

**Table 7: Total wheat imports per country per season
for use in RSA**

	Season										Total
	2004/2005	2005/2006	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014*	
Argentina	574,600	392,930	310,524	684,160	368,739	-	629,600	652,279	98,029	-	3,710,861
Australia	154,112	59,927	-	-	74,714	55,312	181,637	247,675	189,925	50,595	1,013,897
Brazil	-	-	-	-	42,449	123,944	58,551	276,420	234,733	-	736,097
Canada	43,766	62,643	153,694	194,764	54,831	72,911	79,697	45,252	48,583	68,686	824,827
Finland	-	-	-	-	-	-	-	-	-	25,430	25,430
France	-	9,920	-	-	-	-	-	-	-	-	9,920
Germany	115,332	354,718	80,649	111,013	518,002	809,934	88,581	105,964	95,476	114,581	2,394,250
Latvia	-	-	-	-	-	-	-	-	-	22,014	22,014
Lesotho	-	-	-	-	-	-	-	-	384	-	384
Lithuania	-	-	-	-	-	1,611	-	8,880	-	40,532	51,023
Poland	-	-	-	-	13,013	-	-	-	-	-	13,013
Romania	-	-	-	-	-	-	-	36,071	-	-	36,071
Russia	-	-	-	-	-	-	-	154,129	245,228	609,891	1,009,248
Swaziland	-	-	-	-	-	-	-	-	288	-	288
UK	27,586	-	-	-	-	-	-	-	-	-	27,586
Ukraine	29,935	85,979	-	-	13,521	41,230	-	39,016	341,976	327,820	879,477
Uruguay	-	-	-	-	-	-	25,249	45,250	99,033	-	169,532
USA	281,165	88,651	232,266	406,562	113,434	173,030	586,200	112,915	42,572	49,013	2,085,808
Total	1,226,496	1,054,768	777,133	1,396,499	1,198,703	1,277,972	1,649,515	1,723,851	1,396,227	1,308,562	13,009,726

*2013/2014 season figures include imports up to 4 July 2014.

Quality summary of imported wheat (1 October 2012 to 30 September 2013) (Previous season)

The quality of all wheat imported into South Africa is monitored by the SAGL. A subsample of all samples drawn by inspectors of the South African Agricultural Food, Quarantine and Inspection Services (SAAFQIS) of the Department of Agriculture, Forestry and Fisheries (DAFF) is forwarded to the SAGL for analysis. To assist with quality comparisons between local and imported wheat, the same scope of analysis is used for both sets of samples. The import quality results are published only at the end of each production and marketing season.

Please take note that according to the South African grading regulations (please see pages 91 to 103), Regulation 4 Standards for classes, Sub paragraph (2) A consignment shall be classified as Bread Wheat if -- (a) "the wheat in the consignment consists of at least 95 per cent (m/m) of one or more of the bread wheat cultivars specified in the cultivar list;" all imported wheat should be graded as Class Other Wheat. However, for comparison purposes, the wheat is graded by SAGL as if of local origin.

For grading as well as dough and baking quality result of the imported wheat per country, please refer to pages 67 to 84. This imported wheat quality is compared to a summary of the local crop quality of the same (2012/2013) season. To simplify the comparison between the quality of the different countries of import and South African wheat, the average quality per country was summarised in Table 8 on page 66. Please also take note of the number of samples analysed when comparing results, the higher the number of samples, the more reliable the average result will be.

Australian and Canadian wheat had the highest hectolitre mass results, indicating a potential for good

(high) flour extraction. Local wheat compared well with Canadian wheat in this regard. Screenings represent all material that passes through a standard sieve, 1.8 mm in this instance, with 3% the maximum allowed for grades 1 to 3 according to RSA grading regulations. Higher percentages screenings result in higher losses due to the removal of unmillable material. Brazil and Russia had the highest levels of screenings.

American wheat had the lowest whole wheat protein contents resulting in the lowest average by one percent. Brazil is the only country with a falling number average below 220 seconds, individual sample results ranged between 110 and 417 seconds.

The ability of wheat flour to produce dough with good gas-holding capability is attributable to gluten as gluten imparts the elasticity and extensibility characteristics to the dough. Good quality gluten is capable of producing a loaf of bread with a high volume and good crumb texture. As in the previous season, the Canadian wheat had the highest protein content resulting in the highest gluten content. However, when evaluating gluten content, the protein content should also be taken into account. In general a wet gluten content of 28.0% or higher is expected from wheat with a flour protein content of 10%. The wet gluten content of good quality white bread flour normally ranges between 27 – 33%.

Flour with higher water absorption is preferred by bakers as this result in increased dough yields. The acceptable range for white bread flour is 60.0 – 65.0%, average 61.0 – 63.0%. Wheat from only Australia, Brazil and Canada fell within this range. In general, longer development times of 3.5 to 6.0 minutes and stabilities of 8.0 to 12.0 minutes will be an indication of good baking quality, which is associated with good protein quality. The farinogram development times of the imported wheat (Australia and Canada excluded) were much shorter than the South African wheat. The American wheat showed extremely poor quality on the Farinograph.

Acceptable ranges for the Alveograph parameters are as follows: Strength 30 – 45 cm², stability (P) 65 – 120 mm, distensibility (L) 80 – 120 mm and P/L 0.80 – 1.50. A good correlation exists between alveogram strength and protein quality. Except for Germany, all countries showed an increase in distensibility values compared to the previous season. Short distensibility values, as observed with German wheat, can result in lower loaf volumes. The American wheat again showed the weakest quality on the Alveograph.

In general, Extensograph strength values ranging between 80 – 150 cm², maximum heights of 300 – 550 BU and extensibility values of 170 – 220 mm, indicate good baking quality. The tendency towards shorter extensibility values compared to local wheat can also be seen on the Extensograph as with the Alveograph distensibility values. The poor quality observed on the wheat from the USA is confirmed with the Extensograph results.

The imported wheat samples, except for Canada, again showed a tendency towards longer mixogram mixing times. Australian wheat lies on the upper limit of what is considered acceptable mixing times (2.8 to 3.5 minutes) in South Africa. The mixing time is an indication of the amount of time needed to mix the dough to optimum development. The longer the mixing time, the larger the risk that the dough will not be mixed to optimum development, which will negatively influence the bread quality and cause lower loaf volumes. Longer mixing times can also have cost implications due to higher energy inputs required. Australian wheat showed the best and Brazilian wheat the worst correlation between the protein content and 100 g loaf volume.

Composite samples of holds per shipment per country are tested for mycotoxin residues by means of a multi-mycotoxin analysis. The mycotoxin results overall did not raise concerns, although the DON levels were higher than in the previous two seasons and two samples from Uruguay exceeded the EU maximum limits for unprocessed cereals (1 250 µg/kg).