

IMPORTED MAIZE QUALITY
Imported maize quality versus RSA crop quality
2005/2006

| Country of origin | Argentina Average | | | RSA Crop Average | | |
|--|--------------------------|------------|------------|-------------------------|------------|------------|
| Class and grade yellow maize | YM1 | YM2 | COM | YM1 | YM2 | COM |
| RSA Grading | | | | | | |
| Defective kernels above 6.35 mm sieve, % | 1.9 | 1.9 | 2.4 | 4.0 | 8.3 | 8.1 |
| Defective kernels below 6.35 mm sieve, % | 1.7 | 8.3 | 5.5 | 1.8 | 2.5 | 3.1 |
| Total defective kernels, % | 3.6 | 10.2 | 8.1 | 5.8 | 10.8 | 11.2 |
| Other colour maize kernels, % | 0.0 | 0.0 | 0.1 | 0.1 | 0.4 | 7.4 |
| Foreign matter, % | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 |
| Combined deviation, % | 3.8 | 10.3 | 8.3 | 6.0 | 11.5 | 18.8 |
| Pinked maize kernels, % | 9.6 | 4.4 | 18.6 | 0.1 | 0.2 | 0.6 |
| Noxious seeds | 0 | 0 | 0 | 0 | 0 | 0 |
| Physical Factors | | | | | | |
| Hectolitre mass, kg/hl | 77.5 | 75.4 | 76.1 | 76.2 | 74.0 | 74.1 |
| 100 Kernel mass, g | 33.5 | 30.3 | 31.7 | 32.3 | 30.0 | 30.7 |
| Stress cracks, % | 6 | 10 | 14 | 5 | 5 | 10 |
| Milling Index | 99.7 | 104.1 | 93.4 | 93.1 | 87.0 | 87.8 |
| Kernel Size | | | | | | |
| % on top 10 mm | 10.4 | 3.8 | 5.9 | 19.2 | 18.7 | 20.0 |
| % on top 8 mm | 73.8 | 70.1 | 55.2 | 65.5 | 65.3 | 63.4 |
| % through 8 mm | 15.8 | 26.1 | 38.6 | 15.3 | 16.1 | 16.6 |
| Breakage susceptibility, g | | | | | | |
| Below 6.35 mm sieve | 0.0 | 1.8 | 1.4 | 2.0 | 3.7 | 3.4 |
| Below 4.8 mm sieve | 0.0 | 1.0 | 1.0 | 1.4 | 2.5 | 2.1 |
| Nutritional Factors | | | | | | |
| Protein, % | 8.4 | 9.8 | 8.6 | 8.3 | 8.4 | 8.4 |
| Fat, % (db) | 3.9 | 4.3 | 4.5 | 3.9 | 3.9 | 4.0 |
| Starch, % (db) | 71.5 | 69.3 | 70.7 | 71.5 | 71.4 | 71.4 |
| Number of samples | 1 | 1 | 41 | 209 | 86 | 7 |
| Mycotoxins | | | | | | |
| Total Aflatoxin, ppb (ug/kg) [max. value] | 0.38 [4.00] | | | 0.00 [0.00] | | |
| Fumonisin, ppm (mg/kg) [max. value] | 1.39 [5.70] | | | 1.29 [13.00] | | |
| Deoxynivalenol, ppm (mg/kg) [max. value] | 1.08 [2.60] | | | 2.64 [5.90] | | |
| Ochratoxin A, ppb (ug/kg) [max. value] | 0.33 [2.90] | | | 0.14 [2.90] | | |
| Zearalenone, ppm (mg/kg) [max. value] | 0.08 [0.37] | | | 0.03 [0.39] | | |
| Number of samples | 21 | | | 39 | | |
| GMO | | | | | | |
| MON 810, % Samples positive (> LOD of 0.15 %) | 100 | | | 97 | | |
| NK 603 (Roundup Ready), % Samples positive (> LOD of 0.25 %) | 76 | | | 28 | | |
| Number of samples | 21 | | | 39 | | |