unless otherwise stated)			
Type 1 (individual seeds)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Head Poppy, Mexican Poppy, Opium Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (QLD only)	
Type 2	Nil	Castor Oil Plant, Coriander, Crow Garlic/ Wild Garlic, Darling Pea, Parthenium Weed (NSW/VIC/SA), Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3a	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple	
Type 3b	4	Vetch (Tare), Vetch (Commercial)	
Type 3c	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4	20	Bindweed (Field), Cutleaf Mignonette, Darnel (Drake Seed), Hexham Scent/Meliot (only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Sesbania Pea, Patterson's Curse/ Salvation Jane	
Type 6	10	Colombus Grass, Johnson Grass, Saffron Thistle	
Type 7a	1	Adzuki Beans, Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Medic Pods, Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter. Includes Onion Weed Pods regardless of size	
Type 7b	50	Barley (2 & 6 row), Bindweed (Australian), Bindweed (Black), Bread wheat, Brome Grass, Carrot Weed, Red/Spring Feed Wheats, Oats (Black/Wild), Oats (Sand), Oats (Common), Rice, Rye (Cereal), Ryegrass on Stalk, Sorghum (Grain), Triticale, Turnip Weed Pods and any other Foreign Seeds not specified in Types 1-7(a), in SFS or in Unmillable Material Above the Screen that remain above the 2.0mm screen following the Screenings process	
Small Foreign Seeds (% by weight)	0.6	All Foreign Seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
Other Contaminants Max - (count per half litre, unless otherwise stated)			
Pickling Compounds (entire load)	Nil	Pickled grain or artificial colouring	
Chemicals Not Approved for Wheat (entire load)	Nil	Residues of any chemical compound not approved for wheat, used in contravention of the labelled instructions or chemicals in excess of the MRL	
Ryegrass Ergot (length in cm)	2.0	Length of all pieces present aligned end on end	
Cereal Ergot	1	Pieces or whole affected kernel	
Stored Grain Insects & Pea Weevil – Live (entire load)	Nil	All life stages	
Insects – Large, dead or alive	3	Includes Rutherglen bugs, ladybirds, grasshoppers, locusts, sitona weevils, wood bugs & pea weevil (dead only)	
Insects – Small, dead or alive	10	Includes all species of aphid, mites & stored grain insects (dead only)	
Earcockle	10	Number of galls	
Snails	1	Dead or alive	
Loose Smut	3	Pieces of backbone	
Sand	20	Individual grains	
Earth	1	5mm maximum in diameter	
Stones (g per 2.5L)	4.0	Maximum weight of all Stones retained above a 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Presence of meat meal, blood meal, fish meal, poultry offal meal or other animal proteins. Stick/Stubble (>3cm in length and 1cm in diameter), glass, concrete, metal, animal excreta, animal carcasses, tainting agents or any other commercially unacceptable contaminant, smell or taste.	
Other Foreign Material (% by weight)	0.1	Fine material (eg., Soil, dust and minerals), pieces of snail shell (< half), pieces of stored grain insects	
Bread Wheat (% by count)	3.0	300 grain sample (500 grain sample for WA)	

Commodity: Wheat		**Season: 2021/22**	
Grade: DR3		**Standard Reference No.: CSG-132**	
QUALITY PARAMETER	**SPECIFICATION**	**COMMENT**	
Variety Restrictions	Yes	Approved varieties only	
Protein Min (%)	10.0	N X 5.7 @ 11% Moisture Basis	
Protein Max (%)	n/a		
Moisture Max (%)	12.5		
Test Weight Min (kg/hl)	71.0		
Unmillable Material Above the Screen Max (% by weight)	1.2	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods, Skeleton Weed Flowers (Seed Heads) or other seedpods not otherwise listed. Excludes contaminants where tolerances already exist.	
Screenings Max (% by weight)	10.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
Falling Number Min (sec)	200	Falling Number result overrides the visual assessment for Sprouted grains	
Defective Grains Max - (% by count, 300 grain sample [500 grain sample for WA], unless otherwise stated)			
Sprouted	Nil	Distorted	2.0
Stained	20.0	Severely Damaged (count per half litre, grain remaining above the screen)	1.0
Pink Stained	5.0	All Smuts except Loose Smut (entire load)	Nil
White Grain Disorder / Head Scab	1.0	Insect Damaged	1.0
Field Fungi (count per half litre)	10.0	Over-Dried Damaged	Nil
Dry Green or Sappy	2.0	Vitreous Kernels Min (using an approved method)	n/a
Foreign Seed Contaminants Max - (count of seeds in total per half litre, unless otherwise stated)			
Type 1 (individual seeds)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Head Poppy, Mexican Poppy, Opium Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (QLD only)	
Type 2	Nil	Castor Oil Plant, Coriander, Crow Garlic/ Wild Garlic, Darling Pea, Parthenium Weed (NSW/VIC/SA), Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3a	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple	
Type 3b	4	Vetch (Tare), Vetch (Commercial)	
Type 3c	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4	20	Bindweed (Field), Cutleaf Mignonette, Darnel (Drake Seed), Hexham Scent/Meliot (only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Sesbania Pea, Patterson's Curse/ Salvation Jane	
Type 6	50	Colombus Grass, Johnson Grass, Saffron Thistle	
Type 7a	10	Adzuki Beans, Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Medic Pods, Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter. Includes Onion Weed Pods regardless of size	
Type 7b	150	Barley (2 & 6 row), Bindweed (Australian), Bindweed (Black), Bread wheat, Brome Grass, Carrot Weed, Red/Spring Feed Wheats, Oats (Black/Wild), Oats (Sand), Oats (Common), Rice, Rye (Cereal), Ryegrass on Stalk, Sorghum (Grain), Triticale, Turnip Weed Pods and any other Foreign Seeds not specified in Types 1-7(a), in SFS or in Unmillable Material Above the Screen that remain above the 2.0mm screen following the Screenings process	
Small Foreign Seeds (% by weight)	1.2	All Foreign Seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
Other Contaminants Max - (count per half litre, unless otherwise stated)			
Pickling Compounds (entire load)	Nil	Pickled grain or artificial colouring	
Chemicals Not Approved for Wheat (entire load)	Nil	Residues of any chemical compound not approved for wheat, used in contravention of the labelled instructions or chemicals in excess of the MRL	
Ryegrass Ergot (length in cm)	2.0	Length of all pieces present aligned end on end	
Cereal Ergot	1	Pieces or whole affected kernel	
Stored Grain Insects & Pea Weevil – Live (entire load)	Nil	All life stages	
Insects – Large, dead or alive	3	Includes Rutherglen bugs, ladybirds, grasshoppers, locusts, sitona weevils, wood bugs & pea weevil (dead only)	
Insects – Small, dead or alive	10	Includes all species of aphid, mites & stored grain insects (dead only)	
Earcockle	10	Number of galls	
Snails	1	Dead or alive	
Loose Smut	3	Pieces of backbone	
Sand	20	Individual grains	
Earth	1	5mm maximum in diameter	
Stones (g per 2.5L)	4.0	Maximum weight of all Stones retained above a 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Presence of meat meal, blood meal, fish meal, poultry offal meal or other animal proteins. Stick/Stubble (>3cm in length and 1cm in diameter), glass, concrete, metal, animal excreta, animal carcasses, tainting agents or any other commercially unacceptable contaminant, smell or taste.	
Other Foreign Material (% by weight)	0.1	Fine material (eg., Soil, dust and minerals), pieces of snail shell (< half), pieces of stored grain insects	
Bread Wheat (% by count)	5.0	300 grain sample (500 grain sample for WA)	

Commodity: Wheat		**Season: 2021/22**	
Grade: SFE1 (NSW/VIC)		**Standard Reference No.: CSG-140**	
QUALITY PARAMETER	**SPECIFICATION**	**COMMENT**	
Variety Restrictions	Yes	Approved varieties only	
Protein Min (%)	n/a	N X 5.7 @ 11% Moisture Basis	
Protein Max (%)	9.5		
Moisture Max (%)	12.5		
Test Weight Min (kg/hl)	76.0		
Unmillable Material Above the Screen Max (% by weight)	0.6	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods, Skeleton Weed Flowers (Seed Heads) or other seedpods not otherwise listed. Excludes contaminants where tolerances already exist.	
Screenings Max (% by weight)	8.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
Falling Number Min (sec)	300	Falling Number result overrides the visual assessment for Sprouted grains	
Defective Grains Max - (% by count, 300 grain sample [500 grain sample for WA], unless otherwise stated)			
Sprouted	Nil	Distorted	1.0
Stained	10.0	Severely Damaged (count per half litre, grain remaining above the screen)	1.0
Pink Stained	2.0	All Smuts except Loose Smut (entire load)	Nil
White Grain Disorder / Head Scab	1.0	Insect Damaged	1.0
Field Fungi (count per half litre)	10.0	Over-Dried Damaged	Nil
Dry Green or Sappy	1.0		
Foreign Seed Contaminants Max - (count of seeds in total per half litre, unless otherwise stated)			
Type 1 (individual seeds)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Head Poppy, Mexican Poppy, Opium Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (QLD only)	
Type 2	Nil	Castor Oil Plant, Coriander, Crow Garlic/ Wild Garlic, Darling Pea, Parthenium Weed (NSW/VIC/SA), Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3a	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple	
Type 3b	4	Vetch (Tare), Vetch (Commercial)	
Type 3c	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4	20	Bindweed (Field), Cutleaf Mignonette, Darnel (Drake Seed), Hexham Scent/Meliot (only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Sesbania Pea, Patterson's Curse/ Salvation Jane	
Type 6	10	Colombus Grass, Johnson Grass, Saffron Thistle	
Type 7a	1	Adzuki Beans, Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Medic Pods, Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter. Includes Onion Weed Pods regardless of size	
Type 7b	50	Barley (2 & 6 row), Bindweed (Australian), Bindweed (Black), Durum, Brome Grass, Carrot Weed, Red/Spring Feed Wheats, Oats (Black/Wild), Oats (Sand), Oats (Common), Rice, Rye (Cereal), Ryegrass on Stalk, Sorghum (Grain), Triticale, Turnip Weed Pods and any other Foreign Seeds not specified in Types 1-7(a), in SFS or in Unmillable Material Above the Screen that remain above the 2.0mm screen following the Screenings process	
Small Foreign Seeds (% by weight)	0.6	All Foreign Seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
Other Contaminants Max - (count per half litre, unless otherwise stated)			
Pickling Compounds (entire load)	Nil	Pickled grain or artificial colouring	
Chemicals Not Approved for Wheat (entire load)	Nil	Residues of any chemical compound not approved for wheat, used in contravention of the labelled instructions or chemicals in excess of the MRL	
Ryegrass Ergot (length in cm)	2.0	Length of all pieces present aligned end on end	
Cereal Ergot	1	Pieces or whole affected kernel	
Stored Grain Insects & Pea Weevil – Live (entire load)	Nil	All life stages	
Insects – Large, dead or alive	3	Includes Rutherglen bugs, ladybirds, grasshoppers, locusts, sitona weevils, wood bugs & pea weevil (dead only)	
Insects – Small, dead or alive	10	Includes all species of aphid, mites & stored grain insects (dead only)	
Earcockle	10	Number of galls	
Snails	1	Dead or alive	
Loose Smut	3	Pieces of backbone	
Sand	20	Individual grains	
Earth	1	5mm maximum in diameter	
Stones (g per 2.5L)	4.0	Maximum weight of all Stones retained above a 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Presence of meat meal, blood meal, fish meal, poultry offal meal or other animal proteins. Stick/Stubble (>3cm in length and 1cm in diameter), glass, concrete, metal, animal excreta, animal carcasses, tainting agents or any other commercially unacceptable contaminant, smell or taste.	
Other Foreign Material (% by weight)	0.1	Fine material (eg., Soil, dust and minerals), pieces of snail shell (< half), pieces of stored grain insects	

Commodity: Wheat		**Season: 2021/22**	
Grade: SFE1 (SA)		**Standard Reference No.: CSG-141**	
QUALITY PARAMETER	**SPECIFICATION**	**COMMENT**	
Variety Restrictions	Yes	Approved varieties only	
Protein Min (%)	n/a	N X 5.7 @ 11% Moisture Basis	
Protein Max (%)	9.5		
Moisture Max (%)	12.5		
Test Weight Min (kg/hl)	76.0		
Unmillable Material Above the Screen Max (% by weight)	0.6	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods, Skeleton Weed Flowers (Seed Heads) or other seedpods not otherwise listed. Excludes contaminants where tolerances already exist.	
Screenings Max (% by weight)	5.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
Falling Number Min (sec)	300	Falling Number result overrides the visual assessment for Sprouted grains	
Defective Grains Max - (% by count, 300 grain sample [500 grain sample for WA], unless otherwise stated)			
Sprouted	Nil	Distorted	1.0
Stained	5.0	Severely Damaged (count per half litre, grain remaining above the screen)	1.0
Pink Stained	2.0	All Smuts except Loose Smut (entire load)	Nil
White Grain Disorder / Head Scab	1.0	Insect Damaged	1.0
Field Fungi (count per half litre)	10.0	Over-Dried Damaged	Nil
Dry Green or Sappy	1.0		
Foreign Seed Contaminants Max - (count of seeds in total per half litre, unless otherwise stated)			
Type 1 (individual seeds)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Head Poppy, Mexican Poppy, Opium Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (QLD only)	
Type 2	Nil	Castor Oil Plant, Coriander, Crow Garlic/ Wild Garlic, Darling Pea, Parthenium Weed (NSW/VIC/SA), Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3a	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple	
Type 3b	4	Vetch (Tare), Vetch (Commercial)	
Type 3c	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4	20	Bindweed (Field), Cutleaf Mignonette, Darnel (Drake Seed), Hexham Scent/Meliot (only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Sesbania Pea, Patterson's Curse/ Salvation Jane	
Type 6	10	Colombus Grass, Johnson Grass, Saffron Thistle	
Type 7a	1	Adzuki Beans, Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Medic Pods, Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter. Includes Onion Weed Pods regardless of size	
Type 7b	50	Barley (2 & 6 row), Bindweed (Australian), Bindweed (Black), Brome Grass, Carrot Weed, Durum, Red/Spring Feed Wheats, Oats (Black/Wild), Oats (Sand), Oats (Common), Rice, Rye (Cereal), Ryegrass on Stalk, Sorghum (Grain), Triticale, Turnip Weed Pods and any other Foreign Seeds not specified in Types 1-7(a), in SFS or in Unmillable Material Above the Screen that remain above the 2.0mm screen following the Screenings process	
Small Foreign Seeds (% by weight)	0.6	All Foreign Seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
Other Contaminants Max - (count per half litre, unless otherwise stated)			
Pickling Compounds (entire load)	Nil	Pickled grain or artificial colouring	
Chemicals Not Approved for Wheat (entire load)	Nil	Residues of any chemical compound not approved for wheat, used in contravention of the labelled instructions or chemicals in excess of the MRL	
Ryegrass Ergot (length in cm)	2.0	Length of all pieces present aligned end on end	
Cereal Ergot	1	Pieces or whole affected kernel	
Stored Grain Insects & Pea Weevil – Live (entire load)	Nil	All life stages	
Insects – Large, dead or alive	3	Includes Rutherglen bugs, ladybirds, grasshoppers, locusts, sitona weevils, wood bugs & pea weevil (dead only)	
Insects – Small, dead or alive	10	Includes all species of aphid, mites & stored grain insects (dead only)	
Earcockle	10	Number of galls	
Snails	1	Dead or alive	
Loose Smut	3	Pieces of backbone	
Sand	20	Individual grains	
Earth	1	5mm maximum in diameter	
Stones (g per 2.5L)	4.0	Maximum weight of all Stones retained above a 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Presence of meat meal, blood meal, fish meal, poultry offal meal or other animal proteins. Stick/Stubble (>3cm in length and 1cm in diameter), glass, concrete, metal, animal excreta, animal carcasses, tainting agents or any other commercially unacceptable contaminant, smell or taste.	
Other Foreign Material (% by weight)	0.1	Fine material (eg., Soil, dust and minerals), pieces of snail shell (< half), pieces of stored grain insects	

Commodity: Wheat		**Season: 2021/22**	
Grade: SFT1™		**Standard Reference No.: CSG-142**	
QUALITY PARAMETER	**SPECIFICATION**	**COMMENT**	
Variety Restrictions	Yes	Approved varieties only	
Protein Min (%)	n/a	N X 5.7 @ 11% Moisture Basis	
Protein Max (%)	9.5		
Moisture Max (%)	12.5		
Test Weight Min (kg/hl)	76.0		
Unmillable Material Above the Screen Max (% by weight)	0.6	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods, Skeleton Weed Flowers (Seed Heads) or other seedpods not otherwise listed. Excludes contaminants where tolerances already exist.	
Screenings Max (% by weight)	5.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
Falling Number Min (sec)	300	Falling Number result overrides the visual assessment for Sprouted grains	
Defective Grains Max - (% by count, 300 grain sample [500 grain sample for WA], unless otherwise stated)			
Sprouted	Nil	Distorted	1.0
Stained	5.0	Severely Damaged (count per half litre, grain remaining above the screen)	1.0
Pink Stained	2.0	All Smuts except Loose Smut (entire load)	Nil
White Grain Disorder / Head Scab	1.0	Insect Damaged	1.0
Field Fungi (count per half litre)	10.0	Over-Dried Damaged	Nil
Dry Green or Sappy	1.0		
Foreign Seed Contaminants Max - (count of seeds in total per half litre, unless otherwise stated)			
Type 1 (individual seeds)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Head Poppy, Mexican Poppy, Opium Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (QLD only)	
Type 2	Nil	Castor Oil Plant, Coriander, Crow Garlic/ Wild Garlic, Darling Pea, Parthenium Weed (NSW/VIC/SA), Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3a	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple	
Type 3b	4	Vetch (Tare), Vetch (Commercial)	
Type 3c	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4	20	Bindweed (Field), Cutleaf Mignonette, Darnel (Drake Seed), Hexham Scent/Meliot (only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Sesbania Pea, Patterson's Curse/ Salvation Jane	
Type 6	10	Colombus Grass, Johnson Grass, Saffron Thistle	
Type 7a	1	Adzuki Beans, Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Medic Pods, Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter. Includes Onion Weed Pods regardless of size	
Type 7b	50	Barley (2 & 6 row), Bindweed (Australian), Bindweed (Black), Brome Grass, Carrot Weed, Durum, Red/Spring Feed Wheats, Oats (Black/Wild), Oats (Sand), Oats (Common), Rice, Rye (Cereal), Ryegrass on Stalk, Sorghum (Grain), Triticale, Turnip Weed Pods and any other Foreign Seeds not specified in Types 1-7(a), in SFS or in Unmillable Material Above the Screen that remain above the 2.0mm screen following the Screenings process	
Small Foreign Seeds (% by weight)	0.6	All Foreign Seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
Other Contaminants Max - (count per half litre, unless otherwise stated)			
Pickling Compounds (entire load)	Nil	Pickled grain or artificial colouring	
Chemicals Not Approved for Wheat (entire load)	Nil	Residues of any chemical compound not approved for wheat, used in contravention of the labelled instructions or chemicals in excess of the MRL	
Ryegrass Ergot (length in cm)	2.0	Length of all pieces present aligned end on end	
Cereal Ergot	1	Pieces or whole affected kernel	
Stored Grain Insects & Pea Weevil – Live (entire load)	Nil	All life stages	
Insects – Large, dead or alive	3	Includes Rutherglen bugs, ladybirds, grasshoppers, locusts, sitona weevils, wood bugs & pea weevil (dead only)	
Insects – Small, dead or alive	10	Includes all species of aphid, mites & stored grain insects (dead only)	
Earcockle	10	Number of galls	
Snails	1	Dead or alive	
Loose Smut	3	Pieces of backbone	
Sand	20	Individual grains	
Earth	1	5mm maximum in diameter	
Stones (g per 2.5L)	4.0	Maximum weight of all Stones retained above a 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Presence of meat meal, blood meal, fish meal, poultry offal meal or other animal proteins. Stick/Stubble (>3cm in length and 1cm in diameter), glass, concrete, metal, animal excreta, animal carcasses, tainting agents or any other commercially unacceptable contaminant, smell or taste.	
Other Foreign Material (% by weight)	0.1	Fine material (eg., Soil, dust and minerals), pieces of snail shell (< half), pieces of stored grain insects	

Commodity: Wheat		**Season: 2021/22**	
Grade: SFE2 (NSW/VIC)		**Standard Reference No.: CSG-143**	
QUALITY PARAMETER	**SPECIFICATION**	**COMMENT**	
Variety Restrictions	Yes	Approved varieties only	
Protein Min (%)	n/a	N X 5.7 @ 11% Moisture Basis	
Protein Max (%)	10.5		
Moisture Max (%)	12.5		
Test Weight Min (kg/hl)	76.0		
Unmillable Material Above the Screen Max (% by weight)	0.6	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods, Skeleton Weed Flowers (Seed Heads) or other seedpods not otherwise listed. Excludes contaminants where tolerances already exist.	
Screenings Max (% by weight)	8.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
Falling Number Min (sec)	300	Falling Number result overrides the visual assessment for Sprouted grains	
Defective Grains Max - (% by count, 300 grain sample [500 grain sample for WA], unless otherwise stated)			
Sprouted	Nil	Distorted	5.0
Stained	15.0	Severely Damaged (count per half litre, grain remaining above the screen)	1.0
Pink Stained	5.0	All Smuts except Loose Smut (entire load)	Nil
White Grain Disorder / Head Scab	1.0	Insect Damaged	1.0
Field Fungi (count per half litre)	10.0	Over-Dried Damaged	Nil
Dry Green or Sappy	5.0		
Foreign Seed Contaminants Max - (count of seeds in total per half litre, unless otherwise stated)			
Type 1 (individual seeds)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Head Poppy, Mexican Poppy, Opium Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (QLD only)	
Type 2	Nil	Castor Oil Plant, Coriander, Crow Garlic/ Wild Garlic, Darling Pea, Parthenium Weed (NSW/VIC/SA), Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3a	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple	
Type 3b	4	Vetch (Tare), Vetch (Commercial)	
Type 3c	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4	20	Bindweed (Field), Cutleaf Mignonette, Darnel (Drake Seed), Hexham Scent/Meliot (only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Sesbania Pea, Patterson's Curse/ Salvation Jane	
Type 6	10	Colombus Grass, Johnson Grass, Saffron Thistle	
Type 7a	1	Adzuki Beans, Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Medic Pods, Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter. Includes Onion Weed Pods regardless of size	
Type 7b	50	Barley (2 & 6 row), Bindweed (Australian), Bindweed (Black), Brome Grass, Carrot Weed, Durum, Red/Spring Feed Wheats, Oats (Black/Wild), Oats (Sand), Oats (Common), Rice, Rye (Cereal), Ryegrass on Stalk, Sorghum (Grain), Triticale, Turnip Weed Pods and any other Foreign Seeds not specified in Types 1-7(a), in SFS or in Unmillable Material Above the Screen that remain above the 2.0mm screen following the Screenings process	
Small Foreign Seeds (% by weight)	0.6	All Foreign Seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
Other Contaminants Max - (count per half litre, unless otherwise stated)			
Pickling Compounds (entire load)	Nil	Pickled grain or artificial colouring	
Chemicals Not Approved for Wheat (entire load)	Nil	Residues of any chemical compound not approved for wheat, used in contravention of the labelled instructions or chemicals in excess of the MRL	
Ryegrass Ergot (length in cm)	2.0	Length of all pieces present aligned end on end	
Cereal Ergot	1	Pieces or whole affected kernel	
Stored Grain Insects & Pea Weevil – Live (entire load)	Nil	All life stages	
Insects – Large, dead or alive	3	Includes Rutherglen bugs, ladybirds, grasshoppers, locusts, sitona weevils, wood bugs & pea weevil (dead only)	
Insects – Small, dead or alive	10	Includes all species of aphid, mites & stored grain insects (dead only)	
Earcockle	10	Number of galls	
Snails	1	Dead or alive	
Loose Smut	3	Pieces of backbone	
Sand	20	Individual grains	
Earth	1	5mm maximum in diameter	
Stones (g per 2.5L)	4.0	Maximum weight of all Stones retained above a 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Presence of meat meal, blood meal, fish meal, poultry offal meal or other animal proteins. Stick/Stubble (>3cm in length and 1cm in diameter), glass, concrete, metal, animal excreta, animal carcasses, tainting agents or any other commercially unacceptable contaminant, smell or taste.	
Other Foreign Material (% by weight)	0.1	Fine material (eg., Soil, dust and minerals), pieces of snail shell (< half), pieces of stored grain insects	

Commodity: Wheat		**Season: 2021/22**	
Grade: SFE2 (SA)		**Standard Reference No.: CSG-144**	
QUALITY PARAMETER	**SPECIFICATION**	**COMMENT**	
Variety Restrictions	Yes	Approved varieties only	
Protein Min (%)	n/a	N X 5.7 @ 11% Moisture Basis	
Protein Max (%)	10.5		
Moisture Max (%)	12.5		
Test Weight Min (kg/hl)	68.0		
Unmillable Material Above the Screen Max (% by weight)	1.2	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods, Skeleton Weed Flowers (Seed Heads) or other seedpods not otherwise listed. Excludes contaminants where tolerances already exist.	
Screenings Max (% by weight)	10.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
Falling Number Min (sec)	200	Falling Number result overrides the visual assessment for Sprouted grains	
Defective Grains Max - (% by count, 300 grain sample [500 grain sample for WA], unless otherwise stated)			
Sprouted	Nil	Distorted	10.0
Stained	15.0	Severely Damaged (count per half litre, grain remaining above the screen)	1.0
Pink Stained	5.0	All Smuts except Loose Smut (entire load)	Nil
White Grain Disorder/Head Scab	1.0	Insect Damaged	1.0
Field Fungi (count per half litre)	10.0	Over-Dried Damaged	Nil
Dry Green or Sappy	5.0		
Foreign Seed Contaminants Max - (count of seeds in total per half litre, unless otherwise stated)			
Type 1 (individual seeds)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Head Poppy, Mexican Poppy, Opium Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (QLD only)	
Type 2	Nil	Castor Oil Plant, Coriander, Crow Garlic/ Wild Garlic, Darling Pea, Parthenium Weed (NSW/VIC/SA), Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3a	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple	
Type 3b	4	Vetch (Tare), Vetch (Commercial)	
Type 3c	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4	20	Bindweed (Field), Cutleaf Mignonette, Darnel (Drake Seed), Hexham Scent/Meliot (only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Sesbania Pea, Patterson's Curse/ Salvation Jane	
Type 6	50	Colombus Grass, Johnson Grass, Saffron Thistle	
Type 7a	10	Adzuki Beans, Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Medic Pods, Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter. Includes Onion Weed Pods regardless of size	
Type 7b	150	Barley (2 & 6 row), Bindweed (Australian), Bindweed (Black), Brome Grass, Carrot Weed, Durum, Red/Spring Feed Wheats, Oats (Black/Wild), Oats (Sand), Oats (Common), Rice, Rye (Cereal), Ryegrass on Stalk, Sorghum (Grain), Triticale, Turnip Weed Pods and any other Foreign Seeds not specified in Types 1-7(a), in SFS or in Unmillable Material Above the Screen that remain above the 2.0mm screen following the Screenings process	
Small Foreign Seeds (% by weight)	1.2	All Foreign Seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
Other Contaminants Max - (count per half litre, unless otherwise stated)			
Pickling Compounds (entire load)	Nil	Pickled grain or artificial colouring	
Chemicals Not Approved for Wheat (entire load)	Nil	Residues of any chemical compound not approved for wheat, used in contravention of the labelled instructions or chemicals in excess of the MRL	
Ryegrass Ergot (length in cm)	2.0	Length of all pieces present aligned end on end	
Cereal Ergot	1	Pieces or whole affected kernel	
Stored Grain Insects & Pea Weevil – Live (entire load)	Nil	All life stages	
Insects – Large, dead or alive	3	Includes Rutherglen bugs, ladybirds, grasshoppers, locusts, sitona weevils, wood bugs & pea weevil (dead only)	
Insects – Small, dead or alive	10	Includes all species of aphid, mites & stored grain insects (dead only)	
Earcockle	10	Number of galls	
Snails	1	Dead or alive	
Loose Smut	3	Pieces of backbone	
Sand	20	Individual grains	
Earth	1	5mm maximum in diameter	
Stones (g per 2.5L)	4.0	Maximum weight of all Stones retained above a 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Presence of meat meal, blood meal, fish meal, poultry offal meal or other animal proteins. Stick/Stubble (>3cm in length and 1cm in diameter), glass, concrete, metal, animal excreta, animal carcasses, tainting agents or any other commercially unacceptable contaminant, smell or taste.	
Other Foreign Material (% by weight)	0.1	Fine material (eg., Soil, dust and minerals), pieces of snail shell (< half), pieces of stored grain insects	

Commodity: Wheat		**Season: 2021/22**	
Grade: SFT2		**Standard Reference No.: CSG-145**	
QUALITY PARAMETER	**SPECIFICATION**	**COMMENT**	
Variety Restrictions	Yes	Approved varieties only	
Protein Min (%)	n/a	N X 5.7 @ 11% Moisture Basis	
Protein Max (%)	10.5		
Moisture Max (%)	12.5		
Test Weight Min (kg/hl)	72.0		
Unmillable Material Above the Screen Max (% by weight)	1.2	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods, Skeleton Weed Flowers (Seed Heads) or other seedpods not otherwise listed. Excludes contaminants where tolerances already exist.	
Screenings Max (% by weight)	10.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
Falling Number Min (sec)	300	Falling Number result overrides the visual assessment for Sprouted grains	
Defective Grains Max - (% by count, 300 grain sample [500 grain sample for WA], unless otherwise stated)			
Sprouted	Nil	Distorted	5.0
Stained	15.0	Severely Damaged (count per half litre, grain remaining above the screen)	1.0
Pink Stained	5.0	All Smuts except Loose Smut (entire load)	Nil
White Grain Disorder / Head Scab	1.0	Insect Damaged	2.0
Field Fungi (count per half litre)	10.0	Over-Dried Damaged	Nil
Dry Green or Sappy	5.0		
Foreign Seed Contaminants Max - (count of seeds in total per half litre, unless otherwise stated)			
Type 1 (individual seeds)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Head Poppy, Mexican Poppy, Opium Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (QLD only)	
Type 2	Nil	Castor Oil Plant, Coriander, Crow Garlic/ Wild Garlic, Darling Pea, Parthenium Weed (NSW/VIC/SA), Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3a	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple	
Type 3b	4	Vetch (Tare), Vetch (Commercial)	
Type 3c	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4	20	Bindweed (Field), Cutleaf Mignonette, Darnel (Drake Seed), Hexham Scent/Meliot (only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Sesbania Pea, Patterson's Curse/ Salvation Jane	
Type 6	10	Colombus Grass, Johnson Grass, Saffron Thistle	
Type 7a	1	Adzuki Beans, Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Medic Pods, Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter. Includes Onion Weed Pods regardless of size	
Type 7b	50	Barley (2 & 6 row), Bindweed (Australian), Bindweed (Black), Brome Grass, Carrot Weed, Durum, Red/Spring Feed Wheats, Oats (Black/Wild), Oats (Sand), Oats (Common), Rice, Rye (Cereal), Ryegrass on Stalk, Sorghum (Grain), Triticale, Turnip Weed Pods and any other Foreign Seeds not specified in Types 1-7(a), in SFS or in Unmillable Material Above the Screen that remain above the 2.0mm screen following the Screenings process	
Small Foreign Seeds (% by weight)	0.6	All Foreign Seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
Other Contaminants Max - (count per half litre, unless otherwise stated)			
Pickling Compounds (entire load)	Nil	Pickled grain or artificial colouring	
Chemicals Not Approved for Wheat (entire load)	Nil	Residues of any chemical compound not approved for wheat, used in contravention of the labelled instructions or chemicals in excess of the MRL	
Ryegrass Ergot (length in cm)	2.0	Length of all pieces present aligned end on end	
Cereal Ergot	1	Pieces or whole affected kernel	
Stored Grain Insects & Pea Weevil – Live (entire load)	Nil	All life stages	
Insects – Large, dead or alive	3	Includes Rutherglen bugs, ladybirds, grasshoppers, locusts, sitona weevils, wood bugs & pea weevil (dead only)	
Insects – Small, dead or alive	10	Includes all species of aphid, mites & stored grain insects (dead only)	
Earcockle	15	Number of galls	
Snails	10	Dead or alive	
Loose Smut	3	Pieces of backbone	
Sand	50	Individual grains	
Earth	3	5mm maximum in diameter	
Stones (g per 2.5L)	4.0	Maximum weight of all Stones retained above a 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Presence of meat meal, blood meal, fish meal, poultry offal meal or other animal proteins. Stick/Stubble (>3cm in length and 1cm in diameter), glass, concrete, metal, animal excreta, animal carcasses, tainting agents or any other commercially unacceptable contaminant, smell or taste.	
Other Foreign Material (% by weight)	0.1	Fine material (eg., Soil, dust and minerals), pieces of snail shell (< half), pieces of stored grain insects	

Commodity: Wheat		**Season: 2021/22**	
Grade: SGP1		**Standard Reference No.: CSG-146**	
QUALITY PARAMETER	**SPECIFICATION**	**COMMENT**	
Variety Restrictions	Yes	Approved varieties only	
Protein Min (%)	n/a	N X 5.7 @ 11% Moisture Basis	
Protein Max (%)	10.5		
Moisture Max (%)	12.5		
Test Weight Min (kg/hl)	70.0		
Unmillable Material Above the Screen Max (% by weight)	1.2	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods, Skeleton Weed Flowers (Seed Heads) or other seedpods not otherwise listed. Excludes contaminants where tolerances already exist.	
Screenings Max (% by weight)	8.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
Falling Number Min (sec)	250	Falling Number result overrides the visual assessment for Sprouted grains	
Defective Grains Max - (% by count, 300 grain sample [500 grain sample for WA], unless otherwise stated)			
Sprouted	Nil	Distorted	3.0
Stained	15.0	Severely Damaged (count per half litre, grain remaining above the screen)	1
Pink Stained	5.0	All Smuts except Loose Smut (entire load)	Nil
White Grain Disorder / Head Scab	1.0	Insect Damaged	3.0
Field Fungi (count per half litre)	10.0	Over-Dried Damaged	Nil
Dry Green or Sappy	3.0		
Foreign Seed Contaminants Max - (count of seeds in total per half litre, unless otherwise stated)			
Type 1 (individual seeds)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Head Poppy, Mexican Poppy, Opium Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (QLD only)	
Type 2	Nil	Castor Oil Plant, Coriander, Crow Garlic/ Wild Garlic, Darling Pea, Parthenium Weed (NSW/VIC/SA), Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3a	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple	
Type 3b	4	Vetch (Tare), Vetch (Commercial)	
Type 3c	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4	20	Bindweed (Field), Cutleaf Mignonette, Darnel (Drake Seed), Hexham Scent/Meliot (only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Sesbania Pea, Patterson's Curse/ Salvation Jane	
Type 6	10	Colombus Grass, Johnson Grass, Saffron Thistle	
Type 7a	1	Adzuki Beans, Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Medic Pods, Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter. Includes Onion Weed Pods regardless of size	
Type 7b	50	Barley (2 & 6 row), Bindweed (Australian), Bindweed (Black), Brome Grass, Carrot Weed, Durum, Red/Spring Feed Wheats, Oats (Black/Wild), Oats (Sand), Oats (Common), Rice, Rye (Cereal), Ryegrass on Stalk, Sorghum (Grain), Triticale, Turnip Weed Pods and any other Foreign Seeds not specified in Types 1-7(a), in SFS or in Unmillable Material Above the Screen that remain above the 2.0mm screen following the Screenings process	
Small Foreign Seeds (% by weight)	0.6	All Foreign Seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
Other Contaminants Max - (count per half litre, unless otherwise stated)			
Pickling Compounds (entire load)	Nil	Pickled grain or artificial colouring	
Chemicals Not Approved for Wheat (entire load)	Nil	Residues of any chemical compound not approved for wheat, used in contravention of the labelled instructions or chemicals in excess of the MRL	
Ryegrass Ergot (length in cm)	2.0	Length of all pieces present aligned end on end	
Cereal Ergot	1	Pieces or whole affected kernel	
Stored Grain Insects & Pea Weevil – Live (entire load)	Nil	All life stages	
Insects – Large, dead or alive	3	Includes Rutherglen bugs, ladybirds, grasshoppers, locusts, sitona weevils, wood bugs & pea weevil (dead only)	
Insects – Small, dead or alive	10	Includes all species of aphid, mites & stored grain insects (dead only)	
Earcockle	10	Number of galls	
Snails	1	Dead or alive	
Loose Smut	3	Pieces of backbone	
Sand	20	Individual grains	
Earth	1	5mm maximum in diameter	
Stones (g per 2.5L)	4.0	Maximum weight of all Stones retained above a 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Presence of meat meal, blood meal, fish meal, poultry offal meal or other animal proteins. Stick/Stubble (>3cm in length and 1cm in diameter), glass, concrete, metal, animal excreta, animal carcasses, tainting agents or any other commercially unacceptable contaminant, smell or taste.	
Other Foreign Material (% by weight)	0.1	Fine material (eg., Soil, dust and minerals), pieces of snail shell (< half), pieces of stored grain insects	

Commodity: Wheat		**Season: 2021/22**	
Grade: SGP2		**Standard Reference No.: CSG-147**	
QUALITY PARAMETER	**SPECIFICATION**	**COMMENT**	
Variety Restrictions	Yes	Approved varieties only	
Protein Min (%)	10.5	N X 5.7 @ 11% Moisture Basis	
Protein Max (%)	n/a		
Moisture Max (%)	12.5		
Test Weight Min (kg/hl)	70.0		
Unmillable Material Above the Screen Max (% by weight)	1.2	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods, Skeleton Weed Flowers (Seed Heads) or other seedpods not otherwise listed. Excludes contaminants where tolerances already exist.	
Screenings Max (% by weight)	8.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
Falling Number Min (sec)	250	Falling Number result overrides the visual assessment for Sprouted grains	
Defective Grains Max - (% by count, 300 grain sample [500 grain sample for WA], unless otherwise stated)			
Sprouted	Nil	Distorted	5.0
Stained	15.0	Severely Damaged (count per half litre, grain remaining above the screen)	1
Pink Stained	5.0	All Smuts except Loose Smut (entire load)	Nil
White Grain Disorder / Head Scab	1.0	Insect Damaged	3.0
Field Fungi (count per half litre)	10.0	Over-Dried Damaged	Nil
Dry Green or Sappy	5.0		
Foreign Seed Contaminants Max - (count of seeds in total per half litre, unless otherwise stated)			
Type 1 (individual seeds)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Head Poppy, Mexican Poppy, Opium Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (QLD only)	
Type 2	Nil	Castor Oil Plant, Coriander, Crow Garlic/ Wild Garlic, Darling Pea, Parthenium Weed (NSW/VIC/SA), Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3a	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple	
Type 3b	4	Vetch (Tare), Vetch (Commercial)	
Type 3c	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4	20	Bindweed (Field), Cutleaf Mignonette, Darnel (Drake Seed), Hexham Scent/Meliot (only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Sesbania Pea, Patterson's Curse/ Salvation Jane	
Type 6	10	Colombus Grass, Johnson Grass, Saffron Thistle	
Type 7a	1	Adzuki Beans, Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Medic Pods, Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter. Includes Onion Weed Pods regardless of size	
Type 7b	50	Barley (2 & 6 row), Bindweed (Australian), Bindweed (Black), Brome Grass, Carrot Weed, Durum, Red/Spring Feed Wheats, Oats (Black/Wild), Oats (Sand), Oats (Common), Rice, Rye (Cereal), Ryegrass on Stalk, Sorghum (Grain), Triticale, Turnip Weed Pods and any other Foreign Seeds not specified in Types 1-7(a), in SFS or in Unmillable Material Above the Screen that remain above the 2.0mm screen following the Screenings process	
Small Foreign Seeds (% by weight)	0.6	All Foreign Seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
Other Contaminants Max - (count per half litre, unless otherwise stated)			
Pickling Compounds (entire load)	Nil	Pickled grain or artificial colouring	
Chemicals Not Approved for Wheat (entire load)	Nil	Residues of any chemical compound not approved for wheat, used in contravention of the labelled instructions or chemicals in excess of the MRL	
Ryegrass Ergot (length in cm)	2.0	Length of all pieces present aligned end on end	
Cereal Ergot	1	Pieces or whole affected kernel	
Stored Grain Insects & Pea Weevil – Live (entire load)	Nil	All life stages	
Insects – Large, dead or alive	3	Includes Rutherglen bugs, ladybirds, grasshoppers, locusts, sitona weevils, wood bugs & pea weevil (dead only)	
Insects – Small, dead or alive	10	Includes all species of aphid, mites & stored grain insects (dead only)	
Earcockle	10	Number of galls	
Snails	1	Dead or alive	
Loose Smut	3	Pieces of backbone	
Sand	20	Individual grains	
Earth	1	5mm maximum in diameter	
Stones (g per 2.5L)	4.0	Maximum weight of all Stones retained above a 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Presence of meat meal, blood meal, fish meal, poultry offal meal or other animal proteins. Stick/Stubble (>3cm in length and 1cm in diameter), glass, concrete, metal, animal excreta, animal carcasses, tainting agents or any other commercially unacceptable contaminant, smell or taste.	
Other Foreign Material (% by weight)	0.1	Fine material (eg., Soil, dust and minerals), pieces of snail shell (< half), pieces of stored grain insects	

Commodity: Wheat		**Season: 2021/22**	
Grade: FED1™		**Standard Reference No.: CSG-150**	
QUALITY PARAMETER	**SPECIFICATION**	**COMMENT**	
Variety Restrictions	No		
Protein Min (%)	n/a	N X 5.7 @ 11% Moisture Basis	
Protein Max (%)	n/a		
Moisture Max (%)	12.5		
Test Weight Min (kg/hl)	62.0		
Unmillable Material Above the Screen Max (% by weight)	2.6	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods, Skeleton Weed Flowers (Seed Heads) or other seedpods not otherwise listed. Excludes contaminants where tolerances already exist.	
Screenings Max (% by weight)	15.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
Falling Number Min (sec)	n/a	Falling Number result overrides the visual assessment for Sprouted grains	
Defective Grains Max - (% by count, 300 grain sample [500 grain sample for WA], unless otherwise stated)			
Sprouted	n/a	Distorted	n/a
Stained	50.0	Severely Damaged (count per half litre, grain remaining above the screen)	5.0
Pink Stained	5.0	All Smuts except Loose Smut (entire load)	Nil
White Grain Disorder / Head Scab	1.0	Insect Damaged	4.0
Field Fungi (count per half litre)	40.0	Over-Dried Damaged	n/a
Dry Green or Sappy	n/a		
Foreign Seed Contaminants Max - (count of seeds in total per half litre, unless otherwise stated)			
Type 1 (individual seeds)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Head Poppy, Mexican Poppy, Opium Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (QLD only)	
Type 2	Nil	Castor Oil Plant, Coriander, Crow Garlic/ Wild Garlic, Darling Pea, Parthenium Weed (NSW/VIC/SA), Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3a	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple	
Type 3b	4	Vetch (Tare), Vetch (Commercial)	
Type 3c	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4	20	Bindweed (Field), Cutleaf Mignonette, Darnel (Drake Seed), Hexham Scent/Meliot (only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Sesbania Pea, Patterson's Curse/ Salvation Jane	
Type 6	50	Colombus Grass, Johnson Grass, Saffron Thistle	
Type 7a	100	Adzuki Beans, Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Medic Pods, Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter. Includes Onion Weed Pods regardless of size	
Type 7b	400	Barley (2 & 6 row), Bindweed (Australian), Bindweed (Black), Brome Grass, Carrot Weed, Oats (Black/Wild), Oats (Sand), Oats (Common), Rice, Rye (Cereal), Ryegrass on Stalk, Sorghum (Grain), Triticale, Turnip Weed Pods and any other Foreign Seeds not specified in Types 1-7(a), in SFS or in Unmillable Material Above the Screen that remain above the 2.0mm screen following the Screenings process. Durum & Red/Spring Feed wheats unlimited in Fed1	
Small Foreign Seeds (% by weight)	1.2	All Foreign Seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
Other Contaminants Max - (count per half litre, unless otherwise stated)			
Pickling Compounds (entire load)	Nil	Pickled grain or artificial colouring	
Chemicals Not Approved for Wheat (entire load)	Nil	Residues of any chemical compound not approved for wheat, used in contravention of the labelled instructions or chemicals in excess of the MRL	
Ryegrass Ergot (length in cm)	2.0	Length of all pieces present aligned end on end	
Cereal Ergot	1	Pieces or whole affected kernel	
Stored Grain Insects & Pea Weevil – Live (entire load)	Nil	All life stages	
Insects – Large, dead or alive	3	Includes Rutherglen bugs, ladybirds, grasshoppers, locusts, sitona weevils, wood bugs & pea weevil (dead only)	
Insects – Small, dead or alive	10	Includes all species of aphid, mites & stored grain insects (dead only)	
Earcockle	50	Number of galls	
Snails	10	Dead or alive	
Loose Smut	3	Pieces of backbone	
Sand	50	Individual grains	
Earth	6	5mm maximum in diameter	
Stones (g per 2.5L)	4.0	Maximum weight of all Stones retained above a 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Presence of meat meal, blood meal, fish meal, poultry offal meal or other animal proteins. Stick/Stubble (>3cm in length and 1cm in diameter), glass, concrete, metal, animal excreta, animal carcasses, tainting agents or any other commercially unacceptable contaminant, smell or taste.	
Other Foreign Material (% by weight)	0.2	Fine material (eg., Soil, dust and minerals), pieces of snail shell (< half), pieces of stored grain insects	

Commodity: Wheat		**Season: 2021/22**	
Grade: SFW1™		**Standard Reference No.: CSG-151**	
QUALITY PARAMETER	**SPECIFICATION**	**COMMENT**	
Variety Restrictions	Yes	All varieties permitted except Durum and Red Wheat for which a tolerance under Foreign Seed Contaminants applies	
Protein Min (%)	n/a	N X 5.7 @ 11% Moisture Basis	
Protein Max (%)	n/a		
Moisture Max (%)	12.5		
Test Weight Min (kg/hl)	70.0		
Unmillable Material Above the Screen Max (% by weight)	1.2	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods, Skeleton Weed Flowers (Seed Heads) or other seedpods not otherwise listed. Excludes contaminants where tolerances already exist.	
Screenings Max (% by weight)	10.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
Falling Number Min (sec)	n/a	Falling Number result overrides the visual assessment for Sprouted grains	
Defective Grains Max - (% by count, 300 grain sample [500 grain sample for WA], unless otherwise stated)			
Sprouted	n/a	Distorted	10.0
Stained	15.0	Severely Damaged (count per half litre, grain remaining above the screen)	1.0
Pink Stained	5.0	All Smuts except Loose Smut (entire load)	Nil
White Grain Disorder / Head Scab	1.0	Insect Damaged	2.0
Field Fungi (count per half litre)	10.0	Over-Dried Damaged	Nil
Dry Green or Sappy	10.0		
Foreign Seed Contaminants Max - (count of seeds in total per half litre, unless otherwise stated)			
Type 1 (individual seeds)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Head Poppy, Mexican Poppy, Opium Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (QLD only)	
Type 2	Nil	Castor Oil Plant, Coriander, Crow Garlic/ Wild Garlic, Darling Pea, Parthenium Weed (NSW/VIC/SA), Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3a	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple	
Type 3b	4	Vetch (Tare), Vetch (Commercial)	
Type 3c	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4	20	Bindweed (Field), Cutleaf Mignonette, Darnel (Drake Seed), Hexham Scent/Meliot (only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Sesbania Pea, Patterson's Curse/ Salvation Jane	
Type 6	50	Colombus Grass, Johnson Grass, Saffron Thistle	
Type 7a	10	Adzuki Beans, Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Medic Pods, Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter. Includes Onion Weed Pods regardless of size	
Type 7b	150	Barley (2 & 6 row), Bindweed (Australian), Bindweed (Black), Brome Grass, Carrot Weed, Durum, Red Wheats, Oats (Black/Wild), Oats (Sand), Oats (Common), Rice, Rye (Cereal), Ryegrass on Stalk, Sorghum (Grain), Triticale, Turnip Weed Pods and any other Foreign Seeds not specified in Types 1-7(a), in SFS or in Unmillable Material Above the Screen that remain above the 2.0mm screen following the Screenings process	
Small Foreign Seeds (% by weight)	1.2	All Foreign Seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
Other Contaminants Max - (count per half litre, unless otherwise stated)			
Pickling Compounds (entire load)	Nil	Pickled grain or artificial colouring	
Chemicals Not Approved for Wheat (entire load)	Nil	Residues of any chemical compound not approved for wheat, used in contravention of the labelled instructions or chemicals in excess of the MRL	
Ryegrass Ergot (length in cm)	2.0	Length of all pieces present aligned end on end	
Cereal Ergot	1	Pieces or whole affected kernel	
Stored Grain Insects & Pea Weevil – Live (entire load)	Nil	All life stages	
Insects – Large, dead or alive	3	Includes Rutherglen bugs, ladybirds, grasshoppers, locusts, sitona weevils, wood bugs & pea weevil (dead only)	
Insects – Small, dead or alive	10	Includes all species of aphid, mites & stored grain insects (dead only)	
Earcockle	15	Number of galls	
Snails	10	Dead or alive	
Loose Smut	3	Pieces of backbone	
Sand	50	Individual grains	
Earth	3	5mm maximum in diameter	
Stones (g per 2.5L)	4.0	Maximum weight of all Stones retained above a 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Presence of meat meal, blood meal, fish meal, poultry offal meal or other animal proteins. Stick/Stubble (>3cm in length and 1cm in diameter), glass, concrete, metal, animal excreta, animal carcasses, tainting agents or any other commercially unacceptable contaminant, smell or taste.	
Other Foreign Material (% by weight)	0.1	Fine material (eg., Soil, dust and minerals), pieces of snail shell (< half), pieces of stored grain insects	

Commodity: Wheat		**Season: 2021/22**	
Grade: SFWR		**Standard Reference No.: CSG-152**	
QUALITY PARAMETER	**SPECIFICATION**	**COMMENT**	
Variety Restrictions	Yes	All Wheat varieties except durum	
Protein Min (%)	n/a	N X 5.7 @ 11% Moisture Basis	
Protein Max (%)	n/a		
Moisture Max (%)	12.5		
Test Weight Min (kg/hl)	70.0		
Unmillable Material Above the Screen Max (% by weight)	1.2	Includes whiteheads (with grains removed), chaff, backbone, Wild Radish pods, Milk Thistle pods, Skeleton Weed Flowers (Seed Heads) or other seedpods not otherwise listed. Excludes contaminants where tolerances already exist.	
Screenings Max (% by weight)	10.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
Falling Number Min (sec)	n/a	Falling Number result overrides the visual assessment for Sprouted grains	
Defective Grains Max - (% by count, 300 grain sample [500 grain sample for WA], unless otherwise stated)			
Sprouted	n/a	Distorted	10.0
Stained	15.0	Severely Damaged (count per half litre, grain remaining above the screen)	1.0
Pink Stained	5.0	All Smuts except Loose Smut (entire load)	Nil
White Grain Disorder / Head Scab	1.0	Insect Damaged	2.0
Field Fungi (count per half litre)	10.0	Over-Dried Damaged	Nil
Dry Green or Sappy	10.0		
Foreign Seed Contaminants Max - (count of seeds in total per half litre, unless otherwise stated)			
Type 1 (individual seeds)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Head Poppy, Mexican Poppy, Opium Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (QLD only)	
Type 2	Nil	Castor Oil Plant, Coriander, Crow Garlic/ Wild Garlic, Darling Pea, Parthenium Weed (NSW/VIC/SA), Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3a	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple	
Type 3b	4	Vetch (Tare), Vetch (Commercial)	
Type 3c	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4	20	Bindweed (Field), Cutleaf Mignonette, Darnel (Drake Seed), Hexham Scent/Meliot (only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Sesbania Pea, Patterson's Curse/ Salvation Jane	
Type 6	50	Colombus Grass, Johnson Grass, Saffron Thistle	
Type 7a	10	Adzuki Beans, Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Lentils, Lupins, Peas (Field), Medic Pods, Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter. Includes Onion Weed Pods regardless of size	
Type 7b	150	Barley (2 & 6 row), Bindweed (Australian), Bindweed (Black), Brome Grass, Carrot Weed, Durum, Oats (Black/Wild), Oats (Sand), Oats (Common), Rice, Rye (Cereal), Ryegrass on Stalk, Sorghum (Grain), Triticale, Turnip Weed Pods and any other Foreign Seeds not specified in Types 1-7(a), in SFS or in Unmillable Material Above the Screen that remain above the 2.0mm screen following the Screenings process	
Small Foreign Seeds (% by weight)	1.2	All Foreign Seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
Other Contaminants Max - (count per half litre, unless otherwise stated)			
Pickling Compounds (entire load)	Nil	Pickled grain or artificial colouring	
Chemicals Not Approved for Wheat (entire load)	Nil	Residues of any chemical compound not approved for wheat, used in contravention of the labelled instructions or chemicals in excess of the MRL	
Ryegrass Ergot (length in cm)	2.0	Length of all pieces present aligned end on end	
Cereal Ergot	1	Pieces or whole affected kernel	
Stored Grain Insects & Pea Weevil – Live (entire load)	Nil	All life stages	
Insects – Large, dead or alive	3	Includes Rutherglen bugs, ladybirds, grasshoppers, locusts, sitona weevils, wood bugs & pea weevil (dead only)	
Insects – Small, dead or alive	10	Includes all species of aphid, mites & stored grain insects (dead only)	
Earcockle	15	Number of galls	
Snails	10	Dead or alive	
Loose Smut	3	Pieces of backbone	
Sand	50	Individual grains	
Earth	3	5mm maximum in diameter	
Stones (g per 2.5L)	4.0	Maximum weight of all Stones retained above a 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Presence of meat meal, blood meal, fish meal, poultry offal meal or other animal proteins. Stick/Stubble (>3cm in length and 1cm in diameter), glass, concrete, metal, animal excreta, animal carcasses, tainting agents or any other commercially unacceptable contaminant, smell or taste.	
Other Foreign Material (% by weight)	0.1	Fine material (eg., Soil, dust and minerals), pieces of snail shell (< half), pieces of stored grain insects	

SECTION 4 WHEAT VARIETY CLASSIFICATION

Wheat variety classification is the responsibility of Wheat Quality Australia Limited (WQA). Wheat Quality Australia Limited is an independent not for profit company relying on the support and involvement of all sectors of the value chain. It was established by Grains Research and Development Corporation (GRDC) and Grain Trade Australia Limited (GTA) to be responsible for wheat variety classification and related activities from 1 January 2011.

Wheat Quality Australia captures input from all sectors of the wheat value chain to design and deliver wheat variety classification in Australia. The approach includes participants from all segments in the value chain to ensure the classification system is appropriate and relevant at every point.

Wheat classification is the categorisation of a wheat variety into a Class based on processing and end product quality and determines the highest Grade that a variety can be accepted into at delivery. The Classification System aims to deliver grain of consistent physical quality, processing performance and end-product quality to customers and end-users.

The WQA Wheat Variety Master List (Masterlist) provided in this document details all of the varieties acceptable for delivery and their individual classifications or Classes by zone for the 2021/22 season.

For any questions relating to the Classification process or the WQA Wheat Variety Masterlist please go to the Wheat Quality Australia website – www.wheatquality.com.au.

Bin Cascade Rules:

The following Table contains a list of all of the Classes available for classification#. These Classes determine the maximum Bin Grade into which a variety may be received. The Table includes the other, lower Bin Grades into which the variety may also be received – the Bin Grade cascade. The Table should be read in conjunction with the 2021/22 Wheat Variety Masterlist.

Class	Bin Grade Cascade
APH	APH1/APH2 / H1 / H2 / APW1 / APW2 / ASW1 / AUH2 / AGP1 / HPS1 / AUW1 / SFW1 /FED1
AH	H1 / H2 / APW1 / APW2 / ASW1 / AUH2 / AGP1 / HPS1 / AUW1 / SFW1 / FED1
APW	APW1 / APW2 / ASW1 / AGP1 / HPS1 / AUW1 / SFW1 / FED1
ASW	ASW1 / AGP1 / HPS1 / AUW1 / SFW1 / FED1
AGP	AGP1 / HPS1 / AUW1 / SFW1 / FED1
ASF1 (SFE)	SFT1 (SFE1) / SFT2 (SFE2) / SGP1~ / SGP2~ / AUN1^ / SFW1 / FED1
ANW	ANW1 / ANW2 / AUN1^ / SFW1 / FED1
ASWS#	ASWS / AGP1 / AUW1 / SFW1 / FED1
ADR	DR1 / DR2 / DR3 / FED1
APWN	APWN and then as per APW unless otherwise indicated in the Masterlist
FEED**	SFW1 / FED1

Please Note:

~ Only soft (ASF1) varieties eligible for receival into these grades.
^ Only noodle (ANW) and soft (ASF1) varieties eligible for receival into this grade.
# ASWS is not a Class for Classification purposes.
** Includes all Red wheat varieties and Spring Feed wheat varieties.

Rules to Apply:

a) The maximum bin grade classification is to be read from left to right in the above table as this reflects the highest to lowest grade.

b) Deliveries must meet relevant Standards to be able to be received into that bin grade.

c) If the segregation is not available, the next bin grade will apply if the grain is delivered unless other requirements are stated in the relevant Storage & Handling Agreement.

d) Note that not all bin grades implemented during the 2021/22 season may be listed in the above table.

e) Voluntary down-grades are permitted.

Classification Zones:

For the purpose of delivery, the classification is dependent on the point of delivery based on the four classification zones. These Classification Zones are:

1. Northern Classification Zone, including:
    - Queensland – defined by the state boundaries of Queensland.
    - Northern NSW – defined by the Queensland/NSW boundary and the area north of the Central NSW Zone.
    - Central NSW – defined by the region containing the receival sites Albert, Alectown, Bogan Gate, Condobolin, Euabolong West, Gobondery, Gunningbland, Kadungle, Kiacatoo, Mickibri, Ootha, Parkes, Peak Hill, Tomingley, Tottenham, Trundle, Tullamore, Wyanga, Yarrabandi, Yeoval and Yethera.
2. South Eastern Classification Zone – defined by the Victoria/NSW state boundary and the area south of the Central NSW sites listed above.
3. Southern Classification Zone, including:
    - Victoria – defined by the state boundaries of Victoria.
    - South Australia – defined by the state boundaries of South Australia.
4. Western Classification Zone – defined by the state boundaries of Western Australia.

2021/22 WQA Wheat Varietal Master List
As at 1 August 2021

Code	Variety Name	Western Zone	Southern Zone	South Eastern Zone	Northern Zone	Classification Year	Review date
498	AGT KATANA	APW	AH	APW*	APW*	2009	2024
614	ANAPURNA	FEED	FEED	FEED	FEED	NA	2031
299	ANLACE #	AGP	ASFT	ASFT	AGP	1999	2021
279	ARRINO	ANW	AGP	AGP	AGP	1997	2021
466	AXE	APW	AH	APW*	APW*	2007	2023
541	B53	FEED	FEED	FEED	ASW	2015	2025
623	BALLISTA	FEED	AH	AH	FEED	2021	2031
451	BARHAM #	AGP*	ASFT	ASFT	AGP*	2006	2022
610	BASF ASCOT	FEED	APW	FEED	FEED	2020	2030
219	BATAVIA #	AH	AH	AH	AH	1991	2021
295	BAXTER	AH	APW*	APH	APH	1998	2021
557	BECKOM	AH	AH	AH	AH	2015	2025
609	BITALLI	FEED	ADR	ADR	FEED	2020	2030
457	BOLAC	APW*	AH	APH	AH	2006	2022
550	BREMER	AH	FEED	FEED	FEED	2015	2025
443	BULLARING	ASFT	AGP	AGP	AGP	2006	2022
280	CALINGIRI #	ANW	AGP	AGP	AGP	1997	2020
487	CAPAROI	ADR	ADR	ADR	ADR	2008	2023
445	CARINYA	APW*	AH	AH	AH	2006	2022
310	CARNAMAH	APW	APW	APW	APW	1996	2021
603	CATAPULT	AH	AH	AH	AH	2019	2029
313	CHARA	APW	AH	APH	AH	1999	2021
567	CHIEF CL PLUS	APW (N)	APW	APW	FEED	2017	2027
581	COBALT	FEED	APW	FEED	FEED	2018	2028
539	CONDO	APW	AH	AH	AH	2014	2024
565	COOLAH	AH	AH	APH	APH	2016	2026
622	COOTA	FEED	AH	APH	APH	2021	2031
520	CORACK	APW	APW	APW	APW	2012	2022
449	CORRELL	APW*	AH	AH	APW*	2006	2022
553	COSMICK	APW	AH	APW	FEED	2015	2025
305	CUNNINGHAM	APW	AH	AH	AH	1990	2021
559	CUTLASS	APW (N)	APW	AH	APH	2016	2026

Code	Variety Name	Western Zone	Southern Zone	South Eastern Zone	Northern Zone	Classification Year	Review date
592	DBA ARTEMIS	FEED	ADR	FEED	FEED	2019	2029
534	DBA AURORA	FEED	ADR	ADR	ADR	2014	2024
577	DBA BINDAROI	FEED	FEED	FEED	ADR	2018	2028
564	DBA LILLAROI	FEED	FEED	ADR	ADR	2016	2026
591	DBA SPES	FEED	ADR	FEED	FEED	2019	2029
578	DBA VITTAROI	FEED	ADR	ADR	ADR	2018	2028
621	DENISON	APW	APW	FEED	FEED	2021	2031
458	DERRIMUT	APW*	AH	APW*	APW*	2006	2022
596	DEVIL	AH (N)	AH	FEED	FEED	2019	2029
287	DIAMONDBIRD ^	APW	AH	AH	AH	1997	2021
579	DS BENNETT	FEED	ASW	ASW	FEED	2018	2028
547	DS DARWIN	FEED	AH	AH	ASW	2015	2025
568	DS FARADAY	FEED	FEED	APH	APH	2017	2027
549	DS NEWTON	ASW	APW	FEED	FEED	2015	2025
548	DS PASCAL	APW	APW	APW	AH	2015	2025
580	DS TULL	FEED	FEED	APH	FEED	2018	2028
583	EG JET	AH	APW	FEED	APW	2018	2028
584	EG TITANIUM	APW	AH	FEED	APW	2018	2028
422	EGA 2248	ASFT	AGP	AGP	AGP	2004	2021
416	EGA BELLAROI	ADR	ADR	ADR	ADR	2002	2021
417	EGA BONNIE ROCK	AH (N)	APW*	APW*	APW*	2002	2021
456	EGA BURKE	APW*	APW*	AH*	APH	2006	2022
439	EGA EAGLE ROCK	AH	APW*	APW*	APW*	2005	2021
434	EGA GREGORY	AH	APW*	APH	APH	2004	2021
478	EGA KIDMAN	APW*	APW*	AH*	APH	2008	2023
419	EGA WEDGETAIL	APW*	APW*	APH	AH	2002	2021
431	ELLISON	APW*	APW*	APH	APH	2003	2021
518	ELMORE CL PLUS	AH	AH	AH	AH	2012	2022
512	EMU ROCK	AH	AH	AH	APW*	2011	2021
502	ENVOY ^	APW (N)	ASW*	ASW*	ASW*	2010	2020
479	ESPADA	APW	APW	AH	ASW*	2008	2023
504	ESTOC	APW	APW	ASW*	ASW*	2009	2024
494	FANG #	APW	APW	ASW*	ASW*	2009	2019
503	FORREST	ASW*	APW	APW	ASW*	2011	2021
491	FORTUNE	ANW	AGP	AGP	AGP	2008	2023
254	FRAME	APW	APW	APW	APW	1994	2021
427	GBA SAPPHIRE	AH	APW	APH	APH	2004	2021
459	GLADIUS	APW*	AH	AH	APW*	2007	2023

Code	Variety Name	Western Zone	Southern Zone	South Eastern Zone	Northern Zone	Classification Year	Review date
582	GOLD	FEED	AH	AH	AH	2018	2028
526	GRENADE CL PLUS	APW	AH	APW*	APW*	2012	2022
282	H45	APW	ASW	ASW	ASW	1999	2021
84	HALBERD T/N	ASW	ASW	AGP	AGP	1969	2021
620	HAMMER CL PLUS	AH	AH	AH	FEED	2021	2031
533	HARPER	APW	APW	ASW*	ASW*	2014	2024
81	HARTOG	AGP	AH	AH	AH	1982	2021
551	HATCHET CL PLUS	FEED	AH	FEED	FEED	2015	2025
607	HAW1	FEED	FEED	FEED	FEED	NA	2030
606	HAW2	FEED	FEED	FEED	FEED	NA	2030
605	HAW3	FEED	FEED	FEED	FEED	NA	2030
545	HECKTO	FEED	FEED	FEED	FEED	NA	NA
554	HYDRA	APW	APW	APW	FEED	2015	2025
484	HYPERNO	FEED*	ADR	FEED*	ADR	2008	2023
589	ILLABO	AH	AH	APH	AH	2018	2028
511	IMPOSE CL PLUS	APW	ASW*	ASW*	ASW*	2011	2021
556	IMPRESS CL PLUS	APW	FEED	FEED	FEED	2015	2025
543	JADE	ASW	FEED	FEED	AH	2015	2025
460	JANDAROI	ADR	ADR	FEED*	ADR	2007	2023
211	JANZ	AH	AH	APH	APH	1989	2021
505	JUSTICA CL PLUS	APW	APW	APW	ASW*	2011	2021
210	KELALAC	AGP	ASW	AGP	AGP	1988	2021
294	KENNEDY	FEED	FEED	FEED	FEED	1997	2021
497	KING ROCK	AH (N)	APW*	APW*	APW*	2009	2024
595	KINSEI	ANW	FEED	FEED	FEED	2019	2029
540	KIORA	APW*	AH	APH	APH	2014	2024
506	KORD CL PLUS	AH	AH	APW	APW*	2011	2021
509	KUNJIN ^	ASFT	AGP*	AGP*	AGP*	2010	2020
324	LANG	AH	AH	APH	APH	2000	2021
467	LIVINGSTON	APW	AH	AH	AH	2008	2023
585	LONGSWORD	FEED	FEED	FEED	FEED	2018	2028
563	LRPB ARROW	APW	AH	FEED	FEED	2016	2026
626	LRPB AVENGER	APW (N)	FEED	FEED	FEED	2021	2031
627	LRPB BALE	FEED	APW	FEED	FEED	2021	2031
483	LRPB BEAUFORT	FEED	FEED	FEED	FEED	NA	2023
453	LRPB CATALINA	APW	AH	APW	APW	2006	2022
507	LRPB COBRA	AH	AH	AH	APW*	2011	2021
462	LRPB CRUSADER	APW*	APW*	APH	APH	2007	2023

Code	Variety Name	Western Zone	Southern Zone	South Eastern Zone	Northern Zone	Classification Year	Review date
524	LRPB DART	APW*	AH	APH	APH	2012	2022
628	LRPB DUAL	FEED	AH	FEED	FEED	2021	2031
546	LRPB FLANKER	FEED	AH	APH	APH	2015	2025
514	LRPB GAUNTLET	APW*	APW	AH	APH	2012	2022
522	LRPB GAZELLE	AGP*	ASFT	ASFT	ASFT	2012	2022
570	LRPB HAVOC	AH (N)	AH	FEED	FEED	2017	2027
601	LRPB HELLFIRE	FEED	AH	APH	APH	2019	2029
464	LRPB HORNET #	APW*	APW*	AH	AH	2008	2023
508	LRPB IMPALA	AGP*	ASFT	ASFT	ASFT	2011	2021
562	LRPB KITTYHAWK	AH	AH	APH	APH	2016	2026
528	LRPB LANCER	APW*	AH	APH	APH	2013	2023
465	LRPB LINCOLN	APW	AH	AH	AH	2007	2023
513	LRPB MERLIN	APW*	AH	AH	AH	2012	2022
569	LRPB MUSTANG	FEED	FEED	APH	APH	2017	2027
600	LRPB NIGHTHAWK	APW	APW	AH	FEED	2019	2029
599	LRPB NYALA	ASFT	ASFT	ASFT	ASFT	2019	2029
495	LRPB ORION	AGP*	ASFT	ASFT	ASFT	2009	2024
598	LRPB ORYX	ASFT	ASFT	ASFT	ASFT	2019	2029
597	LRPB PARAKEET	FEED	ANW	ANW	FEED	2019	2029
523	LRPB PHANTOM	APW*	AH	APW	APW*	2012	2022
625	LRPB RAIDER	FEED	FEED	APH	APH	2021	2031
561	LRPB RELIANT	FEED	FEED	AH	APH	2016	2026
496	LRPB SCOUT	APW (N)	AH	APW	ASW*	2009	2024
499	LRPB SPITFIRE	APW*	AH	APH	APH	2010	2025
612	LRPB STEALTH	FEED	AH	APH	APH	2020	2030
529	LRPB TROJAN	APW (N)	APW	APW	ASW*	2013	2023
535	LRPB VIKING	APW*	AH	APH	APH	2014	2024
492	MACE	AH (N)	AH	AH	AH	2008	2023
109	MACHETE	AH	AH	AGP	AGP	1985	2021
471	MAGENTA	APW	APW	ASW*	ASW*	2008	2023
530	MANNING	FEED	FEED	FEED	FEED	NA	NA
411	MAROMBI #	FEED*	FEED*	ASW	ASW	2001	2021
537	MITCH	APW*	APW*	APW	AH	2014	2024
566	NINJA	ANW	FEED	FEED	FEED	2017	2027
544	OVALO	FEED	FEED	FEED	FEED	NA	NA
273	PETREL	ASW	ASW	ASW	ASW	1996	2021
500	PRESTON	FEED	FEED	FEED	FEED	NA	NA
412	QAL2000	ASFT	AGP*	ASFT	ASFT	2000	2021
586	RAZOR CL PLUS	ASW	ASW	ASW	FEED	2018	2028
501	REVENUE	FEED	FEED	FEED	FEED	NA	NA
574	RGT ACCROC	FEED	FEED	FEED	FEED	NA	2027
575	RGT CALABRO	FEED	FEED	FEED	FEED	NA	2028
604	RGT IVORY	FEED	FEED	FEED	FEED	NA	2030

Code	Variety Name	Western Zone	Southern Zone	South Eastern Zone	Northern Zone	Classification Year	Review date
590	RGT RELAY	FEED	FEED	FEED	FEED	NA	2029
576	RGT ZANZIBAR	FEED	FEED	FEED	FEED	NA	2028
611	ROCKSTAR	AH (N)	AH	APH	APH	2020	2030
188	ROSELLA	AGP	ANW	ANW	ANW	1985	2021
485	SAINTLY	FEED*	ADR	FEED*	FEED*	2008	2023
532	SCENARIO	FEED	FEED	FEED	FEED	NA	NA
560	SCEPTER	AH	AH	AH	AH	2016	2026
587	SEA CONDAMINE	FEED	FEED	FEED	FEED	NA	2028
613	SEVERN	FEED	FEED	FEED	FEED	NA	2031
531	SF ADAGIO	FEED	FEED	FEED	FEED	NA	NA
594	SHERIFF CL PLUS	APW (N)	APW	APW	APW	2019	2029
527	SHIELD	APW*	AH	APW*	APW*	2012	2022
135	SPEAR	ASW	ASW	AGP	AGP	1983	2021
573	STEEL	APW	FEED	FEED	FEED	2017	2027
234	STILETTO	APW	APW	ASW	ASW	1993	2021
619	STING	AH	AH	AH	FEED	2021	2031
330	STRZELECKI	APW*	APW*	AH	AH	2000	2021
618	SUNBLADE CL PLUS	FEED	AH	APH	APH	2021	2031
216	SUNBRI	AGP	AH	APH	APH	1990	2021
259	SUNBROOK	APW	AH	AH	AH	1995	2021
617	SUNCENTRAL	FEED	FEED	APH	APH	2021	2031
602	SUNCHASER	FEED	AH	APH	APH	2019	2029
161	SUNCO	AH	AH	APH	APH	1986	2021
616	SUNFLEX	FEED	AH	AH	APH	2021	2031
521	SUNGUARD	APW*	APW*	AH	AH	2012	2022
552	SUNLAMB	FEED	ASW	ASW	ASW	2015	2025
276	SUNLIN	APW	APW	APH	APH	1996	2021
615	SUNMASTER	FEED	FEED	APH	APH	2021	2031
538	SUNMATE	APW*	AH	AH	APH	2014	2024
571	SUNMAX	FEED	FEED	APH	APH	2017	2027
588	SUNPRIME	FEED	AH	APH	APH	2018	2028
231	SUNSTATE	AH	AH	APH	APH	1992	2021
558	SUNTIME	FEED	FEED	APH	APH	2016	2026
525	SUNTOP	AH	AH	APH	APH	2012	2022
246	SUNVALE	AH	AH	APH	APH	1993	2021
486	SUNVEX #	APW*	APW*	AH	APH	2008	2023
454	SUNZELL	APW*	AH	APH	AH	2007	2022
536	SUPREME	ANW	FEED*	FEED*	FEED*	2014	2024
542	TENFOUR	FEED	FEED	FEED	FEED	2015	2025
516	TJILKURI	FEED	ADR	FEED	FEED	2012	2022
572	TUNGSTEN	AH	AH	FEED	FEED	2017	2027

Code	Variety Name	Western Zone	Southern Zone	South Eastern Zone	Northern Zone	Classification Year	Review date
624	VALIANT CL PLUS	AH	AH	FEED	FEED	2021	2031
433	VENTURA	APW*	AH	AH	AH	2004	2021
593	VIXEN	AH (N)	AH	APH	AH	2019	2029
493	WAAGAN #	AGP*	ASW	ASW	AGP*	2009	2019
519	WALLUP	APW*	AH	APH	APH	2012	2022
510	WEDIN ^	ASFT	AGP*	AGP*	AGP*	2010	2020
608	WESTCOURT	FEED	ADR	ADR	ADR	2020	2030
281	WESTONIA	APW (N)	APW	ASW	ASW	1997	2021
298	WHISTLER	AGP	ASW	ASW	ASW	1998	2021
517	WID802	FEED	ADR	FEED	FEED	2012	2022
244	WOLLAROI	ADR	ADR	ADR	ADR	1993	2021

Please note for the above table:

1. The Class indicates the highest possible receival grade available for respective varieties.
2. Some or all of the varieties listed in the table may be protected by Plant Breeders' Rights.
3. Varieties listed with a classification date NA have not been assessed by WQA and are therefore FEED only.
4. (N) after the variety classification indicates APWN classification for Hard varieties, APW, AH or APH.
5. * Indicates a default classification, this system is no longer in use.
6. Variety classifications highlighted indicate a change in classification has been made from 2020/21, includes the addition of new varieties.
7. # Variety planned for removal in 2022.
8. ^ Variety planned for removal in 2023.

SECTION 5 METHODS AND PROCEDURES

5.1 Introduction

The following section details methods and procedures to be used for the assessment of various quality parameters as outlined in this Manual.

The methods outlined are either Reference Methods or Field Assessment Methods. Field Assessment Methods are included as a guide to industry where Reference Methods may not be able to be implemented. Note that Field Assessment Methods must equate to the Reference Method for the applicable test method.

In all instances of disputes, test results produced by trade-certified equipment take precedence over non-trade certified equipment and methods. Where the dispute involves only non trade-certified equipment or test methods, the reference method takes precedence over the field assessment method.

Depending on the test to be conducted, variations may exist due to equipment used.

Procedures outlined are a guide for industry. Industry is free to develop their own Operational Procedures for each test and activity based on their own circumstances. At all times industry use of apparatus outlined in this Standard must comply with the manufacturers' recommendations for occupational health and safety and training.

5.2 Sampling

5.2.1 Definitions

This is the standard procedure used to draw a sample of the commodity from a bulk unit tendered for delivery to enable tests to be conducted on the commodity for the purposes of determining its quality.

- A primary sample is an individual probed sample taken from the lot presented for sampling.
- A composite sample is the combined primary samples taken from the lot to be sampled and is representative of the entire lot.
- A sub sample is the sample taken from the mixed composite sample for the purposes of conducting quality tests and is representative of the entire lot.

5.2.2 Scope

Wheat is traded on the basis of quality tests conducted on lots of wheat presented for sale or delivery to end users. Obtaining representative samples is critical to ensuring test results reflect the true quality of these lots.

This procedure is applicable to all cereal grains, pulses and oilseeds.

5.2.3 Apparatus

- Manual sampling probe (double tube compartment probe, one inside the other, equipped with spiralled ports that open sequentially from bottom to top).
- Vacuum or pneumatic probe (an alternative to the manual sampling probe and consisting of a hand held or remotely controlled probe which retrieves grain through the use of a vacuum or other air movement system).
- Mixing bucket (including other associated equipment such as mini-auger suitable for mixing sample, optional).
- Sample dividing apparatus (optional).

5.2.4 Reagents

Not Applicable.

5.2.5 Procedure

Sample Collection guidelines for collecting a representative sample

- The surface of the grain should be fully exposed prior to sampling to allow for effective visual inspection. At this point, the load should be scanned for any defects or contaminants.
- The probe to be used should be of a sufficient length in order to obtain a sample from as close as possible to the bottom of truck.

- A primary sample must be drawn for assessment by thrusting the sampling probe as vertically and as deep as possible into the load.
- At least one probe must be taken from the front, middle and rear of each bulk unit.
- If more than one unit is delivered, samples must be drawn from each bulk unit as described above.
- If the bulk units are of visibly different quality, or if required at the Receival Agents discretion, different samples and grade classification may be undertaken for each separate bulk unit.
- If the declared varietal composition or paddock where the grain was grown is different for each unit tendered for delivery, or more than one variety is commingled in each delivery unit, then a separate assessment of each unit must be conducted.
- Each primary (probed) sample must consist of at least one litre of grain.
- A composite sample from each load tendered for delivery shall consist of the following minimum quantities and number of probes:

Load Size	Sample Size (minimum)
10 tonnes or less	3 litres
Over 10 tonnes up to 20 tonnes	4 litres
Over 20 tonnes up to 30 tonnes	5 litres
Over 30 tonnes up to 40 tonnes	6 litres
Over 40 tonnes up to 50 tonnes	7 litres
Over 50 tonnes up to 60 tonnes	8 litres
Over 60 tonnes up to 70 tonnes	9 litres
Over 70 tonnes up to 80 tonnes	10 litres

Note – in the above table the sample size reflects the number of probe samples. For example, 4 litres equates to 4 probe samples.

Sample Mixing

- The primary samples in each probe must be collected together and thoroughly mixed in a suitable container using a mechanical device where appropriate, to form the composite sample.
- Sub samples should be drawn from the composite sample either by hand or through the use of a suitable sample dividing apparatus.

Sample Analysis

- The sub sample should then be analysed for all of the quality parameters specified in these Standards or in the Receival Agent's agreement with the buyer concerned if different from these Standards.
- Results should be entered on the Receival Agents sample receipt.

5.2.6 References

Sampling of Wheat and other Grains - AACC Method 64-70A

5.3 Moisture Assessment of Cereals – Fan Forced Oven Reference Method

5.3.1 Definitions

This is the fan forced reference method specified in National Measurement Institute legislation to be used to determine the moisture content of grain samples as loss in weight when subjected to heating.

5.3.2 Scope

This is applicable to all cereals when being tested for moisture content under laboratory conditions.

5.3.3 Apparatus

- Laboratory Mill
- Forced Draft Oven capable of being maintained at 130^{o}C +/- 1^{o}C
- Aluminium moisture dishes, 50 – 55 by 15 – 20mm with tight fitting covers
- Desiccator
- Electronic balance capable of weighing up to 100g to 4 decimal places

5.3.4 Reagents

Not applicable

5.3.5 Procedure

- Grind a 30-40g whole grain sample in a suitable mill (Perten 3303, Tecator, Cemotec or similar). Sample to be “as is”.
- Mix thoroughly and transfer 2 to 3g portions to each of 2 or more tared moisture dishes
- Cover and weight the dishes immediately
- Subtract tare weights and record weight of sample
- Clean mill between samples
- Uncover the dishes and place them in pre heated oven (130^{o}C) and place covers under the dishes. Evenly distribute the dishes within the oven
- Close oven door and allow temperature to stabilise and then heat for exactly 60 minutes
- Remove the dishes, quickly replace the lids and place in the desiccator
- Weigh the dishes after they reach room temperature
- Determine loss in weight as moisture as per the following equation:

$$\% \text{ Moisture} = \frac{Wtp - (Wdry - Wdish)}{Wtp} \times 100$$

Where

Wtp is the weight of the test portion before oven drying
Wdry is the weight of the dish, lid and test portion after oven drying
Wdish is the weight of the empty oven moisture dish and lid

Report result to the nearest 0.1%.

If duplicates differ by more than 0.2%, repeat the determination, otherwise, report the average of the duplicates.

5.3.6 References

- Moisture – Air Oven Methods – AACC Method 44-15.02.
- NMI M 8 Pattern Approval Specifications for Protein Measuring Instruments for Grain
- NMI V10 Uniform Test Procedures for the Verification, Certification and In Service Inspection of Protein Instruments for Grain

5.4 Moisture Assessment of Cereals – Brabender Oven Reference Method

5.4.1 Definitions

This is the Brabender Oven reference method used to determine the moisture content of grain samples as loss in weight when subjected to heating.

5.4.2 Scope

This is applicable to all cereals when being tested for moisture content.

5.4.3 Apparatus

- Mill - A low moisture loss mill must be used as significant levels of heat can be generated. The mill of choice is the Falling Number 3303 mill (a Wiley - using a 20 mesh screen). The Falling Number Mill 3303 is used with the setting – Wheat – 0.
- Electronic balance – accuracy = 0.001g (or better)
- Aluminium dishes - these dishes must be kept clean and weigh 11.500 + 0.005g
- Vial with well sealing screw to lid. Currently a small yellow top polyethylene container with polypropylene lid is used. Samples must be prepared and used within 24hrs.

5.4.4 Reagents

Not Applicable

5.4.5 Procedure

- Grind approx 50g of sample in accordance with relevant mill manual. Mix sample well and replace into original sample vial tightly sealing the lid. Sample must be prepared and used on the same day or prepared on the evening before.
- Make sure the dishes are clean and are resting on a clean surface (wipe with tissue). Tare the first dish and also subsequent dishes used but note the weight before taring if weight varies from 11.500 or tare varies by +/- 0.010g from tare. Recheck weight of dish to ensure within 11.500 +/- 0.005g. Dishes must also be checked before and after the season to ensure they are correct.
- Weigh out accurately 10.000 +/- 0.001g of the ground sample into an Aluminium dish. Then shake dish to obtain an even layer of sample.
- Take the weighed samples and place into the oven which has been previously switched on and heated to 130 °C. Place the dishes in the oven noting the number of the dish and its position number (1 through 9). There are ten positions in the oven (the tenth place is taken up by an empty dish for calibration purposes).
- When the oven has been loaded note the time or set a countdown timer to 60 mins once the required temperature is reached. Usually for 130°C the oven takes 10 - 15 minutes to reach the required temperature.
- When one hour has elapsed, standardise the instrument by selecting the empty dish and placing 9g in weights in the small platform between the 3 prongs on the balance and

adjust the scale to 10.0 with the standard swinging freely. Moisture can then be read off for each sample in turn.

- Read the samples in the dishes consecutively recording results in the relevant worksheet.

NOTE:

- When switching the oven on make sure that the Brabender oven is level (use bubble level).
- All results are a direct reading of % w/w water.
- The minimum heating time must be adhered to (1 hour) but heating over the hour will not affect the results (up to 2 hours).
- If only a few grams of sample are available see the manufacturers hand book for the technique to be adopted.
- The weight of Aluminium dishes is to be checked at 6 monthly intervals to ensure they are within 11.500 +/-0.005g. If they are underweight they are to be discarded and replacements purchased. Do not add weight to the dish i.e. solder etc as this will breakdown over time or fall off. If they are overweight they may be cleaned with warm water and neutral detergent. Under no circumstances use abrasive or corrosive chemicals as this will lead to the dish being underweight.

5.4.6 References

- Moisture – Air Oven Methods – AACC Method 44-15.02.
- NMI M 8 Pattern Approval Specifications for Protein Measuring Instruments for Grain
- NMI V10 Uniform Test Procedures for the Verification, Certification and In Service Inspection of Protein Instruments for Grain

5.5 Moisture Assessment of Cereals – NIR

5.5.1 Definitions

This describes the NIR method for determination of moisture in cereal grains.

5.5.2 Scope

This procedure is applicable to all cereal grains.

5.5.3 Reagents

Not applicable.

5.5.4 Apparatus

NIR instrument approved for use for trade purposes under the conditions currently being developed by the National Measurement Institute.

5.5.5 Method

Sample to be “as is”.

Individual manufacturer instructions and procedures should be followed for operation and maintenance of NIR instruments used to determine grain moisture.

Report result to the nearest 0.1%.

5.5.6 References

- NMI M 8 Pattern Approval Specifications for Protein Measuring Instruments for Grain
- NMI V10 Uniform Test Procedures for the Verification, Certification and In Service Inspection of Protein Instruments for Grain

5.6 Protein Assessment of Cereals – Dumas Reference Method

5.6.1 Definitions

This is the Dumas reference method used to determine the crude protein content of cereal grains. Samples are incinerated in an oxygen rich atmosphere to produce oxides of nitrogen which are catalytically reduced to molecular nitrogen. Interfering combustion products are removed by selective absorption. Nitrogen concentration is then measured by a thermal conductivity detector calibrated against a standard of known nitrogen content. Protein is then calculated from nitrogen content using a known factor for each product.

5.6.2 Scope

This method is applicable to all cereal grains.

5.6.3 Apparatus

- Combustion nitrogen analyser consisting of a furnace capable of maintaining minimum operating temperature of 950^{o}C for pyrolysis of the sample in pure oxygen, an isolating system capable of isolating liberated nitrogen gas from other combustion products for subsequent measurement by thermal conductivity detector, a device for converting NO_x products to nitrogen or measuring NO_2, and a detector system capable of interpreting detector response as percent N.

- Grinder or mill that produces ground material with particle size ≤ 0.8mm and with minimal heat generation.

- Analytical balance accurate to at least 0.0005g.

5.6.4 Reagents

- Gases – carrier gas (usually helium), pure (99.9%) oxygen, compressed air (used to drive component parts of the analyser)

- Reference calibration standard – TRIS - high purity (hydroxymethyl) aminomethane or Nicotinic Acid

5.6.5 Procedure

- Follow procedures to set up the analyser and operating gas systems as specified by the manufacturer. Perform the necessary adjustments for gas flows and pressures, combustion temperatures and times and start up equilibrium times to ensure optimal analysis conditions for the type of sample to be analysed.

- Calibrate the instrument by following the manufacturer's guidelines using the appropriate calibration standard. The calibration should be cross checked against a second high purity standard – Nicotinic Acid or EDTA. Blanks, as stipulated by the manufacturer, should be run prior to analysis to establish the baseline. These should include consideration of an atmospheric blanks factor or a sample blank similar to samples under test.

- Grind an amount of sample sufficient to represent the original material, and to perform a number of nitrogen determinations as required. Sample to be "as is".

- Weigh accurately to 0.001g an amount of ground sample, as recommended by the manufacturer, into the appropriate sample capsule and place the sample into the instrument for analysis.

- If presenting the sample to the instrument in a pellet form, adjustments may be required to burn temperatures, times and blanks to compensate for the absence of a sample capsule.

- Blank and standard control/check samples should be repeated periodically (as a guide every 10 samples) during each analytical run to monitor any drift. Standard drift corrections and recalculation of samples should be made after analysis if the drift exceeds specification.

- Calculation of nitrogen content is usually performed automatically by the instrument data processing system or associated software.

- Results should be expressed as percent (%) nitrogen to two decimal places. For conversion to protein content "as is" multiply wheat nitrogen by 5.7%. Convert protein content to an 11% moisture basis for wheat for the nitrogen/protein values where necessary. Report result to the nearest 0.1%.

- Analysis should be repeated if the difference between duplicate test results exceed the respective repeatability values (r) shown in the following table:

Grain	**Mean % N**	**Repeatability**		**Reproducibility**	
		r	**RSD_r %**	**R**	**RSD_r %**
Barley	1.85	0.06	1.22	0.11	2.09
Barley malt	1.49	0.04	0.99	0.08	1.97
Sorghum	1.47	0.05	1.15	0.07	1.69
Wheat durum	2.09	0.04	0.64	0.08	1.32
Wheat*	1.97	0.03	0.61	0.09	1.69
Wheat APH	2.54	0.03	0.46	0.08	1.15
Wheat flour	2.03	0.03	0.46	0.09	1.56

* Wheat other than the type specified in the above table

- Suitable fineness of grind gives a relative standard deviation (RSD) of ≤ 2.0% for ten successive determinations of nitrogen in ground test material. A larger RSD indicates the need for a finer grind or a larger analytical test weight, assuming that the instrument has been properly set up.

- For each batch the accuracy of the system is demonstrated by making ten successive determinations of nitrogen in nicotinic acid or tryptophan (different materials from calibration standard). Means of determinations must be ≤ ± 0.15 of respective theoretical values with standard deviation ≤ 0.15. Failure to achieve these values indicates the need for recalibration or optimisation of instrument settings.

- Accuracy checks should be carried out (1) On instrument installation and reinstallation following repairs and service; (2) When a new batch of working reference material is used; (3) After experiencing problems in instrument set up.

5.6.6 References

- Crude Protein Reference Method - AACC Method 46-30
- Dumas Total Nitrogen Determination – CCD Method 02-03, RACI
- Dumas Combustion – Total Nitrogen Determination (Reference Method) Annex A - National Measurement Institute Document M8
- Sweeney, R.A. (1989). JAOAC 72: 770.
- NMI M 8 Pattern Approval Specifications for Protein Measuring Instruments for Grain
- NMI V10 Uniform Test Procedures for the Verification, Certification and In Service Inspection of Protein Instruments for Grain

5.7 Protein Assessment of Cereals – NIR

5.7.1 Definition

This describes the NIR method for determination of protein in cereal grains.

5.7.2 Scope

This procedure is applicable to all cereal grains.

5.7.3 Reagents

Not applicable.

5.7.4 Apparatus

NIR instrument approved by the National Measurement Institute for use for trade purposes under the conditions stipulated in NMI V10 (Uniform Test Procedures for the Verification, Certification and In Service Inspection of Protein Instruments for Grain), and NMI M8 (Pattern Approval Specifications for Protein Measuring Instruments for Grain).

5.7.5 Method

Sample to be “as is”.

Individual manufacturer instructions and procedures should be followed for operation and maintenance of NIR instruments used to determine grain protein.

Report result to the nearest 0.1%.

5.7.6 References

- NMI M 8 Pattern Approval Specifications for Protein Measuring Instruments for Grain
- NMI V10 Uniform Test Procedures for the Verification, Certification and In Service Inspection of Protein Instruments for Grain

5.8 Test Weight Assessment - Schopper Chondrometer Reference Method

5.8.1 Definitions

The Schopper Chondrometer is used for the measurement of Grain Density (Density is also known as “Bushel Weight”, “Test Weight” or “Hectolitre Weight”).

5.8.2 Scope

This method is applicable to all cereal grains.

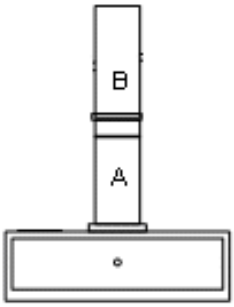
5.8.3 Apparatus

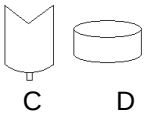
- 1L Schopper Calibrated Chondrometer
- 2 decimal place balance
- Plastic bowl

5.8.4 Reagents

Not applicable

5.8.5 Procedure





- Secure bottom half of cylinder A to base plate on the chondrometer box.
- Ensure the sliding divider C is in the slot on cylinder A.
- Place weight D on top of sliding divider.
- Secure top half of cylinder B to the bottom half A.
- Ensure the slider is closed and pour grain in the cylinder at a constant rate until full to the top.
- Pull the sliding divider out and the weight will move down, drawing the grain down with it (you will hear it moving down).
- Once the weight D is at the bottom, replace the sliding divider back in the slot.

- Carefully tip the cylinder upside down and tip out all the grain remaining above the divider. Make sure to catch the weight D as it drops down.
- Place a plastic container on the electric balance and tare to read zero.
- Remove the blade from the chondrometer and tip the measured litre of grain into the plastic container and weigh.
- The weight is in grams and needs to be multiplied by 0.1 (divided by 10) to obtain a density in kg/hl.
- Always undertake analysis in duplicate and average results.
- Report the result to one (1) decimal place.

5.8.6 References

Test Weight Per Bushel - AACC Method 55-10

National Measurement Institute General Certificate of Approval No 4/10/0A

5.9 Test Weight Assessment – Franklin Mark 11 Chondrometer Reference Method

5.9.1 Definitions

This is the Franklin Mark 11 Chondrometer reference method to determine the density of cereal grains (otherwise known as the Test Weight) expressed as kilograms per hectolitre.

5.9.2 Scope

This method is applicable to all cereal grains.

5.9.3 Apparatus

- Franklin Mark II Drop Weight Trade Certified chondrometer
- Pre-filling Cup

5.9.4 Reagents

Not applicable.

5.9.5 Procedure

- Assemble the instrument together and place the calibration weight onto the top of the measuring cylinder.
- Place the measuring cylinder with weight on the hook at the end of the measuring beam.
- Calibrate the instrument by moving the sliding weight to the position corresponding to 40kg/hl on the measuring beam. The beam should balance equidistantly between the top and bottom of the square space at the other end of the beam.
- If the beam is not balanced, turn the calibration screw at the other end of the beam until the correct setting is achieved.
- Remove the calibration weight. The instrument is then calibrated.
- Insert the cutter bar into the bottom measuring cylinder and place the drop weight on top of the cutter bar.
- Fit the top filling cylinder onto the measuring cylinder.
- Fill the pre-filling cup with grain. Sample to be “as is”.
- Steadily pour the grain from the pre-filling cup with one hand into the top filling cylinder until it is full whilst holding both cylinders together.
- Withdraw the cutter bar in a single swift motion.
- Re-insert the cutter in the slit and push it through the grain with a single firm stroke.
- Remove the top filling cylinder from the measuring cylinder and discard the grain remaining above the cutter, while holding the cutter in place.

- Remove the cutter and suspend the measuring container from the measuring beam of the chondrometer.
- Adjust the sliding weight on the beam until the instrument is balanced.
- Read the test weight of the graduated balance beam at the point indicated by the sliding weight and record the result in kilograms per hectolitre.
- Report the result to one (1) decimal place.

5.9.6 References

Test Weight Per Bushel - AACC Method 55-10

ISO7971-2

National Measurement Institute General Certificate of Approval No 4/10/0A

5.10 Test Weight Assessment – Kern 222 Chondrometer Reference Method

5.10.1 Definition

This is the Kern 222 Trade Certified Chondrometer reference method to determine the density of cereal grains (otherwise known as the test weight) expressed as kilograms per hectolitre.

5.10.2 Scope

This method is applicable to all cereal grains.

5.10.3 Apparatus

- Kern 222 Trade Certified Chondrometer with valid Regulation 13 certificate.
- Electronic balance 0.01g resolution.

5.10.4 Reagents

Not applicable

5.10.5 Procedure

- Assemble the measuring container with the grain cutter inserted in the slit. Place the brass piston on top of the cutter blade. Connect the filling hopper securely on the top of the measuring container.
- Fill the pre-filling cup with grain. Grain sample to be “as is”.
- Empty the pre-filling cup out onto a large sample tray and manually remove any foreign material e.g. whiteheads, straw, barley, lupins, sticks stones etc.
- Pour the remaining grain from the sample tray back into the pre-filling cup. Ensure that the pre filler cup is filled up to or above the internal filling line/groove.
- Steadily pour the grain from the pre-filling cup into the filling hopper until the filling hopper is full.
- Grasp the measuring container firmly with one hand and with the other hand withdraw the cutter in a single swift motion.
- Re-insert the grain cutter in the slit and push it through the grain with a single firm stroke.
- Remove the filling hopper from the measuring container and discard the grain remaining above the cutter, while holding the cutter in place.
- Remove the cutter and return the base bucket to an upright position and then withdraw the cutter.
- Place the Steel Bowl onto the balance and press the T (Tare) button, ensure Zeros are displayed.
- Pour the grain from the bucket into the steel bowl.

- The weight in grams will appear on the display of the balance. This figure is referred to as the weight in grams per litre.
- All numerical results are to be written down to two decimal places.

5.10.6 References

ISO Method 7971-2

National Measurement Institute General Certificate of Approval No 4/10/0A

5.11 Unmillable Material Assessment – Reference Method

5.11.1 Definition

This is the reference method used to determine the percentage by weight of Unmillable Material Above the Screen and Screenings, including Small Foreign Seeds.

5.11.2 Scope

This method is applicable to wheat.

5.11.3 Apparatus

Agtator Shaking Device

Wheat Screen 2.00mm with the following specifications:

- 300mm diameter discs x 0.9mm stainless steel, perforated with 12.7mm x 2.00mm slots, hit and miss on ends with 4.77mm end bar and 2.0mm side bar.
- Slot width as assessed by an Engineers Pin Gauge is to be 2.00 mm ± 0.01 mm. Pin Gauge, being 2.01mm and 1.99, needs to have a valid Regulation 13 certificate.
- Compliance testing shall be undertaken by randomly selecting 74 slots and measuring using the above Gauge. 0 to 25 slots is an acceptable failure rate. Refer to separate procedure.

Analytical balance accurate to at least 0.01g

5.11.4 Reagents

Not applicable.

5.11.5 Procedure

- Obtain a certified half litre sample of grain. Sample to be “as is”.
- Place the wheat screen on top of the Agtator platform with the slots aligned toward the front of the Agtator. Ensure the wheat screen is clean, smooth, dry and free of grain residues in the slots.
- Ensure the Agtator is set to perform 40 to and fro movements over a period of approximately 68 seconds.
- Pour the half litre of grain in one movement onto the screen surface. No additional movement or spreading of the sample over the screen is to occur.
- Turn on the Agtator and allow it to run until the 40 movements have been completed.
- Gently remove the screen and pan from the Agtator and detach the screen from the pan.
- Calculate Screenings percentage - Weigh the contents of the pan on an appropriate top pan balance and calculate the percentage as follows:

$$\text{Screenings by wt (\%)} = \frac{\text{Screenings Weight}}{\text{Total Weight}} \times 100$$

- Calculate Small Foreign Seeds percentage - Separate any Small Foreign Seeds (SFS) as listed in the Definitions Section of these Standards from the Screenings fraction and weigh these separately.

$$\text{SFS by wt (\%)} = \frac{\text{SFS Weight}}{\text{Total Weight}} \times 100$$

- Calculate Unmillable Material Above the Screen percentage - Separate any Unmillable Material Above the Screen (whiteheads with grains removed, chaff, backbone, Wild Radish pods, Milk Thistle pods, other Foreign Seed Pods not otherwise listed whether whole or in pieces and other light material) and weigh separately.

$$\text{Unmillable Material Above the Screen (\%)} = \frac{\text{Unmillable Weight}}{\text{Total Weight}} \times 100$$

- Report all results to the nearest 0.1%.

5.11.6 References

No go gauge with Regulation 13 certificate.

5.12 Falling Number Assessment – Reference Method

5.12.1 Definitions

This is the reference method for determination of Falling Number and is based on the unique ability of alpha amylase to liquefy a starch gel. Strength of the enzyme is measured by Falling Number defined as the time in seconds required to stir plus the time it takes to allow the stirrer to fall a measured distance through a hot aqueous gel undergoing liquefaction.

5.12.2 Scope

This method is applicable to wheat.

5.12.3 Apparatus

Falling Number apparatus, including standardised precision viscometer tubes with close tolerances, inside diameter ± 0.02mm outside diameter ± 0.3mm length ± 0.3mm.

Thermometer, calibrated in 0.1°C, and certified to ± 0.3°C.

Sample Mill. Must produce meal with particle size distribution as follows; <500µm, 0-10%; >210 but <500µm, 25-40%; <210µm, 75-50%. The recommended instrument has a 0.8mm sieve.

Automatic Pipette should be capable of delivering 25 ± 0.3ml.

Analytical balance accurate to at least 0.01g

5.12.4 Reagents

Distilled water

5.12.5 Method

- Start the Falling Number instrument by following the manufacturer's instructions. Ensure the bath is filled with distilled water and the instrument has reached full operating temperature before being used.
- Grind a minimum 250g sample of whole grain using the designated mill. Sample to be "as is".
- Weigh 7.00 g of meal into a dry falling number tube. There is no requirement to adjust the weight of meal based on the elevation where the test occurs or the moisture content of the wheat.
- Add 25 ml of distilled water from the automatic dispenser. Insert a rubber stopper into the top of the tube and shake tube in an upright position 20-30 times (up and down) or more if necessary) until mixed. Make sure all flour is suspended by upending. Alternatively, the unit may shake the tubes.
- Use the viscometer stirrer to scrape down the slurry coating the upper part of the tube and scrape all slurry from the stopper.
- Place the tube and the viscometer stirrer into the water bath within 30 to 60 seconds after mixing. Start the Falling Number apparatus immediately afterward.

- At the conclusion of the test, record the time in seconds.
- Remove the tube and appropriately clean the stirrer, tube and stopper using cold water and brush. Distilled water may assist removal of all traces of the starch gel material. Clean the mill of all residues retained from the sample.
- Report the Falling Number value to the nearest second.

5.12.6 References

Falling Number Determination – AACC Method 56-81B

5.13 Defective Grains Assessment – Reference Method

5.13.1 Definitions

This describes the method of assessment of deliveries of wheat for the various types of defective grains described in these wheat Standards. These are defined as:

Count per 300 grains	Count per half litre	Count per entire load
Sprouted*	Field Fungi	All Smuts except Loose Smut
Stained		
Pink Stained		
White Grain Disorder / Head Scab		
Dry Green or Sappy	**Count per half litre, grains remaining above the screen**	
Over-Dried Damaged	Severely Damaged	
Distorted		
Insect Damaged		
Non-vitreous (durum only)		

* For Sprouted grain, GTA Standards specify both a visual tolerance by count, and a Falling Number minimum. Where sprouted grain is detected, it is recommended that load by load testing using the Falling Number unit occur. Please refer to the procedure for determining whether a Falling Number test is required during the field evaluation process which is detailed separately.

5.13.2 Scope

This method is applicable for all deliveries of wheat.

5.13.3 Apparatus

Wheat Screen 2.00mm with the following specifications:

- 300mm diameter discs x 0.9mm stainless steel, perforated with 12.7mm x 2.00mm slots, hit and miss on ends with 4.77mm end bar and 2.0mm side bar.
- Slot width as assessed by an Engineers Pin Gauge is to be 2.00 mm ± 0.01 mm. Pin Gauge, being 2.01mm and 1.99, needs to have a valid Regulation 13 certificate.
- Compliance testing shall be undertaken by randomly selecting 74 slots and measuring using the above Gauge. 0 to 25 slots is an acceptable failure rate. Refer to separate procedure.

Visual Recognition Standards, with the following photographic standards being recognised by GTA:

- Visual Recognition Standards Guide for Grain Commodity Sampling and Assessment – Issued August 2021, GTA

A 300 grain tray or mechanism capable of holding greater than 300 grains

5.13.4 Reagents

Not applicable

5.13.5 Method

- Sample to be “as is”.

- For nil tolerance defects, the tolerance (rejection of the load) can apply if the defect is detected at any stage of the delivery or testing process, including in the truckload before sampling, in the probe sample, in the entire half litre sample or during discharge into the receival hopper after assessment.

- Following sieving, the grain remaining on the top screen should be examined under conditions of good lighting for a period of at least 30 seconds but no more than 60 seconds. If defective grains are found, the level of defect shall be determined using a 300 grain tray, except for Field Fungi Affected and Severely Damaged which shall be determined as listed below. Instruments of magnification may be used to assist the determination of the level of visually defective grains present in the sample. An unlimited time for assessment may occur.

- If defective grains which have a tolerance based on % in a 300 grain sample are detected, a small sub sample should be drawn from grain remaining on top of the screen following the screenings process, and placed on the open 300 grain tray. Surplus grain should be removed from the tray, ensuring all 300 holes are filled. The lid should then be slid shut, inverted, and the 300 grains emptied onto the bottom inspection tray.

- The assessment for Field Fungi shall be conducted on the entire half litre sample.

- The assessment of Severely Damaged shall be done on the entire sample remaining above the 2mm screen.

- Each grain should be examined to determine if it is classified as defective. An individual kernel may only have one defect, being the defect type with the tightest tolerance in the standard.

  - The defective grains percentage can be assessed with the assistance of the GTA Approved photographic standards (Visual Recognition Standards Guide) or Approved objective measurement instruments where appropriate.

  - Report all applicable results to the nearest 0.1% or nearest number per half litre whichever is applicable.

5.13.6 References

Visual Recognition Standards Guide for Grain Commodity Sampling and Assessment – Issued August 2021, GTA.

5.14 Defective Grain Assessment of Sprouted Grain – Field Evaluation

5.14.1 Definitions

This is the field evaluation procedure for the assessment of sprouted wheat. When sprouted grain is detected in wheat deliveries and load by load testing with the Falling Number unit does not occur, this procedure should be implemented in some form. This procedure is a guide only. Industry must ensure that any procedure used that deviates from load by load testing with the Falling Number unit complies with their customer requirements and the applicable Trading Standard.

5.14.2 Scope

This procedure is applicable to all wheat deliveries.

5.14.3 Apparatus

Wheat Screen 2.00mm with the following specifications

- 300mm diameter discs x 0.9mm stainless steel, perforated with 12.7mm x 2.00mm slots, hit and miss on ends with 4.77mm end bar and 2.0mm side bar.
- Slot width as assessed by an Engineers Pin Gauge is to be 2.00 mm ± 0.01 mm. Pin Gauge, being 2.01mm and 1.99, needs to have a valid Regulation 13 certificate.
- Compliance testing shall be undertaken by randomly selecting 74 slots and measuring using the above Gauge. 0 to 25 slots are an acceptable failure rate. Refer to separate procedure.

Analytical balance accurate to at least 0.01g

Visual Recognition Standards with the following photographic standards being recognised by GTA:

- Visual Recognition Standards Guide for Grain Commodity Sampling and Assessment – Issued August 2021, GTA.

A 300 grain tray or mechanism capable of holding greater than 300 grains

Falling Number apparatus (see Falling Number test method)

5.14.4 Reagents

Not applicable

5.14.5 Method

- Sample to be “as is”.
- Following sieving, the grain remaining on the top screen should be examined under conditions of good lighting for a period of at least 30 seconds but no more than 60 seconds. If sprouted grains are found, the level of defect shall be determined using a 300 grain tray. Instruments of magnification can be used to assist the determination of the level of sprouted grains present in the sample.

Nil tolerance applies

- If sprouted grains are detected and a nil tolerance applies the load can only be accepted into Feed segregations.

Nil tolerance does not apply or alternative procedure is used

- If sprouted grains are detected, a small representative sub sample should be drawn from across the top of the screen and placed on the open 300 grain tray. Surplus grain should be removed from the tray, ensuring all 300 holes are filled. The lid should then be slid shut, inverted, and the 300 grains emptied onto the bottom inspection tray.

- Examine the 300 grains. If 1% or more sprouted grains are present (more than 3 grains per 300) it is recommended to conduct a Falling Number test on that load and classify accordingly. If load by load testing is not conducted, refer to Running Sample Assessment below.

- If less than 1% sprouted grain is found (less than 3 grains per 300) the Falling Number test is optional, providing appropriate procedures are employed by the Receival Agent to ensure that the Falling Number result on the running samples compiled for the storage unit into which the loads are being delivered is maintained at or above the limits specified for the grade being received (see Running Sample Assessment below).

- Running Sample Assessment

"Running Sample Assessment" can be adopted where the Receival Agent is unable to apply the Receival Standard Procedure through lack of sufficient Falling Number units or chooses not to apply the Receival Standard procedure.

  - It is recommended that this procedure occur either on site or as close as possible to the receival site, in order to minimise the time delay in the site receiving the Falling Number results and to minimise the risk of receival of out of specification grain.
  - Upon detection of sprouted grain in a delivery, an initial visual sprouting limit must be set for that grade. The tolerance for sprouted grains for the first day wheat is delivered after a rain event is to be set by the Receival Agent at a conservative level to protect the integrity of the stack. A suggestion is to set this visual tolerance based on the stack sample or individual grower samples.
  - Following the setting of a visually sprouted grain limit, running samples are to be collected by placing a sub-sample of each load into a bucket representing deliveries into the particular grade. The sample is to be closed off once an appropriate tonnage has been delivered into the grade/stack. Suggested tonnage is 500 tonnes.
  - The running samples are to be either assessed on site (preferred) or forwarded to a close by location for Falling Number analysis as often as possible, with a minimum of one sample per day forwarded for Falling Number analysis (i.e., even if less than the required tonnage is delivered into the grade).
  - All Falling Number analyses on running samples are to be reported back to the receival site(s) as soon as possible, with a recommended maximum of 4 hours from sample collection.
  - Based on the Falling Number result of the running sample, the visually sprouted grain tolerance may be altered on a grain stack basis. Note that if the running sample Falling Number result is below the minimum Receival Standard specification, the Nil tolerance on visually sprouted grain is to be reinstated to ensure the overall quality of the particular grain stack is maintained.

- It should be noted that a Falling Number result always overrides the sprouted grain tolerance for each wheat delivery.
- Where a Falling Number result is reported, report result to the nearest second.
- If results of the visual count of sprouted grains are reported, report result to the nearest 0.1%.

5.14.6 References

Not applicable

5.15 Contaminants Assessment – Reference Method

5.15.1 Definitions

This describes the method of assessment of deliveries of wheat for the various types of Contaminants described in these wheat Standards. The various contaminant types and their assessment methods are described in this method as follows:

Length in cm per half litre	% by Count 300 grain	Weight in grams per 2.5 litres	Count per half litre	% by weight in half litre	Count per entire load
Ryegrass Ergot	Bread wheat (durum deliveries only)	Stones (above the screen)	All Weed Seeds except Type 2, includes Foreign Seed Pods where specified	Other Foreign Material	Chemicals Not Approved for Wheat or in Excess of the MRL
			Cereal Ergot	Small Foreign Seeds	Objectionable Material
			Earcockle	Unmillable Material Above the Screen*	Pickling Compounds or Artificial Colouring
			Earth		Stored Grain Insects and Pea Weevil - Live
			Insects Large – Live or Dead		Type 2 weed seeds
			Insects Small – Live or Dead		
			Loose Smut		
			Sand		
			Snails		

* May or may not include a contaminant.

5.15.2 Scope

This method is applicable for all deliveries of wheat.

5.15.3 Apparatus

Wheat Screen 2.00mm with the following specifications:

- 300mm diameter discs x 0.9mm stainless steel, perforated with 12.7mm x 2.00mm slots, hit and miss on ends with 4.77mm end bar and 2.0mm side bar.
- Slot width as assessed by an Engineers Pin Gauge is to be 2.00 mm ± 0.01 mm. Pin Gauge, being 2.01mm and 1.99, needs to have a valid Regulation 13 certificate.
- Compliance testing shall be undertaken by randomly selecting 74 slots and measuring using the above Gauge. 0 to 25 slots is an acceptable failure rate. Refer to separate procedure.

Analytical balance accurate to at least 0.01g

Visual Recognition Standards with the following photographic standards being recognised by GTA:

- Visual Recognition Standards Guide for Grain Commodity Sampling and Assessment – Issued August 2021, GTA.
- Seed Impurities of Grain Identification Guide, 3rd Edition, GTA.
- Insects of Stored Grain, A Pocket Reference, 2nd Edition, CSIRO

A 300 grain tray or mechanism capable of holding 300 grains or greater

Mesh Screen (optional)

Ruler

5.15.4 Reagents

Not applicable.

5.15.5 Method

- Sample to be "as is".
- For contaminants with tolerances above zero, assessment is made on the half litre sample on grain above and below the 2.00 mm screen after the Unmillable Material assessment has been conducted.
- For nil tolerance contaminants, the tolerance (rejection of the load) may apply if the contaminant is detected at any stage of the delivery or testing process, including in the truckload before sampling, in the probe sample, in the half litre sample or during discharge into the receival hopper after assessment.
- Following sieving, the grain remaining on the top and in the bottom screen should be examined under conditions of good lighting. There is no time restriction for this assessment. If contaminants are found, they shall be removed by hand and assessed in accordance with the tolerance prescribed in these Standards under 5.15.1.
- If any Stones are found above the screen in the initial half litre sample, then a further four half litre samples should be taken. If the total weight of all Stones found in the combined 2.5L sample is above 4.0g, the load is to be rejected.
- Seed contaminants are to be assessed using the appropriate visual assessment method and in accordance with the tolerance prescribed in these Standards under 5.18.1. Note that for Type 1 weed seeds, tolerances apply to individual seeds whereas for all other Types listed, tolerances are the total of all seeds in each Type.
- Small Foreign Seeds (SFS) are assessed in the bottom tray (catchpan). These may need to be physically removed from all non-SFS material in the bottom tray. Alternatively, to assist in separating SFS from non-SFS material in the bottom tray, a mesh screen may be used. Place the sample over the mesh screen over a white tray and gently shake. SFS tend to remain on top of the mesh screen. Physical hand separation of SFS may still be required using this method.

- Note that any seed pods detected must not be opened. Whole pods or part thereof are classified as Unmillable Material Above the Screen unless tolerances are specified in Foreign Seeds.

- Where depicted, other contaminants should be assessed using the GTA Approved photographic standards. Where reference material is not available, other contaminants should be assessed by reference to the Definitions of those parameters.

- For assessment of Pickling Compounds, Chemicals not Approved for Wheat or Chemicals in Excess of the MRL, it is recommended that all deliveries are accompanied by a signed declaration referring to its chemical status. Where the receiving agent believes that the visual appearance and/or odour of grain suggests that it has been treated with a non approved chemical, it is recommended the grain is not received until the representative "as received" sample has been tested by an approved independent laboratory and the presence or absence of non approved chemicals ascertained.

- Report results as follows:

  Count per half litre – nearest whole number
  Length in cm per half litre – nearest 0.1cm
  Percentage by wt in half litre – nearest 0.1%
  Weight in grams in 2.5 litres – nearest 0.1g
  Percentage by count in 300 grains – nearest 0.1%
  Percentage by count in a half litre – nearest 1%

5.15.6 References

Visual Recognition Standards Guide for Grain Commodity Sampling and Assessment – Issued August 2021, GTA.

Seed Impurities of Grain Identification Guide, 3rd Edition, GTA

Insects of Stored Grain, A Pocket Reference, 2nd Edition, CSIRO

Ute Guide Series, GRDC.

5.16 Vitreous Kernel Assessment – Reference Method

5.16.1 Definition

This is the reference method for the determination of vitreous kernel percentage in durum wheat presented for delivery. The principle involves visual identification and removal of mottled grains by hand picking from a 300 grain sample. Every grain is carefully examined on all sides before a vitreous kernel assessment is made. Bleached grains may be assessed visually or using a Farinator or other suitable equipment in order to facilitate their classification. The non vitreous grains are counted, and the vitreous grain percentage then calculated.

5.16.2 Scope

This method is applicable to all durum wheat.

5.16.3 Apparatus

Sample divider

Agtator and 2.00mm wheat screen

Seed counter

Sample inspection tray

Tweezers

Farinator or other equipment

Visual Recognition Standards Guide for Grain Commodity Sampling and Assessment – Issued August 2021, GTA.

5.16.4 Reagents

Not applicable.

5.16.5 Method

- Sample to be “as is”.
- Screen the sample over a 2.00mm wheat screen using the approved method of determining Unmillable Material for Wheat.
- Count out 300 grains obtained from the top of the screen after completion of the screening process using a grain counter. A 300 grain tray or hand counting can also be used.
- Pour the 300 grain sample into the sample inspection tray.
- With the aid of tweezers (if required), visually examine the grain, turning each grain from side to side so that its entire surface may be observed.
- Separate the grains according to whether they are assessed as vitreous, non vitreous or bleached. Count the non vitreous grains.
- Bleached grains may be difficult to ascertain if they are vitreous or not. These may be assessed visually or using a Farinator, or other suitable equipment then classified as

vitreous or non vitreous. Vitreous grains will appear uniformly bright and translucent. Non vitreous grains will be dull and opaque, or will contain dark, opaque sections that are clearly visible within the remaining translucent section of the grain.

- Count the non vitreous grain and add the result to that determined at the previous step above.
- Calculate the sum of the non vitreous grain counts.
- Determine the vitreous grain percentage as follows:

  $$\text{Vitreous kernels (\%)} = 300 - \text{non vitreous grain count} \times 100$$
  $$300$$
- Vitreous grain percentages are reported correct to the nearest whole number.

5.16.6 References

Method for the Determination of the Vitreousness of Durum Wheat, International Association for Cereal Chemistry (ICC) ICC Standard No 129 1980

Visual Recognition Standards Guide for Grain Commodity Sampling and Assessment – Issued August 2021, GTA.

5.17 Vitreous Kernel Assessment in Durum – Digital Imaging Method

5.17.1 Definition

This is the preferred field assessment method for the determination of the percentage of vitreous kernels in durum. The principle involves the use of a suitably calibrated Cervitec digital imaging instrument to scan a preset quantity of individual durum grains, and to express the result as a percentage by count of vitreous kernels relative to the total number of durum grains analysed.

5.17.2 Scope

This method is applicable to all durum.

5.17.3 Apparatus

Cervitec™ 1642 Digital Imaging Analyser

1000 kernel grain measure

5.17.4 Reagents

Not applicable

5.17.5 Method

- Place the instrument on a clean, level and stable surface.
- Set the instrument to the correct application model for the grain type being analysed (DWAU 009d).
- Perform an Unmillable Material assessment on the sample to be tested as per the appropriate method outlined in this Manual.
- Collect a representative 1,000 kernel sample of durum grains from the top of the 2.00 mm wheat screen after the Unmillable Material assessment has been completed.
- Ensure the grain is free of foreign objects or unmillable material.
- Start the analysis by pressing the appropriate key(s) on the instrument.
- Once the wheel begins to turn, pour the 1,000 kernel sample into the instrument hopper. The instrument will conduct the analysis.
- Once the analysis process is complete, the result will be displayed as % vitreous. Record the result and remove the sample from the collection drawer.
- Report result to the nearest 0.1%.

5.17.6 References

Method for the Determination of the Vitreousness of Durum Wheat, International Association for Cereal Chemistry (ICC) ICC Standard No 129 1980

Cervitec™ 1642 Grain Inspector User Manual 1001 3801 / Rev. 1.0

5.18 Variety Declaration Procedure

5.18.1 Definitions

This is the recommended procedure for determining the variety of the load presented for delivery.

5.18.2 Scope

This procedure is applicable to all wheat deliveries.

5.18.3 Apparatus

Not applicable.

5.18.4 Reagents

Not applicable.

5.18.5 Method

- For the purposes of the Receival Standards and delivery of grain, classification is dependant on the point of delivery. This means that the highest grade classification available to a variety depends on the region in which it is delivered and the segregation being available at the point of delivery.

- Driver declares the variety(s) in the load tendered for delivery. It is recommended that the grower sign a Declaration Form and provide this to the driver for provision to the Receival Agent. This Declaration Form should at a minimum contain the grower details and the variety(s) of the load.

- If the declared varietal composition or paddock where the grain was grown is different for each unit tendered for delivery, or more than one variety is commingled in each delivery unit, then a separate assessment of each unit must be conducted.

- Note that depending on the varietal declaration and the procedures of the Receival Agent, a sample of the load may be taken and sent to a laboratory for assessment of the variety within the sample. In this instance sample is to be “as is”.

- Report the variety as per the following procedure using the applicable code as defined by the Receival Agent.

<u>Load is Declared as One Variety Only</u>

- Where the load is declared as being of the one variety only, review the applicable maximum grade classification of that variety as per the Variety Masterlist.

- Based on the quality results, Grade the load and record the declared variety.

<u>Load is Declared as Multiple Varieties of the Same Grade Classification Status</u>

- Where the load is declared as being of more than the one variety, determine the different varieties contained in the load and for each, review the applicable maximum grade classification as per the Variety Masterlist.

- Based on the quality results, Grade the load and record the variety with the greatest percentage in the load.

Load is Declared as Multiple Varieties of Different Grade Classification Status

- Where the load is declared as being of more than the one variety, determine the different varieties contained in the load and for each, review the applicable maximum grade classification as per the Variety Masterlist.

- No matter the percentage of each variety in the load, the maximum grade classification of the load can only be as per the lowest Grade classification of the declared varieties.

- Based on the quality results, Grade the load no higher than the lowest Grade classification and record that variety.

5.18.6 References

Variety Masterlist

Declaration Form, if applicable

5.19 Screen Slot Size Compliance Procedure

5.19.1 Definition

This is the recommended procedure for determining whether the screen slot size complies with the Standard and relevant legislation.

5.19.2 Scope

This procedure is applicable to all wheat deliveries and screens used for assessment purposes.

5.19.3 Apparatus

Engineers Pin Gauge, 1.99mm and 2.01mm, with a valid Regulation 13 certificate

Checking template (if available)

Calibration Sticker

5.19.4 Reagents

Not applicable.

5.19.5 Method

- Compliance testing shall be undertaken by randomly selecting 74 slots and measuring using the above Gauge.
- Place screen or disc with the smooth surface up so that it sits horizontally.
- Examine the screen for any damage to the slots. If there is any damage affecting the accuracy of the slots or the screen immediately reject the screen.
- Ensure the screen is labelled with the correct slot/hole size, the commodity that is normally tested on the screen (wheat) and the screen identification number.
- For screen accuracy, place relevant checking template (testing 74 slots) centred as much as possible (use the handle as a guide) on top of screen and rotate so that all the holes line up. For discs place the disc on top of relevant checking template, rotate disc until all the holes line up then clamp with bulldog clips.
- Select the appropriate GO/NO GO GAUGE for the screen/disk to be tested i.e., for wheat, the wheat gauge 1.99 - 2.01mm.
- Hold the GO/NO GO GAUGE in the middle.
- Place an end of the GO/NO GO GAUGE on the middle of a slot which lines up with a slot on the template so that is perpendicular to the slot.
- Release the GO/NO GO GAUGE. Gauges are not to be pushed through slots.
    - If the GREEN (GO) end does not go through then the slot fails. Record this event and move on to the next slot.

- If the GREEN (GO) end does go through then the slot size is greater than the nominated size of the GREEN end. Proceed to test the slot with the RED (NO GO) end as follows:
    - If the RED (NO GO) end does not go through then the slot size is less than the nominated size of the RED end and greater than the nominated size of the Green End, hence the slot is within the accepted range and passes.
    - If the RED (NO GO) end does go through then the slot fails. Record this event and move on to the next slot.
- Proceed to test all 74 slots, recording each failure.
- 0 to 25 slots is an acceptable failure rate.

- If the screen meets the tolerances:
    - Record results on the equipment record
    - Affix the relevant calibration sticker to the side of the sieve (not the catch pan)

5.19.6 References

Not applicable.

5.20 Bread Wheat Assessment in Durum – Reference Method

5.20.1 Definitions

This is the reference method for the determination of bread wheat percentage in durum wheat presented for delivery.

5.20.2 Scope

This method is applicable to all durum wheat.

5.20.3 Apparatus

Sample divider

Agtator and 2.00mm wheat screen

Seed counter

Sample inspection tray

Tweezers

Visual Recognition Standards, with the following photographic standards being recognised by GTA:

- Visual Recognition Standards Guide for Grain Commodity Sampling and Assessment – Issued August 2020, GTA.

5.20.4 Reagents

Not applicable.

5.20.5 Method

- Sample to be "as is".
- Screen the sample over a 2.00mm wheat screen using the approved method of determining Screenings of Wheat.
- Count out 300 grains obtained from the top of the screen after completion of the screening process using a grain counter. A 300 grain tray or hand counting can also be used.
- Pour the 300 grain sample into the sample inspection tray.
- With the aid of tweezers (if required), separate the bread wheat grains which can be identified by the presence of fine hairs on the brush end of the grain.
- Count the number of bread wheat grains separated.
- Calculate the percentage of bread wheats:

$$\text{Bread wheat (\%)} = \frac{\text{Bread wheat count}}{300} \times 100$$

- Report results to the nearest percent.

5.20.6 References

Visual Recognition Standards Guide for Grain Commodity Sampling and Assessment – Issued August 2021, GTA.

SECTION 6 REFERENCE MATERIALS

At the time of publishing this Manual, the following photographic Reference Material referred to in this Manual is considered by GTA to be suitable as an aid to classification of wheat.

Industry should be aware that all such material is controlled by the author of that material and appropriate copies of that material can be obtained from the author.

The method of printing, copying, storing, using or otherwise obtaining such Reference Material may impact on the appearance of its content. This may impact on the classification of wheat. Industry should note the method of publication of the material by the author and other relevant information such as version number to ensure they have the appropriate version.

Name of Material	Material Type	Author	Version Number	Applicable Dates
Defective Grains				
Visual Recognition Standards Guide for Grain Commodity Sampling and Assessment	Hardcopy booklet	GTA	n/a	Issued August 2021
Contaminants				
Grain Quality Winter Grain Crops: The Ute Guide	Hardcopy booklet	GRDC	n/a	n/a
Weeds: The Ute Guide	Hardcopy booklet	GRDC	Various editions	n/a
Insects of Stored Grain, A Pocket Reference	Hardcopy booklet	CSIRO	2nd Edition	2007
Seed Impurities of Grain Identification Guide	Hardcopy booklet	GTA	3rd Edition	n/a