

## **SECTION 3 GRAIN QUALITY STANDARDS**

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

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

- Definitions
- Varietal Master List
- 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: Effective:	SORGHUM No.1 1 August 2017	Standard Reference No. Season:	CSG-1 2017/18
PARAMETER	SPECIFICATION	COMMENT / VARIATION	
Description	n/a	Grain Sorghum of Red, White or Yellow varieties only	
Moisture Max (%)	13.5		
Test Weight Min (kg/hl)	71.0		
Foreign Material Max (% by wt)	2.0	All matter other than already specified in this Standard	
Screenings Max (% by wt)	11.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
<b>DEFECTIVE GRAINS Max</b> (% by count, 300 grain sample, unless otherwise stated)			
Total Defective, of which	5.0	Includes Field Fungi, Sappy, Insect Damaged, Severely Damaged and Mould	
Field Fungi	3.0		
Severely Damaged (% by weight per half litre)	0.5	Heat damaged / bin burnt, diseased or other serious visual defects	
Mould (% by weight per half litre)	0.05		
Sprouted	3.0	Not included in Total Defective	
<b>FOREIGN SEED CONTAMINANTS Max</b> – (count of seeds in total per half litre unless otherwise stated)			
Type 1 (Individual seed basis)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Headed Poppy, Mexican Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (Qld only)	
Type 2 (entire load)	Nil	Castor Oil Plant, Coriander, Crow Garlic/Wild Garlic, Darling Pea, Opium Poppy, Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3 (a)	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple/False Castor Oil	
Type 3 (b)	4	Vetch (Blue/Tare) and Vetch (Commercial)	
Type 3 (c)	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4(a)	20	Bindweed (Field), Cutleaf Mignonette seeds or pods, Damek, Hexham Scent/King Island Melilot (Hexham Scent is only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Patterson's Curse/Salvation Jane, Sesbania pea	
Type 6	10	Saffron Thistle	
Type 7 (a)	50	Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Johnson Grass or Columbus Grass, Lentils, Lupin, Peas (Field), Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter	
Type 7 (b)	400	Barley, Bindweed (Australian), Bindweed (Black), Wheat, Durum, Oats (Black), Oats (Sand), Oats (Wild), Oats (Common), Rice, Rye (Cereal), Sorghum (Forage), Triticale, Turnip Weed and any other weed seeds not specified in Types 1-7(a) or SFS	
Small Foreign Seeds (% by weight)	1.6	All foreign seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
<b>OTHER CONTAMINANTS Max</b> - (count per half litre, unless otherwise stated)			
Cereal Smut (entire load)	Nil	Ball and Gall Smut or any other smut species	
Cereal Ergot (entire load)	Nil	Pieces or whole affected kernels of all cereal ergots except Sorghum Ergot	
Sorghum Ergot (% by weight)	0.3	<i>Claviceps africana</i> and <i>Cerebella sclerotes</i>	
Ryegrass Ergot (entire load)	Nil		
Stored Grain insects & Pea Weevils – Live (entire load)	Nil	All life stages	
Insects – Large	3	Dead or alive	
Insects – Small	10	Dead or alive	
Sand/Soil (% by weight)	0.06		
Stones (g per 2.5L)	4.0	Maximum total weight of all Stones retained above the 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Sticks, glass, concrete, pickled grain, artificial colouring or any other commercially unacceptable contaminant	
Odour (entire load)	Nil	Grain which has any commercially foreign odour due to tainting agents or improper storage causing mould, souring or musty odours	
Maximum Temperature (°c)	35	Grain temperature ex grain dryer	
Chemicals Not Approved for Sorghum (entire load)	Nil	Residues of any chemical compound not approved for grain sorghum, used in contravention of the labelled instructions or chemicals in excess of the MRL	

<b>Commodity:</b>	<b>SORGHUM No.2</b>	<b>Standard Reference No.</b>	<b>CSG-2</b>
<b>Effective:</b>	<b>1 August 2017</b>	<b>Season:</b>	<b>2017/18</b>
<b>PARAMETER</b>	<b>SPECIFICATION</b>	<b>COMMENT / VARIATION</b>	
Description	n/a	Grain Sorghum of Red, White or Yellow varieties only	
Moisture Max (%)	13.5		
Test Weight Min (kg/hl)	62.0		
Foreign Material Max (% by wt)	4.0	All matter other than already specified in this Standard	
Screenings Max (% by wt)	25.0	All matter passing through a 2.0mm slotted screen – 40 shakes in the direction of the slots	
<b>DEFECTIVE GRAINS Max</b> (% by count, 300 grain sample, unless otherwise stated)			
Total Defective	25.0	Includes Field Fungi, Sappy, Insect Damaged, Severely Damaged and Mould	
of which			
Field Fungi	10.0		
Severely Damaged (% by weight per half litre)	1.0	Heat damaged / bin burnt, diseased or other serious visual defects	
Mould (% by weight per half litre)	0.1		
Sprouted	10.0	Not included in Total Defective	
<b>FOREIGN SEED CONTAMINANTS Max</b> – (count of seeds in total per half litre unless otherwise stated)			
Type 1 (Individual seed basis)	8	Colocynth, Double Gees/Spiny Emex/Three Cornered Jack, Jute, Long Headed Poppy, Mexican Poppy, Field Poppy, Horned Poppy, Wild Poppy, New Zealand Spinach, Parthenium Weed (Qld only)	
Type 2 (entire load)	Nil	Castor Oil Plant, Coriander, Crow Garlic/Wild Garlic, Darling Pea, Opium Poppy, Peanut seeds and pods, Ragweed, Rattlepods, Starburr, St. John's Wort	
Type 3 (a)	2	Bathurst Burr, Bellvine, Branched Broomrape, Bulls Head/Caltrop/Cats Head, Cape Tulip, Cottonseed, Dodder, Noogoora Burr, Thornapple/False Castor Oil	
Type 3 (b)	4	Vetch (Blue/Tare) and Vetch (Commercial)	
Type 3 (c)	2 pods / 8 seeds	Heliotrope (Blue), Heliotrope (Common)	
Type 4(a)	20	Bindweed (Field), Cutleaf Mignonette seeds or pods, Damel, Hexham Scent/King Island Melilot (Hexham Scent is only acceptable if no tainting odour is present), Hoary Cress, Mintweed, Nightshades, Paddy Melon, Skeleton Weed, Variegated Thistle	
Type 5	40	Knapweed (Creeping/Russian), Patterson's Curse/Salvation Jane, Sesbania pea	
Type 6	10	Saffron Thistle	
Type 7 (a)	50	Broad Beans, Chickpeas, Corn (Maize), Cowpea, Faba Beans, Johnson Grass or Columbus Grass, Lentils, Lupin, Peas (Field), Safflower, Soybean, Sunflower and any other seeds or pods greater than 5mm in diameter	
Type 7 (b)	400	Barley, Bindweed (Australian), Bindweed (Black), Wheat, Durum, Oats (Black), Oats (Sand), Oats (Wild), Oats (Common), Rice, Rye (Cereal), Sorghum (Forage), Triticale, Turnip Weed and any other weed seeds not specified in Types 1-7(a) or SFS	
Small Foreign Seeds (% by weight)	1.6	All foreign seeds not specified in Types 1-7(b) that fall below the 2.0mm screen during the Screenings process	
<b>OTHER CONTAMINANTS Max</b> - (count per half litre, unless otherwise stated)			
Cereal Smut (entire load)	Nil	Ball and Gall Smut or any other smut species	
Cereal Ergot (entire load)	Nil	Pieces or whole affected kernels of all cereal ergots except Sorghum Ergot	
Sorghum Ergot (% by weight)	0.3	<i>Claviceps africana</i> and <i>Cerebella sclerotes</i>	
Ryegrass Ergot (entire load)	Nil		
Stored Grain insects & Pea Weevils – Live (entire load)	Nil	All life stages	
Insects – Large	3	Dead or alive	
Insects – Small	10	Dead or alive	
Sand/Soil (% by weight)	0.06		
Stones (g per 2.5L)	4.0	Maximum total weight of all Stones retained above the 2.0mm screen per 2.5L	
Objectionable Material (entire load)	Nil	Sticks, glass, concrete, pickled grain, artificial colouring or any other commercially unacceptable contaminant	
Odour (entire load)	Nil	Grain which has any commercially foreign odour due to tainting agents or improper storage causing mould, souring or musty odours	
Maximum Temperature (°c)	35	Grain temperature ex grain dryer	
Chemicals Not Approved for Sorghum (entire load)	Nil	Residues of any chemical compound not approved for grain sorghum, used in contravention of the labelled instructions or chemicals in excess of the MRL	