



PESTICIDES - PERMITTED USES

In an attempt to provide our Members with the most current information possible in a simple format, the Pesticides Subcommittee has recently revised the Monograph.

The attached “ASTA Pesticide Monograph” provides information on pesticide usage for the United States. These are as listed in the October 2006 revision of Title 40 Code of Federal Regulations part 180, tolerances by crop for raw agricultural commodities.

The regulation of food and feed containing pesticide residues is governed by Sections 402, 408, and 409 of the Federal Food Drug and Cosmetic Act (FFDCA). The requirements of Section 402 of the FFDCA apply equally to both domestically produced and imported food/feed found to contain pesticide residues. Therefore, even though the use of a pesticide in a foreign country is not subject to the U.S. Environmental Protection Agency (EPA) registration requirements under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), a pesticide residue in imported food or feed must be in conformity with a tolerance, tolerance exemption, or food additive regulation established by EPA. If a pesticide residue is “unavoidable,” an action level may be established by the Food and Drug Administration (FDA).

The following is a brief description of the types of pesticide regulations. More complete definitions are available in the Code of Federal Regulations.

Tolerance for Pesticides

Tolerances for the maximum pesticides residue that may be legally present in or on a raw agricultural commodity are established by EPA under Section 408 of the FFDCA. This section also authorized EPA to exempt a pesticide residue in a raw agricultural commodity from the requirement for a tolerance. A tolerance or tolerance exemption is required when EPA grants registration under FIFRA for use of a pesticide in food and feed production in the United States.

Food Additive Tolerance for Pesticides

A food additive tolerance or tolerance exemption is required under Section 409 of the FFDCA on a processed food or feed for a pesticide residue in a raw agricultural commodity that concentrates during processing to a level that is greater than the tolerance for the raw agricultural commodity.

ASTA encourages those who supply the spice industry to use integrated pest management plans. Where, appropriate pesticides should only be used as part of such plans and only when necessary to protect the health and safety of the public or the product. Pesticides should only be used in accordance with applicable local regulations and the regulations of the country where the products are to be marketed.

At the same time, we are aware that the use of pesticides is constantly under scrutiny by the consuming



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public and the scientific community. Therefore, we encourage suppliers who use pesticides to do so with an understanding of the ever-changing climate of scientific and public opinion. We must also remind you that the rules and regulations referred to in this document are always subject to change. This document is by no means represents the total requirements of these or any other government agencies.

ASTA PESTICIDES MONOGRAPH

Agricultural Chemicals - U.S. Tolerance (ppm) by Crop

Citation from 40 CFR 180	Chemical	Usage Permitted?	Tolerance - ppm	Comments
§180.108	Acephate	Yes	4	Peppers (of which no more than 1 ppm is <i>O, S</i> - dimethyl phosphoramidothioate)
§180.225	Aluminum Phosphide	Yes Yes	0.01 0.1	(A) Pre-harvest fumigant for pest burrows sesame seed
§180.449	Avermectin	Yes	0.03	Herbs, Fresh , except chives (B)
§180.507	Azoxystrobin	Yes Yes	260 50 2	Herbs, Dried (B) Herbs, Fresh (B) Peppers
§180.442	Bifenthrin	Yes	0.05	Herbs, Fresh , (B)
§180.1121	Boric Acid and its salts	Yes	Exempt	(A)
§180.103	Captan	Yes	25	Peppers
§180.169	Carbaryl	Yes Yes	10 0.02	Peppers Fresh Dill (Florida regional tolerance)
§180.254	Carbofuran	Yes	1	Peppers (of which no more than 0.2 ppm is carbamate)
§180.342	Chlorpyrifos	Yes	1	Peppers
§180.532	Cyprodinil	Yes Yes	15 3	Herbs, Dried (B) Herbs, Fresh (B)
§180.414	Cyromazine	Yes	1	Peppers
§180.235	2,2-DDVP	Yes Yes	0.5 2.0	(A) regardless of fat content (A) greater than 6% fat
§180.204	Dimethoate	Yes	2	Peppers
§180.182	Endosulfan	Yes Yes	2 0.2	Peppers Mustard Seed (negligible residue tolerance)
§180.151	Ethylene Oxide	Yes	50	(B) Whole spices
§180.516	Fludioxonil	Yes Yes	65 10	Herbs, Dried (B) Herbs, Fresh (B)
§180.364	Glyphosate	Yes	0.2	Herbs, Fresh , (B)
§180.133	Lindane	Yes	1	Peppers
§180.111	Malathion	Yes	8	Peppers
§180.123	Methyl Bromide	Yes Yes Yes	100 100 30	Cumin post-harvest Ginger root pre-& post harvest Peppers post-harvest
§180.215	Naled	Yes Yes	0.5 0.5	Peppers (A), from use of the pesticide for area pest (mosquito and fly) control.
§180.328	Naproamide	Yes	0.1	Basil, marjoram, mint, peppers, rosemary, and savory (summer & winter)
§180.456	Oxadixyl	Yes	0.1	Peppers, ginger & turmeric
§180.222	Prometryn	Yes Yes	0.3 0.1	Dill - regional tolerance Parsley - regional tolerance
§180.2	Sulfur	Yes	Safe	(A), follow label directions



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A. Raw Agricultural Commodities

B. Spices and herb are defined in two Crop Groups as follows:
Crop Group 19A - angelica; balm; basil; borage; burnet; camomile; catnip; chervil (dried); chive; chive, Chinese, clary; coriander (leaf); costmary; culantro (leaf); curry (leaf); dillweed; horehound; hyssop; lavender; lemongrass; lovage (leaf); marigold; marjoram (*Origanum* spp.); nasturtium; parsley (dried); pennyroyal; rosemary; rue; sage; savory, summer and winter; sweet bay; tansy; tarragon; thyme; wintergreen; woodruff; and wormwood. Crop Group 19B - allspice; anise (seed); anise star; annatto (seed); caper (buds); caraway; caraway, black; cardamom; cassia (buds); celery (seed); cinnamon; clove (buds); coriander (seed); culantro (seed); cumin; dill (seed); fennel, common; fennel, Florence (seed); fenugreek; grains of paradise; juniper (berry); lovage (seed); mace; mustard (seed); nutmeg; pepper, black; pepper, white; poppy (seed); saffron; and vanilla.

C. Spice and herbs defined as: allspice, anise, basil, bay, black pepper, caraway, cassia, celery seed, chili, cinnamon, cloves, coriander, cumin, dill, ginger, mace, marjoram, nutmeg, oregano, paprika, poppy, red pepper, rosemary, sage, savory, thyme, turmeric, white pepper.

D. Dried foods