SAFETY DATA SHEET

Updated on 26/09/2024

1. Material Identification

Product Name : Fenthion
Catalog Number : io-2386
CAS Number : 55-38-9
Identified uses : Laboratory chemicals, manufacture of chemical compounds
Company : Ionz

>> R&D Use only

2. Hazards Identification

GHS Classification:

Flammable liquid (category 2)
Acute toxicity, oral (Category 3)
Acute toxicity, dermal (Category 3)
Acute toxicity, inhalation (Category 3)
Specific target organ toxicity, single exposure (Category 1)

Pictogram(s)

GHS Hazard Statements

>> H301 (12.7%): Toxic if swallowed [Danger Acute toxicity, oral]

>> H302 (87.3%): Harmful if swallowed [Warning Acute toxicity, oral]

>> H310 (10.9%): Fatal in contact with skin [Danger Acute toxicity, dermal]

>> H312 (85.5%): Harmful in contact with skin [Warning Acute toxicity, dermal]

>> H331 (98.2%): Toxic if inhaled [Danger Acute toxicity, inhalation]

>> H341 (100%): Suspected of causing genetic defects [Warning Germ cell mutagenicity]

>> H372 (100%): Causes damage to organs through prolonged or repeated exposure [Danger Specific target organ toxicity, repeated exposure]

>> H400 (100%): Very toxic to aquatic life [Warning Hazardous to the aquatic environment, acute hazard]

>> H410 (100%): Very toxic to aquatic life with long lasting effects [Warning Hazardous to the aquatic environment, long-term hazard]

Precautionary Statement Codes

>> P203, P260, P261, P262, P264, P270, P271, P273, P280, P301+P316, P301+P317, P302+P352, P304+P340, P316, P317, P318, P319, P321, P330, P361+P364, P362+P364, P391, P403+P233, P405, and P501

Health Hazards:

>> Excerpt from NIOSH Pocket Guide for Fenthion:

>> Exposure Routes: Inhalation, skin absorption, ingestion, skin and/or eye contact

>> Symptoms: Nausea, vomiting, abdominal cramps, diarrhea, salivation; headache, dizziness, lassitude (weakness, exhaustion); rhinorrhea (discharge of thin nasal mucus), chest tightness; blurred vision, miosis; cardiac irregularities; muscle fasciculation; dyspnea (breathing difficulty)

>> Target Organs: Respiratory system, central nervous system, cardiovascular system, plasma cholinesterase (NIOSH, 2024)

>> This compound is probably combustible. (NTP, 1992)

>> Combustible. Liquid formulations containing organic solvents may be flammable. Gives off irritating or toxic fumes (or gases) in a fire.

3. Composition/Information On Ingredients

Chemical name : Fenthion
CAS Number : 55-38-9
Molecular Formula : C10H15O3PS2
Molecular Weight : 278.3000 g/mol

4. First Aid Measures

First Aid:

>> EYES: First check the victim for contact lenses and remove if present. Flush victim's eyes with water or normal saline solution for 20 to 30 minutes while simultaneously calling a hospital or poison control center. Do not put any ointments, oils, or medication in the victim's eyes without specific instructions from a physician. IMMEDIATELY transport the victim after flushing eyes to a hospital even if no symptoms (such as redness or irritation) develop.

>> SKIN: IMMEDIATELY flood affected skin with water while removing and isolating all contaminated clothing. Gently wash all affected skin areas thoroughly with soap and water. IMMEDIATELY call a hospital or poison control center even if no symptoms (such as redness or irritation) develop. IMMEDIATELY transport the victim to a hospital for treatment after washing the affected areas.

>> INHALATION: IMMEDIATELY leave the contaminated area; take deep breaths of fresh air. IMMEDIATELY call a physician and be prepared to transport the victim to a hospital even if no symptoms (such as wheezing, coughing, shortness of breath, or burning in the mouth, throat, or chest) develop. Provide proper respiratory protection to rescuers entering an unknown atmosphere. Whenever possible, Self-Contained Breathing Apparatus (SCBA) should be used; if not available, use a level of protection greater than or equal to that advised under Protective Clothing.

>> INGESTION: CHOLINESTERASE INHIBITORS ARE EXTREMELY TOXIC AND FAST-ACTING POISONS. IMMEDIATELY call a hospital of poison control center and transport the victim to a hospital. Atropine is an antidote for cholinesterase inhibitors but should only be administered by properly trained personnel. In the absence of this option and if the victim is conscious and not convulsing, it may be worth considering the risk of inducing vomiting, even though the induction of vomiting is not usually recommended outside of a physician's care. Ipecac syrup or salt water may be used to induce vomiting in such an emergency. If the victim is convulsing or unconscious, do not give anything by mouth, assure that the victim's airway is open and lay the victim on his/her side with the head lower than the body. DO NOT INDUCE VOMITING. IMMEDIATELY transport the victim to a hospital. (NTP, 1992)

First Aid Measures

Inhalation First Aid

>> Fresh air, rest. Refer immediately for medical attention.

Skin First Aid

>> Remove contaminated clothes. Rinse and then wash skin with water and soap. Refer for medical attention . Wear protective gloves when administering first aid.

Eye First Aid

>> First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.

Ingestion First Aid

>> Rinse mouth. Give a slurry of activated charcoal in water to drink. Refer immediately for medical attention.

5. Fire Fighting Measures

>> Fires involving this material can be cntrolled with a dry chemical. carbon dioxide, foam or Halon extinguisher. (NTP, 1992)

>> Use water spray, foam, powder, carbon dioxide.

6. Accidental Release Measures

Isolation and Evacuation:

Isolation and evacuation measures to take when a large amount of this chemical is accidentally released in an emergency.

>> Excerpt from ERG Guide 152 [Substances - Toxic (Combustible)]:

>> IMMEDIATE PRECAUTIONARY MEASURE: Isolate spill or leak area in all directions for at least 50 meters (150 feet) for liquids and at least 25 meters (75 feet) for solids.

>> SPILL: Increase the immediate precautionary measure distance, in the downwind direction, as necessary.

>> FIRE: If tank, rail tank car or highway tank is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions. (ERG, 2024)

Spillage Disposal:

Methods for containment and safety measures to protect workers dealing with a spillage of this chemical.

>> Personal protection: chemical protection suit, protective gloves and filter respirator for organic gases and particulates adapted to the airborne concentration of the substance. Do NOT let this chemical enter the environment. Collect leaking and spilled liquid in sealable containers as far as possible. Absorb remaining liquid in dry sand or inert absorbent. Then store and dispose of according to local regulations.

7. Handling And Storage

Safe Storage:

>> Separated from strong oxidants and food and feedstuffs. Well closed. Keep in a well-ventilated room. Provision to contain effluent from fire extinguishing. Store in an area without drain or sewer access.

Storage Conditions:

>> Store in original container, preferably in a locked area, away from children, food, feed.

8. Exposure Control/ Personal Protection

REL-TWA (Time Weighted Average)

>> 0.2 mg/m³

>> See Appendix D

>> none See Appendix G

>> 0.05 [mg/m3], inhalable fraction and vapor

>> 0.05 mg/m

TLV-TWA (Time Weighted Average)

>> 0.05 mg/m³ (inhalable fraction and vapor) [2005]

MAK (Maximale Arbeitsplatz Konzentration)

>> (inhalable fraction): 0.2 mg/m

Inhalation Risk:

>> A harmful contamination of the air will not or will only very slowly be reached on evaporation of this substance at 20 °C; on spraying or dispersing, however, much faster.

Effects of Short Term Exposure:

>> Cholinesterase inhibition. The substance may cause effects on the nervous system. This may result in convulsions and respiratory failure. The effects may be delayed. Medical observation is indicated.

Effects of Long Term Exposure:

>> Cholinesterase inhibition. Cumulative effects are possible. See Acute Hazards/Symptoms.

Fire Prevention

>> NO open flames.

Exposure Prevention

>> PREVENT GENERATION OF MISTS! STRICT HYGIENE! IN ALL CASES CONSULT A DOCTOR!

Inhalation Prevention

>> Use ventilation, local exhaust or breathing protection.

Skin Prevention

>> Protective gloves. Protective clothing.

Eye Prevention

>> Wear face shield or eye protection in combination with breathing protection.

Ingestion Prevention

>> Do not eat, drink, or smoke during work. Wash hands before eating.

Exposure Control and Personal Protection

Exposure Summary

>> Biological Exposure Indices (BEI) [ACGIH] - Acetylcholinesterase activity in red blood cells = 70% of individual's baseline; Butylcholinesterase activity in serum or plasma = 60% of individual's baseline; Sample at end of shift; [TLVs and BEIs]

Maximum Allowable Concentration (MAK)

>> 0.2 [mg/m3], inhalable fraction[German Research Foundation (DFG)]

9. Physical And Chemical Properties

Molecular Weight:

>> 278.3

Exact Mass:

>> 278.02002368

Physical Description:

>> Fenthion is a yellow to tan oily liquid with a slight odor of garlic. (NTP, 1992)

>> COLOURLESS OILY LIQUID WITH CHARACTERISTIC ODOUR. PALE YELLOWISH BRONZE LUMPS WITH METALLIC LUSTRE.

Color/Form:

>> COLORLESS LIQUID

Odor:

>> Slight garlic odor

Boiling Point:

>> 189 °F at 0.01 mmHg (NTP, 1992)

Melting Point:

>> 43 °F (NIOSH, 2024)

>> 7.5 °C

Flash Point:

>> 170 °C

Solubility:

>> Insoluble (<1 mg/ml at 72.5 °F) (NTP, 1992)

>> Solubility in water at 20 °C: none

Density:

>> 1.25 at 68 °F (NTP, 1992) - Denser than water; will sink

>> Relative density (water = 1): 1.25

Vapor Density:

>> Relative vapor density (air = 1): 9.6

Vapor Pressure:

>> 3e-05 mmHg at 68 °F (NTP, 1992)

>> Vapor pressure at 25 °C: negligible

LogP:

>> log Kow= 4.091

>> 3.17-4.8

Stability/Shelf Life:

>> STABLE TO LIGHT

Autoignition Temperature:

>> 365 °C

Decomposition:

>> When heated to decomposition it emits very toxic fumes of /phosphorus oxides and sulfur oxides/.

Corrosivity:

The ability of a chemical to damage or destroy other substances when it comes into contact.

>> NON-CORROSIVE

Refractive Index:

>> INDEX OF REFRACTION: 1.5698 AT 20 °C/D

Collision Cross Section:

Collision cross section (CCS) represents the effective area for the interaction between an individual ion and the neutral gas through which it is traveling (e.g., in ion mobility spectrometry (IMS) experiments). It quantifies the probability of a collision taking place between two or more particles.

>> 156.19 Å² [M+H]+

10. Stability And Reactivity

>> No rapid reaction with air. No rapid reaction with water.

11. Toxicological Information

Toxicity Summary:

>> Fenthion is a cholinesterase or acetylcholinesterase (AChE) inhibitor. A cholinesterase inhibitor (or 'anticholinesterase') suppresses the action of acetylcholinesterase. Because of its essential function, chemicals that interfere with the action of acetylcholinesterase are potent neurotoxins, causing excessive salivation and eye-watering in low doses, followed by muscle spasms and ultimately death. Nerve gases and many substances used in insecticides have been shown to act

by binding a serine in the active site of acetylcholine esterase, inhibiting the enzyme completely. Acetylcholine esterase breaks down the neurotransmitter acetylcholine, which is released at nerve and muscle junctions, in order to allow the muscle or organ to relax. The result of acetylcholine esterase inhibition is that acetylcholine builds up and continues to act so that any nerve impulses are continually transmitted and muscle contractions do not stop. Among the most common acetylcholinesterase inhibitors are phosphorus-based compounds, which are designed to bind to the active site of the enzyme. The structural requirements are a phosphorus atom bearing two lipophilic groups, a leaving group (such as a halide or thiocyanate), and a terminal oxygen.

EPA Human Health Benchmarks for Pesticides:

This section provides the EPA human health benchmarks non-enforceable drinking water levels related to adverse health effects from drinking water exposure to contaminants that have no drinking water standards or health advisories.

Chemical Substance

>> Fenthion

Acute or One Day PAD (RfD) [mg/kg/day]

>> 0.0007

Acute or One Day HHBPs [ppb]

>> 5

Acute HHBP Sensitive Lifestage/Population

>> Children

Chronic or One Day PAD (RfD) [mg/kg/day]

>> 0.00007

Chronic or One Day HHBPs [ppb]

>> 0.4

Chronic HHBP Sensitive Lifestage/Population

>> General Population

Reference (PDF)

>> Human Health Benchmarks for Pesticides - 2021 Update

USGS Health-Based Screening Levels for Evaluating Water-Quality:

This section provides the USGS Health-Based Screening Levels for Evaluating Water-Quality data.

Chemical

>> Fenthion

USGS Parameter Code

>> 38801

Chronic Noncancer HHBP (Human Health Benchmarks for Pesticides)[µg/L]

>> 0.4

Reference

>> Smith, C.D. and Nowell, L.H., 2024. Health-Based Screening Levels for evaluating water-quality data (3rd ed.). DOI:10.5066/F71C1TWP

Evidence for Carcinogenicity:

Evidence that this chemical does or may cause cancer. The information here is collected from various sources by the Hazardous Substances Data Bank (HSDB).

>> Cancer Classification: Group E Evidence of Non-carcinogenicity for Humans

Carcinogen Classification:

This section provides the International Agency for Research on Cancer (IARC) Carcinogenic Classification and related monograph links. In the IARC Carcinogenic classification, chemicals are categorized into four groups: Group 1 (carcinogenic to humans), Group 2A (probably carcinogenic to humans), Group 2B (possibly carcinogenic to humans), and Group 3 (not classifiable as to its carcinogenicity to humans).

>> Spraying and application of nonarsenical insecticides entail exposures that are probably carcinogenic to humans (Group 2A). (L135)

Health Effects:

>> Acute exposure to cholinesterase inhibitors can cause a cholinergic crisis characterized by severe nausea/vomiting, salivation, sweating, bradycardia, hypotension, collapse, and convulsions. Increasing muscle weakness is a possibility and may result in death if respiratory muscles are involved. Accumulation of ACh at motor nerves causes overstimulation of nicotinic expression at the neuromuscular junction. When this occurs symptoms such as muscle weakness, fatigue, muscle cramps, fasciculation, and paralysis can be seen. When there is an accumulation of ACh at autonomic ganglia this causes overstimulation of nicotinic expression in the sympathetic system. Symptoms associated with this are hypertension, and hypoglycemia. Overstimulation of nicotinic acetylcholine receptors in the central nervous system, due to accumulation of ACh, results in anxiety, headache, convulsions, ataxia, depression of respiration and circulation, tremor, general weakness, and potentially coma. When there is expression of muscarinic overstimulation due to excess acetylcholine at muscarinic acetylcholine receptors symptoms of visual disturbances, tightness in chest, wheezing due to bronchoconstriction, increased bronchial secretions, increased salivation, lacrimation, sweating, peristalsis, and urination can occur. Certain reproductive effects in fertility, growth, and development for males and females have been linked specifically to organophosphate pesticide exposure. Most of the research on reproductive effects has been conducted on farmers working with pesticides and insecticdes in rural areas. In females menstrual cycle disturbances, longer pregnancies, spontaneous abortions, stillbirths, and some developmental effects in offspring have been linked to organophosphate pesticide exposure. Prenatal exposure has been linked to impaired fetal growth and development. Neurotoxic effects have also been linked to poisoning with OP pesticides causing four neurotoxic effects in humans: cholinergic syndrome, intermediate syndrome, organophosphate-induced delayed polyneuropathy (OPIDP), and chronic organophosphate-induced neuropsychiatric disorder (COPIND). These syndromes result after acute and chronic exposure to OP pesticides.

Exposure Routes:

>> The substance can be absorbed into the body in hazardous amounts by inhalation, through the skin and by ingestion.

>> inhalation, skin absorption, ingestion, skin and/or eye contact

Inhalation Exposure

>> Dizziness. Nausea. Vomiting. Sweating. Pupillary constriction, muscle cramp, excessive salivation. Laboured breathing. Convulsions. Unconsciousness.

Skin Exposure

>> MAY BE ABSORBED! Further see Inhalation.

Eye Exposure

>> Blurred vision.

Ingestion Exposure

>> Abdominal cramps. Diarrhoea. Nausea. Vomiting. Further see Inhalation. Pupillary constriction. Muscle cramps. Excessive salivation.

>> nausea, vomiting, abdominal cramps, diarrhea, salivation; headache, dizziness, lassitude (weakness, exhaustion); rhinorrhea (discharge of thin nasal mucus), chest tightness; blurred vision, miosis; cardiac irregularities; muscle fasciculation; dyspnea (breathing difficulty)

Target Organs:

Organs that are affected by exposure to this chemical. Information in this section reflects human data unless otherwise noted.

>> respiratory system, central nervous system, cardiovascular system, plasma cholinesterase

Adverse Effects:

An adverse effect is an undesired harmful effect resulting from a medical treatment or other intervention.

>> Other Poison - Organophosphate

>> ACGIH Carcinogen - Not Classifiable.

Toxicity Data:

>> LD50: 330 mg/kg (Dermal, Rat) (L1682) LD50: 190 to 615 mg/kg (Oral, Rat) (L1682)

Treatment:

Treatment when exposed to toxin

>> If the compound has been ingested, rapid gastric lavage should be performed using 5% sodium bicarbonate. For skin contact, the skin should be washed with soap and water. If the compound has entered the eyes, they should be washed with large quantities of isotonic saline or water. In serious cases, atropine and/or pralidoxime should be administered. Anti-cholinergic drugs work to counteract the effects of excess acetylcholine and reactivate AChE. Atropine can be used as an antidote in conjunction with pralidoxime or other pyridinium oximes (such as trimedoxime or obidoxime),

though the use of '-oximes' has been found to be of no benefit, or possibly harmful, in at least two meta-analyses. Atropine is a muscarinic antagonist, and thus blocks the action of acetylcholine peripherally.

Interactions:

>> The equitoxic coadministration of 2-sec-butylphenyl N-methylcarbamate and fenthion resulted in only a 1.6 fold potentiation compared to the expected /acute oral/ LD50 /of the methyl carbamate/. However, 1 hr oral pretreatment with 3 (1/100 LD50), 7.5, 15, and 30 mg/kg of fenthion resulted in 5, 9, 12, and 15 fold potentiation of the acute oral toxicity of 2-sec-butylphenyl N-methylcarbamate, respectively. These fenthion pretreatments caused significant incr in the 2-sec-butylphenyl N-methylcarbamate plasma concn and in the area under the concentration-time curve. These results suggested that fenthion pretreatment caused the potentiation of the acute toxicity of 2-sec-butylphenyl N-methylcarbamate partially by the inhibition of detoxication of 2-sec-butylphenyl N-methylcarbamate.

Antidote and Emergency Treatment:

>> 1. INSURE THAT A CLEAR AIRWAY EXISTS BY ASPIRATION OF SECRETIONS IF NECESSARY. ADMIN OXYGEN BY MECHANICALLY ASSISTED PULMONARY VENTILATION IF RESPIRATION IS DEPRESSED. IMPROVE TISSUE OXYGENATION AS MUCH AS POSSIBLE BEFORE ADMIN ATROPINE TO MINIMIZE RISK OF VENTRICULAR FIBRILLATION. IN SEVERE POISONINGS, IT MAY BE NECESSARY TO SUPPORT PULMONARY VENTILATION MECHANICALLY FOR SEVERAL DAYS. 2. ADMIN ATROPINE SULFATE IV, OR IM IF IV INJECTION IS NOT POSSIBLE. ... IN MODERATELY SEVERE POISONING: ADULT DOSAGE AND CHILDREN OVER 12 YR: 0.4-2.0 MG REPEATED EVERY 15 MIN UNTIL ATROPINIZATION IS ACHIEVED. MAINTAIN ATROPINIZATION WITH REPEATED DOSAGE OF 0.02-0.05 MG/KG BODY WEIGHT. /ORGANOPHOSPHATE PESTICIDES/

Human Toxicity Excerpts:

>> CHOLINESTERASE INHIBITOR.

Non-Human Toxicity Excerpts:

>> Moderately toxic to fish (1 mg/l for immature Lebistes reticulans causes no damage over 48 hr). Male whitebait are by contrast more susceptible.

Non-Human Toxicity Values:

>> LD50 Rat male oral 190-315 mg/kg

National Toxicology Program Studies:

Reports from the National Toxicology Program, an interagency program supported by three government agencies (NIH, FDA, and CDC) within the Department of Health and Human Services. This program plays a critical role in generating, interpreting, and sharing toxicological information about chemicals of public health concerns.

>> A bioassay of fenthion for possible carcinogenicity was conducted by administering the test chemical in feed to F344 rats ... . Groups of 50 rats of each sex ... were administered fenthion in the diet at one of two doses, either 10 or 20 ppm, for 103 weeks and then observed for 0 to 2 additional weeks. Matched controls consisted of groups of 25 untreated animals ... of each sex. All surviving animals were killed at 103 to 105 weeks. The mean body weights and the survivals of the dosed animals were essentially unaffected by administration of the test chemical ... . Thus, most of the animals may have been able to tolerate higher doses. Sufficient numbers of animals in all groups of rats ... were at risk for development of late-appearing tumors. In the male and female rats ... no tumors occurred at incidences that were significantly higher in dosed groups than in control groups. ... It is concluded that under the conditions of this bioassay, fenthion was not carcinogenic for male or female F344 rats.

12. Ecological Information

ICSC Environmental Data:

>> The substance is very toxic to aquatic organisms. This substance does enter the environment under normal use. Great care, however, should be taken to avoid any additional release, for example through inappropriate disposal.

Average Daily Intake:

The average amount of the compound taken into the body through eating, drinking, or breathing.

>> Based upon an avg olive oil concn of 0.236 mg fenthion/kg olive oil(1) and an estimated consumption of 20 kg olive oil/yr for people in Greece(1), the daily dietary exposure has been estimated to be 0.0002 mg/kg body weight(1). Based upon monitoring in FDA's Total Diet Study for fiscal year 1978, the avdi for US toddlers was estimated to be <0.001 ug/kg body weight/day(2); in fiscal years 1979-82, fenthion was not detected in infant and toddler food composites so the estimated avdi was 0.0(2).

13. Disposal Considerations

Spillage Disposal

>> Personal protection: chemical protection suit, protective gloves and filter respirator for organic gases and particulates adapted to the airborne concentration of the substance. Do NOT let this chemical enter the environment. Collect leaking and spilled liquid in sealable containers as far as possible. Absorb remaining liquid in dry sand or inert absorbent. Then store and dispose of according to local regulations.

Disposal Methods

>> Hydrolysis & landfill: Mix fenthion with excess CaO /calcium oxide/ or NaOH /sodium hydroxide/ and sand or other adsorbent in a pit or trench at least 0.5 m deep in a clay soil. NaOH (or Na2CO3) /sodium carbonate/ can also be added to the mixture to help speed the reactions when CaO is used as the main alkali. The amt of CaO or NaOH to use depends on the amt of pesticide to be disposed of and, to some extent, the concentration of active ingredient in the pesticide and the actual chemical nature of the active ingredient. A practical guideline, in the absence of specific directions, is to use an approx volume or weight of alkali from one-half of to the same as that of the pesticide. For dilute formulations, such as a 1% soln or dust, the amount of CaO of NaOH can be reduced by one-half. For very concentrated pesticides (over 80% active ingredient) the amount of CaO or NaOH can be doubled, but the concentrate should be mixed first with water (or soapy water) before reaction with the alkali. For safety, a preliminary test should be made in which very small amt of the pesticide and alkali are mixed and observed briefly to make sure it does not react too vigorously. Sizable quantities of pesticides can be disposed of in several smaller batches, rather than all at once, for added safety. 50% hydrolysis at 80 °C in acid medium requires 36 hr, or 95 min in alkaline medium. Recommendable method: Incineration. Peer-review: For large amt incineration in a unit with effluent gas scrubbing is recommendable. (Peer-review conclusions of an IRPTC expert consultation (May 1985))

>> MALATHION MAY BE DISPOSED OF BY ABSORBING IN VERMICULITE, DRY SAND, EARTH, OR A SIMILAR MATERIAL ... & /DISPOSING OF SO AS TO MEET LOCAL, STATE, & FEDERAL REGULATIONS/. /MALATHION/

>> Incineration together with flammable solvent in furnace equipped with afterburner and scrubber is recommended. /Malathion/

>> The following wastewater treatment technologies have been investigated for Malathion: Biological treatment and reverse osmosis. /Malathion/

>> For more Disposal Methods (Complete) data for FENTHION (7 total), please visit the HSDB record page.

14. Transport Information

DOT

Fenthion
6.1
UN Pack Group: III

IATA

Fenthion
6.1,
UN Pack Group: III

15. Regulatory Information

Regulatory Information

New Zealand EPA Inventory of Chemical Status

>> Fenthion: HSNO Approval: HSR002850 Approved with controls

16. Other Information

Other Safety Information

Chemical Assessment

>> IMAP assessments - Phosphorothioic acid, O,O-dimethyl O-[3-methyl-4-(methylthio)phenyl] ester: Human health tier I assessment

>> IMAP assessments - Phosphorothioic acid, O,O-dimethyl O-[3-methyl-4-(methylthio)phenyl] ester: Environment tier I assessment

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