

## Typical Grain Bulk Densities and Angles of Repose

*Tables are to be used as a guide only*

Content	kg/m <sup>3</sup>	Bulk density tonnes/m <sup>3</sup>	Angle of repose
Nuts	600-650		60 degrees
Wheat	750	0.750	27
Barley	620	0.620	28
Oats	450	0.450	28
Maize	720	0.720	28
Rye	710	0.710	26
Soybean	750	0.750	27
Safflower	530	0.530	28
Sunflower	400	0.400	30
Rapeseed	670	0.670	22
Linseed	730	0.730	20
Sorghum	720	0.720	28
Lupins	720	0.720	28

Content	kg/m <sup>3</sup>	Content	kg/m <sup>3</sup>
<b>Bulk Densities</b>		<b>All weights as kg/cubic metre, plus 5% compaction</b>	
Alfalfa Seed	760	Navy Bean	760
Barley	630	Oats	580
Canary	700	Peanuts in Shell	300
Canola	690	Peanut Shelled	640
Canola Meal	630	Rice Long Paddy	620
Cement	1280	Rice Med Paddy	660
Chick Laying Mash	460	Rice Long Brown	790
Chickpea	740	Rice Med Brown	850
Cotton Seed	400	Rye Grain	700
Cowpea	750	Safflower	530
Flax Seed	700	Sawdust	210
Horse Pellets	650	Sesame	590
Linseed	720	Sorghum	730
Lucerne Pellets	660	Soybean	750
Lupin	770	Sunflower	420
Maize	720	Triticale	700
Millet	630	Wheat	820
Mung	750		

### Super Density

Content	kg/m <sup>3</sup>	Content	kg/m <sup>3</sup>
Bulk Super	1200	DAP	928
Highplos	1000	Single Super	1050
Double Super	1040	Granulated Urea	767
Starter 12	840	Starterfos	995
MAP 11-23-0	950	Pivot 15	930
Double Zinc	1060	Pivot DAP 18	1030
Triple Super TSP	970		

**Note:** The bulk density and angle of repose will vary according to variety, moisture content, quality and trash content of the grain. To check grain bulk density weight 1 L of grain. This weight in kilograms is its density in tonnes per cubic metre.