

ADDENDUM TO SAGL TEST REPORT

MICRONUTRIENT COMPOSITION OF FORTIFIED FOODSTUFFS

		COMPOSITION PER 1kg FLOUR		COMPOSITION PER 1kg BREAD (± 667g flour)	
		WHITE BREAD FLOUR	BROWN BREAD FLOUR (88% White bread flour + 12% Bran)	WHITE BREAD	BROWN BREAD
Micronutrients		Min.	Min.	Min.	Min.
Vitamin A	(mcg RE)	1610	1415	800	700
Thiamine	(mg)	3.91	3.79	2.49	2.54
Riboflavin	(mg)	2.05	1.95	1.41	1.39
Niacinamide (Nicotinic Acid / Nicotinamide)	(mg)	38.42	54.76	27.91	41.59
Pyridoxine	(mg)	2.82	3.07	2.13	2.67
Folic acid	(mg)	1.36	1.24	0.74	0.74
Total Iron	(mg)	43.65	47.97	32.26	34.69
Total Zinc	(mg)	20.70	26.73	15.30	20.07
Moisture basis:		14%	14%	39%	39%

		COMPOSITION PER 1kg MEAL			
		SUPER MAIZE MEAL	SPECIAL MAIZE MEAL	SIFTED MAIZE MEAL	UN-SIFTED MAIZE MEAL
Micronutrients		Min.	Min.	Min.	Min.
Vitamin A	(mcg RE)	1877	1877	1877	1877
Thiamine	(mg)	3.09	3.86	4.76	5.57
Riboflavin	(mg)	1.79	1.88	1.97	2.06
Niacinamide (Nicotinic Acid / Nicotinamide)	(mg)	29.70	31.86	34.65	38.25
Pyridoxine	(mg)	3.89	4.25	4.79	5.42
Folic acid	(mg)	1.89	1.91	1.93	1.94
Total Iron	(mg)	37.35	40.14	44.28	50.40
Total Zinc	(mg)	18.90	22.55	26.60	30.20
Moisture basis:		12.5%	12.5%	12.5%	12.5%

FORTIFICATION MIX FOR WHEAT FLOUR (as is moisture base)

		Specifications for 200g/ton	Specifications for 300g/ton	Specifications for 400g/ton	Specifications for 500g/ton
		Wheat flour	Wheat flour	Wheat flour	Wheat flour
Vitamin A #	(RE/g)	8929	5953	2976	1190
Thiamine Mononitrate	(g/kg)	12.46	8.31	4.16	1.66
Riboflavin	(g/kg)	8.89	5.93	2.96	1.19
Niacinamide (Nicotinic Acid / Nicotinamide)	(g/kg)	118.42	78.95	39.47	15.79
Pyridoxine HCl	(g/kg)	16.24	10.83	5.42	2.17
Folic acid	(g/kg)	7.89	5.26	2.63	1.05
Total Iron	(g/kg)	178.57	119.05	59.52	23.81
Total Zinc	(g/kg)	93.75	62.50	31.25	12.50

FORTIFICATION MIX FOR MAIZE MEAL (as is moisture base)

		Specifications for 200g/ton	Specifications for 300g/ton	Specifications for 400g/ton	Specifications for 500g/ton
		Maize meal	Maize meal	Maize meal	Maize meal
Vitamin A #	(RE/g)	10425	6950	3475	1390
Thiamine Mononitrate	(g/kg)	14.02	9.35	4.67	1.87
Riboflavin	(g/kg)	8.44	5.63	2.81	1.13
Niacinamide (Nicotinic Acid / Nicotinamide)	(g/kg)	125.00	83.33	41.67	16.67
Pyridoxine HCl	(g/kg)	19.29	12.86	6.43	2.57
Folic acid	(g/kg)	11.05	7.37	3.68	1.47
Total Iron	(g/kg)	178.67	119.11	59.56	23.82
Total Zinc	(g/kg)	93.75	62.50	31.25	12.50

FORTIFICATION MIX FOR UNSIFTED MAIZE MEAL - SPECIAL PERMISSION (as is moisture base)

		Specifications for 200g/ton	Specifications for 300g/ton	Specifications for 400g/ton	Specifications for 500g/ton
		Maize meal	Maize meal	Maize meal	Maize meal
Vitamin A #	(RE/g)	10425	6950	3475	1390
Thiamine Mononitrate	(g/kg)	14.02	9.35	4.67	1.87
Riboflavin	(g/kg)	8.44	5.63	2.81	1.13
Niacinamide (Nicotinic Acid / Nicotinamide)	(g/kg)	125.00	83.33	41.67	16.67
Pyridoxine HCl	(g/kg)	19.29	12.86	6.43	2.57
Folic acid	(g/kg)	11.05	7.37	3.68	1.47
Total Iron	(g/kg)	89.29	59.52	29.76	11.91
Total Zinc	(g/kg)	93.75	62.50	31.25	12.50

Vitamin A palmitate determined as Vitamin A retinol (by saponification) and calculated as RE/g.

REFERENCE: Regulations relating to the fortification of certain foodstuffs, 14 November 2008. Government Gazette No. 31584