

Country of origin	USA			
Class and Grade White maize	WM1	WM2	COM	Average
RSA Grading				
Defective kernels above 6.35mm screen, %	1.8	2.4	1.9	1.9
Defective kernels below 6.35mm screen, %	2.6	4.2	4.2	3.2
Total defective kernels, %	4.4	6.6	6.1	5.2
Other colour maize kernels %	0.4	0.7	0.2	0.4
Foreign matter, % (all matter other than maize, glass, stone, coal, dung or metal)	0.0	0.4	1.1	0.3
Combined deviation, %	4.8	7.6	7.4	5.9
Live Insects	0	0	0	0
Poisonous seeds (Crotalaria sp., Datura sp., Ricinis communis)	0	0	0	0
Poisonous seeds (Argemone Mexicana L., Convolvulus sp., Ipomoea purpurea Roth., Lolium temulentum, Xanthium sp.)	0	0	0	0
Undesirable odour	No	No	No	0
No. of samples	6	2	2	10
USA Grading factors according to RSA grades				
Heat damaged kernels, %	0.1	0.5	0.0	0.2
Total damaged kernels, %	1.8	1.9	2.1	1.9
Broken corn and foreign material, %	0.8	2.1	2.8	1.5
Bushel weight, lbs	60.9	60.4	60.8	60.8
No. of samples	6	2	2	10
Physical Quality Characteristics				
100 Kernel mass, g (as is)	34.2	33.4	33.8	34.0
Stress cracks, %	16	21	28	19
Milling Index	86	86	85	86
Grit Yield	66	66	66	66
No. of samples	6	2	2	10
Kernel size				
% above 10 mm	2.6	3.4	2.5	2.7
% above 8 mm	63.9	67.2	60.0	63.8
% below 8 mm	33.6	29.5	37.6	33.5
No. of samples	6	2	2	10
Breakage susceptibility				
% below 6.35 mm	0.3	0.7	1.2	0.5
% below 4.75 mm	1.6	1.2	2.5	1.7
No. of samples	6	2	2	10
Nutritional Factors				
Protein, %(db)	8.9	8.9	8.8	8.9
Fat, %(db)	3.8	3.7	3.9	3.8
Starch, %(db)	74.0	74.3	73.3	73.9
Crude fibre, % (db)	2.4	2.2	2.2	2.3
No. of samples	6	2	2	8
Roff Milling				
Break 1, %	13.0	13.0	13.0	13.0
Break 2, %	6.7	6.6	6.7	6.7
Break 3, %	10.8	10.7	10.8	10.8
Grits, %	44.3	44.0	44.1	44.1
Bran and Germ, %	25.4	25.8	25.6	25.6
Extraction (Total meal), %	74.7	74.3	74.5	74.5
No. of samples	2	2	2	6
Whiteness Index				
Whiteness Index, 87:13, sifted	35.9	34.5	34.3	34.9
Whiteness Index, unsifted	37.2	35.9	36.3	36.5
No. of samples	2	2	2	6

*Bühler MCKA Milling				
*Fraction B1 - B3, %	23.1	22.8	24.2	23.4
*Fraction C1 - C3, %	41.0	41.2	40.6	40.9
*Grits (Fraction G3), %	14.4	14.7	14.9	14.7
*Germ/Bran (Degermer overs + Fractions G1 & G2)	21.5	21.3	20.3	21.0
*Extraction (Total meal), %	78.5	78.7	79.7	79.0
No. of samples	2	2	2	6
<i>*Investigative study to establish the correlation between the Roff and Bühler MCKA milling techniques are in progress</i>				
Whiteness Index				
Whiteness Index, 87:13, sifted	12.3	11.4	11.5	11.7
Whiteness Index, unsifted	13.1	13.2	15.8	14.0
No. of samples	2	2	2	6
Mycotoxins				
Aflatoxin B ₁ , µg/kg [max. value]	0	0	0	0 [0]
Aflatoxin B ₂ , µg/kg [max. value]	0	0	0	0 [0]
Aflatoxin G ₁ , µg/kg [max. value]	0	0	0	0 [0]
Aflatoxin G ₂ , µg/kg [max. value]	0	0	0	0 [0]
Fumonisin B ₁ , µg/kg [max. value]	324	630	1001	555 [1852]
Fumonisin B ₂ , µg/kg [max. value]	111	233	283	169 [538]
Fumonisin B ₃ , µg/kg [max. value]	61	61	157	59 [157]
Deoxynivalenol, µg/kg [max. value]	138	84	0	49 [2547]
15-ADON, µg/kg [max. value]	0	0	0	44 [275]
Ochratoxin A, µg/kg [max. value]	0	0	0	0 [0]
Zearalenone, µg/kg [max. value]	0	0	0	0 [0]
HT-2, µg/kg [max. value]	0	0	0	0 [0]
T-2, µg/kg [max. value]	0	0	0	0 [0]
No. of samples	6	2	2	10