No. R. 115

24 January 1986

REGULATIONS GOVERNING ACIDS, BASES AND SALTS AND THE AMOUNTS THEREOF THAT FOODSTUFFS MAY CONTAIN

The Minister of National Health and Population Development in terms of section 15 (1) of the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act 54 of 1972), has made the regulations contained in the Schedule hereto.

SCHEDULE

Definitions

1. In these regulations "the Act" shall mean the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act 54 of 1972), and any expression to which a meaning has been assigned in the Act shall bear such meaning, and, unless inconsistent with the context—

"acid" shall mean any substance which is capable, and generally used for the purpose, of increasing the acidity of a foodstuff;

"annex" shall mean the Annex to these regulations;

"base" shall mean any substance which is capable, and generally used for the purpose of increasing the alkalinity of a foodstuff; and

"salt (buffer)" shall mean any substance which is capable, and generally used for the purpose, of altering and controlling the acidity or alkalinity of a foodstuff.

2. Subject-

- (a) to the provisions of regulation 3 and 4; and
- (b) to the provisions of the regulations made under the Act relating
 - the additives and amounts as well as the tolerances for certain substances in wine, other fermented beverages and spirits, published by Government Notice R. 2870 of 31 December 1981;
 - (ii) foodstuffs for infants, young children and children, published by Government Notice R. 1130 of 8 June 1984;
 - (iii) preservatives and antioxidants, published by Government Notice R. 965 of 3 June 1977;
 - (iv) wheaten and rye products, published by Government Notice R. 2417 of 30 October 1987;

[Subpar. (iv) inserted by G.N.R. 1885 dd. 4.9.1987.]

(v) jam, conserve, marmalade and jelly, published by Government Notice R. 2627 of 12 December 1986,

[Subpar. (v) inserted by G.N.R. 1885 dd. 4.9.1987.]

no foodstuff shall contain any added acid, base of salt.

- 3. A foodstuff listed in Column I of the Annex may—
 - (a) contain any of the acids, bases of salts specified opposite thereto in Column II of the Annex in a proportion not exceeding the number of milligrams per kilogram specified opposite thereto in column III of the Annex;
 - (b) contain a mixture of the acids, bases and salts referred to in paragraph (a), if compatible, on condition that the sum of the fractions obtained when the amount of each acid, base or salt used is divided by the maximum permissible amount of such acid, base or salt when used alone does not exceed one.
- 4. Subject to the provisions of regulations 2 and 3, foodstuffs prepared in part from foodstuffs not listed in column I of the Annex and in part from foodstuffs listed in the said column shall not contain a larger quantity of acid, base or salt than is permissible in the latter foodstuffs in terms of these regulations.
- 5. Where criteria of purity are laid down for an acid, base or salt in the latest version of "Food Chemicals Codex", such criteria shall apply.
- 6. These regulations shall come into effect three months after the date of publication thereof.

ANNEX
[Annex amended by G.N.R. 1885 dd. 4.9.1987.]

I	II	III
Foodstuff	Acid, base or salt	 Maximum level mg/kg
1. BAKING POWDER		
	DL-tartaric acid	*GMP
	Na- aluminium phosphate, acidic	

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Foodstuff	Acid, base or salt	Maximum level mg/kg
2. CEREAL PRODUCTS		***************************************
Canned pasta products [Inserted by G.N. R. 2128 dd.	Glucono-delta-lactone	*GMP
31.7.1992.] Instant breakfast cereals,	Ca, K and Na othophosphate	*GMP
pre-cooked Selfraising pre-mixed powdered cake and bread flours	Acetic acid and its Ca, K and Na salts Ca, K and Na and NH ₄ orthophosphate DL-tartaric acid	3 000 *GMP
3. COCOA Cocoa beans, nibs, mass, press cake and dust	Citric acid DL-tartaric acid	5 000, single or in combination *GMP
	L(+)-Tartaric acid	5 000, single or in combination 2 500, expressed as P ₂ O ₅ on the cocoa fraction 5 000, singly or in combination with other alkalising agents, expressed as anhydrous K ₂ CO ₃ on a fat-free basis
Cocoa powders	DL-tartaric acid	5 000, singly or in combination with other alkalising agents, expressed as anhydrous K ₂ CO ₃ on a fat-free cocoa fraction *GMP
	K, Mg, Na and NH ₄ hydroxide	5 000, singly or in combination with other alkalising agents, expressed as anhydrous K ₂ CO ₃ on a fat-free cocoa fraction
	Citric acid	5 000, singly or in combination on the cocoa fraction 2 500, expressed as P ₂ O ₅ on the cocoa fraction
4. CONDIMENTS Chutney and ketchup	Acetic acid	*GMP

I	П	III
Foodstuff	Acid, base or salt	Maximum level mg/kg
French dressing, mayo-	DL-tartaric acid	*GMP Sufficient to maintain the pH at a level of 2,8 to 3,5 3 000, expressed as the acid
nnaise, salad cream, mint jelly, prepared mustards and sandwich spread Low-oil dressing and	Citric acid	*GMP
Low-oil dressing and no-oil dressing Sauces (including dry sauce mixes)	Acetic acid Citric acid Lactic acid DL-Malic acid Acetic acid Ca, K and Na polyphosphate	*GMP
sauce makes)	Citric acid and its Na salts	*GMP
5. CHOCOLATE, SU- GAR AND FLOUR CONFECTIONARY Chocolate (except where otherwise specified)	Citric acid	5 000, singly or in combination *GMP 2 500, expressed as P ₂ O ₅ on the cocoa fraction
Chocolate, composite and flavoured, exclu- ding filling	Ca, K, Mg, Na and NH ₄ carbonate	5 000, singly or in combination with other alkalising agents, expressed as anhydrous K_2CO_3 on a fat-free basis
Sugar confectionary, excluding chocolate but including flour confec- tionary, and excluding filling	Acetic acid and its Ca, K and Na-salts Carbonic acid and its Ca, K, Mg and NH ₄ salts Carbonic acid diamide (Urea) DL-tartaric acid [Inserted by G.N.R. 2128 dd. 31.7.1992.] Furmaric acid and its Ca, K and Na salts Gluconic acid and its Ca, K and Na salts	*GMP

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	Foodstuff	Acid, base or salt	Maximum level mg/kg
		Lactic acid and its Ca, K and Na salts DL-malic acid and its Ca, K and Na salts Na hydrogen carbonate Glucono delta-lactone Na aluminium phosphate, acidic Citric acid and its Ca, K, Na and NH4 salts L(+)-Tartaric acid and its Ca, K and Na salts Ca, K and Na orthophosphate Phosphoric acid	*GMP 10 000, expressed as P ₂ O ₅ carried over from baking powder 2 500, expressed as P ₂ O ₅ carried over from use of chocolate
6. D	ESSERTS		
Ir w aı	custard instant puddings, instant rhips, instant trifles, and powdered dessert nixes	Acetic acid and its Ca, K and Na salts	*GMP *GMP
	ellies and desserts, old, set or refrigerated	Adipic acid	*GMP
i	ellies, conventional, in- luding table jellies	Adipic acid	*GMР

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	I	II	III
	Foodstuff	Acid, base or salt	Maximum level mg/kg
		Fumaric acid and its Ca, K and Na salts K hydrogen phosphate, dibasic DL-malic acid and its Ca, K and Na salts Na pyrophosphate L(+)-Tartaric acid and its Ca, K and Na salts	*GMP
THE REST OF THE PARTY OF THE PA	Pectin dessert mixes	Adipic acid	*GMP
7.	FROZEN DESSERTS Ice cream, frozen custard, ice milk and sherbet	Acetic acid	*GMP 2 000, singly or in combination, expressed as P ₂ O ₅ 1 000
8.	FRUIT Apple sauce, cherries, grapes, litches and peaches, canned, peaches and strawberries, quick frozen	Citric acid	*GMP
	Apricots, gooseberries, guavas, kiwifruit, quinces, youngberries, canned	Citric acid	*GMP
	Granadilla pulp, man- goes, melon and paw- paw, canned	Citric acid	*GMP
	Grapefruit, canned Mandarins, canned Oranges, canned Pears, canned	Citric acid	*GMP
	•	DL-malic acid	*GMP
	Pineapple, canned	Citric acid	*GMP

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	Foodstuff	Acid, base or salt	Maximum level mg/kg
NAT	Strawberries, canned	Citric acid	*GMP
	Tropical fuit salad, can- ned	Citric acid	*GMP
9.	FRUIT JUICES / FRUIT NECTARS		
	Apricot, peach and pear nectars	Citric acid	*GMP
	Grape juice and grape juice concentrated	Ca-hydroxide	*GMP
	Labrusca type grape juice, sweetened, con- centrated	Citric acid	*GMP
	Non-pulpy black currant, apple, guava, mango, orange and lemon, nectar/juice	Citric acid	*GMP
	Pineapple juice	Citric acid	*GMP, but not allowed when the juice contains added sugars
	Pulpy nectars of small fruits	Citric acid	*GMP
	Fruit juices (except where otherwise speci- fied), excluding concen- trated fruit juices	Citric acid	*GMP
10.	JAMS, WHOLE- FRUIT PRESERVES, AND JELLIES	Citric acid and its Ca, K and Na salts	
	Jams, wholefruit pre- serves, marmalade (ci- trus) and jellies (except where otherwise spe- cified)	DL-malic acid and its Ca, K and Na salts DL-tartaric acid	*GMP 3 000, singly or in
11	MARGARINE	Furnaric acid and its Ca, K and Na salts L(+)-Tartaric acid and its Ca, K and Na salts Citric acid and its K and Na salts	combination, expressed as the acid *GMP

I	II	III
Foodstuff	Acid, base or salt	Maximum level mg/kg
	DL-tartaric acid	*GMP
12. MARINE FOODS (a) Canned fish and shellfish		
Crab meat and lobster flesh	Citric acid Diphosphate and disodium dihydrogen (di-	*GMP
	sodium pyrophosphate)	5 000, singly or in combination, expressed as P_2O_5
Mackerel, jack mackerel (Maasbanker) sardines and sardine-type pro- ducts	Acetic acid	*GMP
Prawns and shrimps	Citric acidPhosphoric acid	*GMP 850 of the final product
Tuna and bonito in water or oil	Diphosphate, tetrasodium (Na pyrophosphate)	5 000, expressed as P ₂ O ₅
Fish (all species except where otherwise spe- cified) (b) Fish pastes (c) Quick frozen fillets	Polyphosphate, sodium or potassium (Na K hexametaphosphate)	5 000, expressed as P ₂ O ₅ *GMP
Cod, flatfish, haddock and ocean perch Hake	Diphosphate, tetrasodium or tetrapotassium (Na K pyrophosphate)	5 000 of the final product, expressed as P_2O_5 singly or in combination
	Diphosphate, tetrasodium or tetrapotassium (Na/K pyrophosphate) Monophosphate, monosodium or monopotassium (Na/K orthophosphate) Polyphosphate, sodium (Na hexametaphosphate) Triphosphate, pentasodium or pentapotassium or calcium (Na/K/Ca tripolyphosphate)	5 000 of the final product, expressed as P ₂ O ₅ singly or in combination
(d) Quick frozen shell- fish	Polyphosphate, sodium (Na hexametaphosphate)	5 000 of the final product,
Crabs and lobsters	Triphosphate, pentasodium or pentapotassium or calcium (Na/K/Ca tripolyphosphate)	expressed as P ₂ O ₅

I	II	III
Foodstuff	Acid, base or salt	· Maximum level mg/kg
Prawns and shrimps	Citric acid Diphosphate, pentasodium or pentapotassium or calcium (Na/K/Ca tripolyphosphate) Polyphosphate, sodium, (Na hexametaphosphate)	*GMP 5 000 of the final product, expressed as P ₂ O ₅ singly or in combination
(e) Fresh fish (f) Pickled and curried fish	Disodium dihydrogen pyrophosphate	*GMP *GMP
13. MEAT Processed products containing meat and/or edible offal [Substituted by G.N. R. 1300 dd. 23.7.1993.]	K and Na phosphate, monobasic and dibasic K and Na polyphosphate	7 000, (added on natural phosphate in combination) expressed as P ₂ O ₅ 10 000 *GMP
14. MILK AND MILK PRODUCTS		
Butter and whey butter	Ca and Na hydroxide	2 000, singly or in com- bination expressed as anhydrous substances
Buttermilk	Carbonic acid and its Ca, K and Na salts Citric acid and its Ca, K and Na salts Hydrochloric acid and its Ca, K and Na salts Na hydrogen carbonate Na hydroxide Phosphoric acid and its Ca, K and Na salts Polyphosphoric acid and its Ca, K and Na salts	2 000, singly or in com- bination expressed as anhydrous substances
Cheese, cottage	Citric acid	*GMP
Cheese preparations and cheece, processed	Acetic acid	40 000, singly or in combination with other acidifiers, emulsifiers and other food additives specified by regulation, expressed as anhydrous substances, but mono-, di- and polyphosphates shall not exceed 30 000
	Phosphoric acid	9 000 of the total phosphates, expressed as P_2O_5
Harzer Kase	Vinegar Ca carbonate	*GMP 30 000 of the drained acid curd together with Ca carbonate