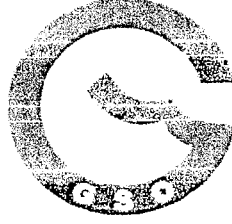


هيئة التقييس لدول مجلس التعاون لدول الخليج العربية
STANDARDIZATION ORGANIZATION FOR G.C.C (GSO)



UAE.S GSO 382/ 1994

الحدود القصوى المسموح بها من بقايا مبيدات الآفات
في المنتجات الزراعية والغذائية - الجزء الأول
MAXIMUM LIMITS OF PESTICIDE RESIDUES
IN AGRICULTURAL AND FOOD
PRODUCTS - PART 1

ICS:67.040

**MAXIMUM LIMITS OF PESTICIDE RESIDUES
IN AGRICULTURAL AND FOOD
PRODUCTS - PART 1**

Date of GSO Board of Directors' Approval : 13/6/1415 H – 16/11/1994
Issuing status : Technical Regulation

Emirates Authority for Standards & Metrology (ESMA)

STANDARDS OF UNITED ARAB EMIRATES

Date of ESMA Board of Directors' Approval : 18/7/1414 H – 1/1/1994
Issuing status : Technical Regulation

Number of pages: 10

Copy right To ESMA

**MAXIMUM LIMITS OF PESTICIDE RESIDUES
IN AGRICULTURAL AND FOOD
PRODUCTS - PART 1**

1. SCOPE AND FIELD OF APPLICATION

This standard is concerned with maximum limits for the following pesticide residues in or on foods and agricultural commodities or animal feeds:

Malathion, Bromophos, Diquat Fenchlorfos, Pyrethrins, Quintozene, Parathion, Orthophenyl Phenol, Methidathion and Fentin.

2. COMPLEMENTARY REFERENCES

- 2.1 GSO 133/1990 "Regulations for Pesticides".
- 2.2 GSO Standard on "Sampling for Determination of Pesticide Residues in Food and Agricultural Products".
- 2.3 GSO Standard on "Methods of Determination of Pesticide Residues in Food and Agricultural Products".

3. DEFINITIONS

- 3.1 **Pesticide:** Any substance intended for preventing, destroying, attracting, repelling or controlling any pest including unwanted species of plants or animals during the production, storage, transport, distribution, and processing of food, agricultural commodities, or animal feeds, or which may be administered to animals for the control of ectoparasites.

The term includes substances intended for use as a plant-growth regulator, defoliant, desiccant, fruit thinning agent, or sprouting inhibitor and substances applied to crops either before or after harvest to protect the commodity from deterioration during storage and transport. The term normally excludes fertilizers, plant and animal nutrients, food additives, and animal drugs.

- 3.2 **Agricultural commodities:** Such as raw cereals, sugar beet, and cottonseed which might not, in the general sense, be considered food.
- 3.3 **Pesticide residue:** Any specified substance in food, agricultural commodity or feed resulting from the use of a pesticide (3.1). The term includes any derivatives of a pesticide such as conversion products, metabolises, reaction products and impurities considered to be of toxicological significance.
- 3.4 **Maximum residue limit:** The maximum concentration of pesticide residue (3.3), permitted in or on a food, agricultural commodity or animal feed (ppm).
- 3.5 **Animal feed:** Harvested fodder crops, by-products of agricultural crops and other products of plant or animal origin which are used for animal feeding and which are not intended for human consumption.

4. REQUIREMENTS

Pesticide residue limits in or on food, agricultural commodities or animal feeds shall not exceed the limits given against each in the following Tables (1-10).

4.1 Malathion

Residue: Sum of malathion and its oxygen analogue.

Table (1)
Maximum Residue Limits for Malathion

Commodity	Maximum Residue Limit for Malathion (PPM)	Notes
- Apples	2	
- Beans, Dried	8	
- Beans, Green	2	
- Blackberries	8	
- Blueberries	0.5	
- Bran of rye	20	Unprocessed
- Bran of wheat	20	Unprocessed
- Blue berries	0.5	
- Broccoli	5	
- Cabbage	8	
- Cauliflower	0.5	
- Celery	1	
- Cereal grains	8	
- Cherries	6	
- Citrus fruits	4	
- Eggplant (aubergines)	0.5	
- Endive	8	
- Fruit, Dried	8	
- Grapes	8	
- Kale	3	
- Kohlrabi	0.5	
- Lentils	8	
- Lettuce	8	
- Nuts (whole in shell)	8	
- Peaches	6	

Table (1) (continued)

Commodity	Maximum Residue Limit for Matathion (PPM)	Notes
- Pears	0.5	
- Peas (in the Pod)	0.5	
- Peppers	0.5	
- Plums	6	
- Raspberries	8	
- Root Vegetables (except Turnips)	0.5	
- Spinach	8	
- Strawberries	1	
- Swiss Chard	0.5	
- Tomatoes	3	
- Turnips	3	
- Whole Meal and Flour from Rye and Wheat	2	

4.2 Bromophos

Residue: Bromophos

Table (2)

Maximum Residue limits for Bromophos

Commodity	Maximum Residue Limit for Matathion (PPM)	Notes
- Apples	2	
- Barley straw	0.5	
- Blackberries	1.0	
- Broadbeans (without pods)	0.1	
- Broccoli	0.1	
- Brussels sprouts	0.5	
- Cabbage	0.1	
- Cabbage, savoy	1.0	
- Carrots	2	
- Cauliflower	0.1	
- Celery	1	
- Cereal grains	10	
- Cherries	1	
- Cucumber	0.1	

Table (2) (continued)

Commodity	Maximum Residue Limit for Matathion (PPM)	Notes
- Currants, red, black, white	1.0	
- French bean	1	
- Gooseberries	0.5	
- Kale	0.5	
- Kohlrabi	0.1	
- Leeks	2	
- Lettuce	1	
- Lettuce lamb's	2	
- Milk	0.05*	
- Oat straw	0.5	
- Olive oil	5	
- Olive	5	
- Onions	0.5	
- Peaches	1.0	
- Pears	1.0	
- Peas	0.1	
- Plums including prunes	2	
- Radishes	2	
- Rape seed	0.2	
- Rape seed oil	0.2	
- Raspberries	1	
- Sheep, carcass meat	0.5	in the carcass fat
- Spinach	1	
- Strawberries	0.5	
- Sugar beet (roots)	0.5	
- Sugar beet leaves	0.5	
- Tomatoes	0.5	
- Wheat bran	20	Unprocessed
- White bread	0.5	
- White flour	2	
- Whole meal bread	2	

* Level at or about the limit of determination.

4.3 Diquat

Residue: Diquat cation

Table (3)

Maximum Residue Limits for Diquat

Commodity	Maximum Residue Limit for Matathion (PPM)	Notes
- Barley	5	
- Beans	0.5	
- Cottonseed	1	
- Cottonseed, Edible oil	0.1	
- Eggs	0.05	
- Maize	0.1	
- Meat	0.05*	
- Meat products	0.05*	
- Milk (whole)	0.01	
- Onion	0.1	
- Peas	0.1	
- Potatoes	0.2	
- Rapeseed	2	
- Rapeseed, Edible oil	0.1	
- Rice in the husk	5	
- Rice (hulled and/or polished)	0.2	
- Sesame seed oil, Edible	0.1	
- Sorghum	2	
- Sugar beets	0.1	
- Sunflower seed	0.5	
- Sunflower seed, Edible oil	0.1	
- Vegetables	0.05*	
- Wheat	2	
- Wheat flour (white)	0.2	
- Whole meal wheat flour	2	
- Wheat bran	5	

* Levels at or about the limit of determination.

4.4 Fenchlorfos

Residue : Sum of fenchlorfos and its oxygen analogue

Table (4)
Maximum Residue Limits for Fenebtorfos

Commodity	Maximum Residue Limit for Matathion (PPM)	Notes
– Cattle Carcase Meat	10	in the
– Eggs	0.05	Shell-free- basis
– Goat, Carcase Meat	10	Carcase fat
– Milk	0.08	in the Fat
– Poultry	0.01*	
– Sheep, Carcase meat	10	in the Carcase fat

* Level at or about the limit of determination.

4.5 Pyrethrins

Residue: Sum of pyrethrins I and II and other structurally related insecticidal ingredients of pyrethrum.

Table (5)
Maximum Residue Limits for Pyrethrins

Commodity	Maximum Residue Limit for Matathion (PPM)	Notes
– Cereal grains	3	
– Fish, dried	3	
– Fruit	1	
– Fruit, dried	1	
– Oilseeds	1	
– Peanut (kernels)	1	
– Tree nuts	1	
– Vegetables	1	
– Vegetables, dried	1	

4.6 Quintozene

Residue: Sum of quintozene, pentachloroaniline and methyl pentachlorophynyl sulphide.

Table (6)
Maximum Residue Limits for Quintozene

Commodity	Maximum Residue Limit for Matathion (PPM)	Notes
- Bananas	1	Whole Product
- Beans (except navy beans)	0.01	
- Broccoli	0.02	
- Cabbage	0.02	
- Cottonseed	0.03	
- Lettuce	3	
- Navy beans	0.2	
- Peanuts	2	
- Peanuts (whole product)	5	
- Peppers (bell-type)	0.01	
- Potatoes	0.2	
- Tomatoes	0.1	

4.7 Parathion

Residue: Sum of parathion and its oxygen analogue.

Table (7)
Maximum Residue Limits for Parathion

Commodity	Maximum Residue Limit for Matathion (PPM)	Notes
- Apricots	1	Whole Product
- Citrus fruit	1	
- Other fruits	0.5	
- Peaches	1	
- Vegetables	0.7	Except carrots

4.8 Orthophenyl phenol [2-phenylphenol] and its sodium salt

Residue: 2 phenylphenol and sodium 2-phenyl -phenate, expressed as 2-phenylphenol.

Table (8)
Maximum Residue Limits for Orthophenylphenol

Commodity	Maximum Residue Limit for Matathion (PPM)	Notes
- Apples	25	Edible portion
- Cantaloupes	10	
- Carrots	20	
- Cherries	3	
- Citrus fruit	10	
- Cucumber	10	
- Nectarines	3	
- Peaches	20	
- Pears	25	
- Peppers	10	
- Pineapples	10	
- Plums	15	
- Sweet potatoes	15	
- Tomatoes	10	

4.10 Fentin

Residue: Fentin excluding inorganic tin and di- and mono-phenyl tin.

Table (10)
Maximum Residue Limits for Feath

Commodity	Maximum Residue Limit for Matathion (PPM)	Notes
– Carrots	0.2	
– Celeriac	0.1	
– Celery	1	
– Cocoa beans	0.1*	
– Coffee (raw beans)	0.1*	
– Peanuts	0.05*	Shell-free basis
–	0.05*	Shell-free basis
– Potatoes	0.1	
– Rice in the husk	0.1*	
– Sugar beets	0.2	

* Level at or about limit of determination.

5. SAMPLING

Sampling shall be carried out according to the GSO standard mentioned in 2.2.

6. METHODS OF TESTING

6.1 Pesticide residues shall be determined according to the GSO standard to be approved by GSMO on "Methods of Test for Pesticides Residues in Agricultural and Food Commodities".

6.2 Tests for determination of the relevant residues of the following pesticides shall be carried out on the samples of agricultural and food commodities according to item (4. 1) to determine their compliance with this standard.

Malathion	Quintozene
Bromophos	Parathion
Diquat	Orthophenylphenol
Fenchlorfos	Methidatlon
Pyrethrins	Fentin

4.9 Methidathion

Residue: Methidathion

Table (9)

Maximum Residue Limits for Methidathion

Commodity	Maximum Residue Limit for Matathion (PPM)	Notes
- Apples	0.5	
- Apricots	0.2	
- Beans	0.1	
- Cabbage	0.2	
- Cattle, fat	0.02*	
- Cattle, edible offal	0.02*	
- Cattle, carcass meat	0.02*	
- Cauliflower	0.2	
- Cherries	0.2	
- Citrus fruit (except mandarins)	2.0	
- Cottonseed	0.2	
- Cotton seed oil (crude)	1	
- Eggs	0.02*	Shell-free basis
- Grapes	0.2	
- Hops (dried)	3	
- Leafy vegetables	0.2	
- Maize (Grain)	0.1	
- Mandarins	5	
- Milk	0.0008*	
- Nectarines	0.2	
- Peaches	0.2	
- Pears	0.5	
- Peas	0.1	
- Plums	0.2	
- Potatoes	0.02*	
- Poultry	0.02*	
- Poultry, Edible offal	0.02*	
- Poultry, fat	0.02*	
- Sheep, Edible offal	0.02*	
- Sheep, fat	0.02*	
- Sheep, Carcass meat	0.02*	
- Sorghum (Grain)	0.1	Dry, manufactured
- Tea	0.1	
- Tomatoes	0.1	

* Level at or about limit of determination.