US EPA ARCHIVE DOCUMENT

315

2,4-D/TOX

(15)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE: February 9, 1977

SUBJECT: Velsicol Vegatrol A-4D Herbicide; EPA Reg. No. 876-222 (2-4D)

FROM: Toxicology Branch

TO: Mr. Richard F. Mountfort; Product Manager # 23

Released

Presumably, the applicant wishes to amend the labeling for subject pesticide to provide for added claims for:

1. water hyacinth control by government agencies

2. water milfoil control by TVA.

Toxicology Branch has no questions concerning the safety of such uses as provided in §§ 180.142, CFR 40, so long as the established tolerance of 1 part per million in or on the raw agricultural commodity fish is not exceeded. From the data referenced in the application, this could not be determined.

Roland A. Gessert

Roland A. Gessert, D.V.M.
Toxicology Branch

EPA Form 1320-6 (Rev. 3-76)

3.5 parts per million combined residues of DDT and toxaphene in or on soybeans (dry form), of which residues DDT shall not exceed 1.5 parts per million and toxaphene shall not exceed 2 parts per million.

3 parts per million in or on bananas (of which residue not more than 0.3 part per million shall be in the pulp after the peel is removed and discarded), pineapples.

2 parts per million in or on soybeans (dry form).

0.1 part per million in or on sunflower seeds.

[36 FR 22540, Nov. 25, 1971, as amended at 41 FR 22938, June 8, 1976]

§ 180.139 1,1-Dichloro-2,2-bis(*p*-ethylphenyl) ethane; tolerances for residues.

Tolerances are established for residues of the insecticide 1,1-dichloro-2,2-bis (*p*-ethylphenyl) ethane in or on raw agricultural commodities as follows:

15 parts per million in or on apples, broccoli, brussels sprouts, cabbage, cauliflower, cherries, kohlrabi, lettuce, pears, spinach.

Zero in meat and milk.

§ 180.140 BHC; tolerances for residues.

Tolerances are established for residues of the insecticide BHC (benzene hexachloride) in or on raw agricultural commodities as follows:

1 part per million in or on apples, apricots, asparagus, avocados, broccoli, brussels sprouts, cabbage, cauliflower, celery, cherries, collards, cucumbers, eggplants, grapes, kale, kohlrabi, lettuce, melons, mustard greens, nectarines, okra, onions (dry bulb only), peaches, pears, peppers, plums (fresh prunes), pumpkins, spinach, squash (summer and winter), strawberries, Swiss chard, and tomatoes.

0.01 part per million (negligible residue) in or on pecans.

[39 FR 13776, Apr. 17, 1974]

§ 180.141 Biphenyl; tolerances for residues.

A tolerance of 110 parts per million for residues of the fungicide biphenyl (also known as diphenyl) from postharvest use is established in or on each of the following raw agricultural commodities: Citrus citron, grapefruit, kumquats, lemons, limes, oranges, tangerines, other citrus fruits and hybrids thereof.

§ 180.142 2,4-D; tolerances for residues.

(a) Tolerances are established for residues of the herbicide and plant regulator 2,4-D (2,4-dichlorophenoxyacetic acid) in or on raw agricultural commodities as follows:

5 parts per million in or on apples, citrus fruits, pears, and quinces. The tolerance on citrus fruits also includes residues of 2,4-D (2,4-dichlorophenoxyacetic acid) from the preharvest application of 2,4-D isopropyl ester and 2,4-D butoxyethyl ester to citrus fruits and from the postharvest application of the 2,4-D isopropyl ester to lemons.

0.2 part per million in or on potatoes.

(b) Tolerances are established for residues of 2,4-D (2,4-dichlorophenoxyacetic acid) at:

1000 parts per million in or on grasses (pasture and rangeland);

300 parts per million in or on grass hay;

20 parts per million in or on the forage of barley, oats, rye, and wheat, corn fodder and forage, rice straw, sorghum fodder and forage, and sugar cane forage;

2 parts per million in or on sugarcane;

0.5 part per million in or on the grain of barley, oats, rye, and wheat, corn grain and fresh corn including sweet corn (kernels plus cob with husks removed), cranberries, grapes, and sorghum;

0.1 part per million in or on blueberries and rice.

from application of 2,4-D in acid form, or in the form of one or more of the following salts or esters:

(1) The inorganic salts: Ammonium, lithium, potassium and sodium.

(2) The amine salts: Alkanolamines of the ethanol and isopropanol series), alkyl (C–12), alkyl (C–13), alkyl (C–14), alkylamines derived from tall oil, amylamine, diethanolamine, diethylamine, diisopropanolamine, dimethylamine, N,N-dimethyl-linoleylamine, N,N-dimethyl-oleyamine, ethanolamine, ethylamine, heptylamine, isopropanolamine, isopropylamine, linoleylamine, methylamine, morpholine, octylamine, oleylamine, N-oleyl-1,3-propylenediamine, propylamine, triethanolamine, triethylamine, triisopropanolamine, and trimethylamine.

(3) The esters: Amyl (pentyl), butoxyethoxypropyl, butoxypropyl, butyl, dipropylene glycol isobutyl ether, ethoxyethoxyethyl, ethoxyethoxypropyl, ethyl, ethoxypropyl, butoxyethyl, butoxypoly-

ethylene glycol butyl ether, isobutyl, isooctyl (including, but not limited to, 2-ethylhexyl, 2-ethyl-4-methylpentyl, and 2-octyl), isopropyl, methyl, polyethylene gylcol 200, polypropoxybutyl, polypropylene glycol, propylene glycol, propylene glycol butyl ether, propylene glycol isobutyl ether, tetrahydrofurfuryl, and tripropylene glycol isobutyl ether.

(c) Tolerances are established for negligible residues of 2,4-D (2,4-dichlorophenoxyacetic acid) from application of its dimethylamine salt to irrigation ditch banks in the Western United States in programs of the Bureau of Reclamation; cooperating water user organizations; the Bureau of Sport Fisheries, U.S. Department of the Interior; Agricultural Research Service, U.S. Department of Agriculture and the Corps of Engineers, U.S. Department of Defense, at 0.1 part per million in or on the crop groupings: Citrus; cucurbits; forage grasses; forage legumes; fruiting vegetables; grain crops; leafy vegetables; nuts; pome fruits; root crop vegetables; seed and pod vegetables; small fruits; stone fruits; and the individual raw agricultural commodities avocados, cottonseed, hops, and strawberries. Where tolerances are established at higher levels from other uses of 2,4-D on the subject crops, the higher tolerance applies also to residues from the irrigation ditch bank use cited above.

(d) A tolerance of 5 parts per million is established for residues of 2,4-D sodium salt and alkanolamine salts (of the ethanol and isopropanol series), calculated as 2,4-D(2,4-dichlorophenoxyacetic acid), in or on asparagus.

(e) A tolerance of 0.05 part per million is established for residues of 2,4-D (2,4-dichlorophenoxyacetic acid) from application of its alkanolamine salts (of the ethanol and isopropanol series) in or on strawberries.

(f) Tolerances are established for residues of 2,4-D(2,4-dichlorophenoxyacetic acid) from application of its dimethylamine salt for water hyacinth control in ponds, lakes, reservoirs, marshes, bayous, drainage ditches, canals, rivers and streams that are quiescent or slow moving in programs conducted by the Corps of Engineers or other Federal, State, or local public agencies at 1.0 part per million (ppm) in the crops and crop groupings listed in paragraph (c) of this section and at 1.0 ppm in or on the raw agricultural commodities fish and shellfish. Where tolerances are established at higher levels from other uses of the dimethylamine salt of 2,4-D on crops included within these commodity groups, the higher tolerances also apply to residues from the aquatic uses cited above.

(g) [Reserved]

(h) Tolerances are established for residues of 2,4-dichlorophenoxyacetic acid (2,4-D) and/or its metabolite 2,4-dichlorophenol (2,4-DCP) in food products of animal origin at:

2 parts per million in kidney of cattle, goats, hogs, horses, and sheep;

0.2 parts per million in meat, fat, and meat byproducts (other than kidney) of cattle, goats, hogs, horses, and sheep;

0.1 part per million in milk;

0.05 part per million in poultry and eggs.

(i) A tolerance is established for residues of 2,4-D (2,4-dichlorophenoxyacetic acid) for applications of its dimethylamine salt or its butoxyethanol ester for Eurasian Watermilfoil control in programs conducted by the Tennessee Valley Authority in dams and reservoirs of the TVA system at 1.0 part per million in or on the raw agricultural commodity fish.

[36 FR 22540, Nov. 25, 1971, as amended at 37 FR 12311, June 22, 1972; 38 FR 29589, Oct. 26, 1973; 39 FR 43292, Dec. 12, 1974; 40 FR 6502, Feb. 12, 1975; 40 FR 13500, Mar. 27, 1975; 40 FR 53295, Dec. 16, 1975; 41 FR 11515, Mar. 19, 1976; 41 FR 23386, June 10, 1976]

§ 180.143 Dipropyl isocinchomeronate; tolerances for residues.

Tolerances are established for negligible residues of the insecticide dipropyl isocinchomeronate, resulting from dermal application, in raw agricultural commodities as follows:

0.1 part per million in meat, fat, and meat byproducts of cattle, goats, hogs, horses, and sheep.

0.004 part per million in milk.

[37 FR 16937, Aug. 23, 1972]

§ 180.144 Tricyclohexyltin hydroxide; tolerances for residues.

Tolerances are established for combined residues of the insecticide tricyclohexyltin hydroxide and its organotin metabolites (calculated as tricyclohexyltin hydroxide) in or on raw agricultural commodities as follows:

60 parts per million in or on almond hulls.

30 parts per million in or on hops.

4 parts per million in or on peaches and nectarines.

3 parts per million i
berries.

2 parts per million ir
citrus, and pears.

1 part per million in
(fresn prunes).

0.5 part per million in
and walnuts.

0.5 part per million in
ney of cattle, goats, ho
sheep.

0.2 part per million in
meat byproducts (exclu
kidney) of cattle, goats, h
sheep.

0.05 part per million in
ing negligible residues in

[37 FR 16803, Aug. 19, 1972
38 FR 14169, May 30, 197
Apr. 12, 1974; 39 FR 31904, S

§ 180.145 Fluorine com
ances for residues.[2]

A tolerance of 7 parts
combined fluorine is esta
dues of the insecticidal
pounds cryolite and sy
(sodium aluminum fluo
each of the following r
commodities: Apples, a
beets (with or without
greens alone, blackberri
(huckleberries), boysenb
brussels sprouts, cabbage,
flower, citrus fruits, corn,
berries, cucumbers, de
plants, grapes, kale, ko
loganberries, melons, m
nectarines, okra, peaches,
peas, peppers, plums (
pumpkins, quinces, radi
without tops) or radish
ries, rutabagas (with or w
rutabaga tops, squash, str
mer squash, tomatoes, tu
without tops) or turnip
berries.

§ 180.146 Inorganic bro
combined bromide
fumigation with ethyl
tolerances for residu

Tolerances of 50 parts
established for residues
bromides (calculated as B
following grains that ha
gated after harvest with e
mide: Barley, corn, oats,
rye, sorghum (milo), whea

[2] Tolerances established a
data acquired at the public
1950 and formerly appeared i