# SAFETY DATA SHEET FORTIX

**SDS #**: FO002194-1-A **Revision date**: 2019-03-28

Format: NA Version 1



# 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier** 

Product Name FORTIX

Other means of identification

Product Code(s) FO002194-1-A

Legacy Product Code 31R/3110

Synonyms SMART EW, AQUAFIN,

, MALATHION: diethyl [(dimethoxyphosphinothioyl)thio]butanedioate (CAS Name);

diethyl(dimethoxyphosphinothioylthio)succinate (IUPAC Name)

Active Ingredient(s) Malathion

Formula C<sub>10</sub>H<sub>19</sub>O<sub>6</sub>PS<sub>2</sub> (Malathion)

Chemical Family Organophosphate

Recommended use of the chemical and restrictions on use

Recommended Use: Insecticide

**Restrictions on Use:** Use as recommended by the label.

<u>Supplier Address</u> Cheminova Agro de Argentina S.A.

Carlos Pellegrini 719 – Piso 9

C1009ABO – Ciudad Autónoma de Buenos Aires – Argentina

Teléfono: 011 5984-3700 Email:msdsinfo@fmc.com www.fmcargentina.com.ar

**Emergency telephone number** Medical Emergencies :

1 800 / 331-3148 (U.S.A. & Canada)

1 651 / 632-6793 (All Other Countries - Collect)

For leak, fire, spill or accident emergencies, call: 1 800 / 424-9300 (CHEMTREC - U.S.A.) 1 703 / 741-5970 (CHEMTREC - International) 1 703 / 527-3887 (CHEMTREC - Alternate)

# 2. HAZARDS IDENTIFICATION

Classification

#### **OSHA Regulatory Status**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Version 1

### GHS Label elements, including precautionary statements

#### **EMERGENCY OVERVIEW**

# Warning

#### Hazard Statements

H410 - Very toxic to aquatic life with long lasting effects



#### **Precautionary Statements - Prevention**

P273 - Avoid release to the environment

### **Precautionary Statements - Response**

P308 + P313 - If exposed or concerned: Get medical advice/attention

P391 - Collect spillage

# **Precautionary Statements - Disposal**

P501 - Dispose of contents/container according to label directions

#### Hazards not otherwise classified (HNOC)

No hazards not otherwise classified were identified.

# Other Information

Very toxic to aquatic life with long lasting effects.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Family Organophosphate.

Chemical name	CAS-No	Weight %
Malathion Technical	121-75-5	40
Tristyryl phenol-polyethylene glycol-phosphoric acid	114535-82-9	1-5

Synonyms are provided in Section 1.

4. FIRST AID MEASURES

Eye Contact Immediately rinse eyes with much water or eyewash solution, occasionally opening eyelids,

until no evidence of chemical remains. Remove contact lenses after a few minutes and

rinse again. Get medical attention immediately if irritation persists.

Skin Contact Immediately remove contaminated clothing and footwear. Wash off immediately with plenty

of water. Wash skin with soap and water. See physician if any symptom develops.

**Inhalation** If experiencing any discomfort, immediately remove from exposure. Light cases: Keep

person under surveillance. Get medical attention immediately if symptoms develop. Serious

cases: Get medical attention immediately or call for an ambulance.

Ingestion If swallowed, do not induce vomiting - seek medical advice Rinse mouth with water and

afterwards drink plenty of water or milk If vomiting does occur, rinse mouth and drink fluids

again Get medical attention

Version 1

Most important symptoms and effects, both acute and delayed

On exposure to larger quantities of aged product, symptoms of poisoning (cholinesterase inhibition) may occur.

Indication of immediate medical attention and special treatment needed, if necessary

Immediate medical attention is required in cases of ingestion. It may be helpful to show this safety data sheet to physician.

This product contains a cholinesterase inhibitor affecting the central and peripheral nervous systems and producing respiratory depression. Decontamination procedures such as whole body washing, gastric lavage and administration of activated charcoal are often required. If symptoms are present, administer atropine sulphate in large doses. Two to four mg intravenously or intramuscularly, as soon as possible. Repeat at 5 to 10 minute intervals until signs of atropinization appear. Maintain full atropinization until all organophosphate is metabolized. Obidoxime chloride (Toxogonin), alternatively pralidoxime chloride (2-PAM), may be administered as an adjunct to, but not a substitute for atropine, which is a symptomatic and often life-saving antidote. Treatment with oxime should be maintained as long as atropine sulphate is administered. At first sign of pulmonary edema, the patient should be given supplemental oxygen and treated symptomatically. Continued absorption may occur and relapse may occur after initial improvement. VERY CLOSE SUPERVISION OF THE PATIENT IS INDICATED FOR AT LEAST 48 HOURS, DEPENDING ON THE SEVERITY OF POISONING. This product contains a reversible cholinesterase inhibitor. If any sign of cholinesterase inhibition occurs, call a doctor (physician), clinic or hospital immediately. Explain that the victim has been exposed to an organophosphorus insecticide. Describe his/her condition and the extent of exposure. Immediately remove the exposed person from the area where the product is present.

# 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media** 

Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

Small Fire Dry chemical. Carbon dioxide (CO<sub>2</sub>).

**Large Fire** Water spray. Foam.

Unsuitable extinguishing media Av

Avoid heavy hose streams.

**Specific Hazards Arising from the Chemical** 

The essential breakdown products are volatile, toxic, malodorous, irritant and inflammable compounds such as dimethyl sulphide, methyl mercaptan, sulphur dioxide, carbon monoxide, carbon dioxide and phosphorus pentoxide.

**Explosion data** 

Sensitivity to Mechanical Impact Sensitivity to Static Discharge No information available. No information available.

Protective equipment and precautions for firefighters

Use water spray to cool fire exposed surfaces and protect personnel. Approach fire from upwind to avoid hazardous vapours and toxic decomposition products. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Dike to prevent runoff. As in any fire, wear self-contained breathing apparatus and full protective gear.

### 6. ACCIDENTAL RELEASE MEASURES

#### **Personal Precautions**

It is recommended to have a predetermined plan for the handling of spills. Empty, closable vessels for the collection of spills should be available.

In case of large spill (involving 10 tonnes of the product or more):

Observe all safety precautions when cleaning up spills. Use personal protection equipment. Depending on the magnitude of the spill this may mean wearing respirator, face mask or eye protection, chemical resistant clothing, gloves and rubber boots. Stop the source of the spill immediately if safe to do so. Keep unprotected persons away from the spill area.

Version 1

Other

For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.

**Environmental Precautions** 

Contain the spill to prevent any further contamination of surface, soil or water. Wash waters must be prevented from entering surface water drains. Uncontrolled discharge into water courses must be alerted to the appropriate regulatory body.

**Methods for Containment** 

It is recommended to consider possibilities to prevent damaging effects of spills, such as bunding or capping.

Methods for cleaning up

If appropriate, surface water drains should be covered. Minor spills on the floor or other impervious surface should be swept up or preferably vacuumed up using equipment with high efficiency final filter. Transfer to suitable containers. Clean area with strong industrial detergent and much water. Absorb wash liquid onto a suitable absorbent such as hydrated lime, universal binder, attapulgite, bentonite or other absorbent clays and transfer contaminated absorbent to suitable containers. The used containers should be properly closed and labelled.

Large spills which soak into the ground should be dug up and transferred to suitable containers. Large spills in water should be contained as much as possible by isolation of the contaminated water. The contaminated water must be collected and removed for treatment or disposal.

#### 7. HANDLING AND STORAGE

#### Handling

In an industrial environment it is recommended to avoid all personal contact with the product, if possible by using closed systems with remote system control. Otherwise it is recommended to handle the material by mechanical means as much as possible. Adequate ventilation or local exhaust ventilation is required. The exhaust gases should be filtered or treated otherwise. For personal protection in this situation, see section 8.

For its use as a pesticide, first look for precautions and personal protection measures on the officially approved label on the packaging or for other official guidance or policy in force. If these are lacking, see section 8.

Remove contaminated clothing and shoes. Wash thoroughly after handling. Use protective gloves made of chemical materials such as nitrile or neoprene. Wash the outside of gloves with soap and water before reuse. Check regularly for leaks. Do not discharge to the environment. Do not contaminate water when disposing of equipment wash waters. Collect all waste material and remains from cleaning equipment, etc., and dispose of as hazardous waste. See section 13 for disposal.

**Storage** 

Product should be stored below 25°F. The product should never be heated above 55°C. Local heating above this temperature should be avoided as well. Store in closed, labelled containers. The storage room should be constructed of incombustible material, closed, dry, ventilated and with impermeable floor, without access of unauthorised persons or children. A warning sign reading "POISON" is recommended. The room should only be used for storage of chemicals. Food, drink, feed and seed should not be present. A hand wash station should be available.

Incompatible products

Strong alkalis, Amines, Strong oxidizing agents.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

L	Chemical name	ACGIH TLV	OSHA PEL	NIOSH	Mexico
Γ	Malathion Technical	TWA: 1 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup>	IDLH: 250 mg/m <sup>3</sup>	Mexico: TWA 10 mg/m <sup>3</sup>
	(121-75-5)	-	S*	TWA: 10 mg/m <sup>3</sup>	
	Chemical name	British Columbia	Quebec	Ontario TWAEV	Alberta

Version 1

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Malathion Technical (121-75-5)	TWA: 1 mg/m³ Skin	TWA: 10 mg/m³ Skin	TWA: 1 mg/m <sup>3</sup> inhalable fraction and	TWA: 1 mg/m³ Skin
			vapor	
			Skin	

**Appropriate engineering controls** 

**Engineering measures** Apply technical measures to comply with the occupational exposure limits (if listed above).

When working in confined spaces (tanks, containers, etc.), make sure there is an adequate source of air for breathing and wear the recommended equipment. Ventilate all transport

vehicles prior to discharge.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses. Face-shield. Maintain eye wash fountain and quick-drench facilities in work

area.

**Skin and Body Protection**Use coveralls or long-sleeved uniform and head covering. For large exposures as in case of

a spill, use barrier suit covering the entire body, such as a waterproof PVC suit. Leather items, including shoes, belts and watchbands, that have been contaminated should be removed and destroyed. Wash all work clothing before reuse (separately from clothing

commonly used).

**Hand Protection** Wear long chemical resistant gloves, such as barrier laminate, butyl rubber or nitrile rubber.

The breakthrough times of these materials for the product are unknown. Generally, however, the use of protective gloves will give only partial protection against dermal exposure. Small tears in the gloves and cross-contamination can easily occur. It is recommended to limit the work to be done manually and to change the gloves frequently. Be careful not to touch anything with contaminated gloves. Used gloves should be thrown

out and not be reused.

**Respiratory Protection**The product does not automatically present an airborne exposure concern during normal

handling. In the event of an accidental discharge of the material which produces a heavy vapour or mist, workers should put on officially approved respiratory protection equipment

with a universal filter type including particle filter.

**Hygiene measures** Must have clean water available for washing in case of eye or skin contamination. Wash

skin before eating, drinking, chewing gum, or using snuff. Shower after work. Remove contaminated clothing and wash before reuse. Wash all work clothing separately; do not

mix with household laundry.

**General information** When used in a closed system, personal protection equipment will not be required. The

following is meant for other situations, when the use of a closed system is not possible, or when it is necessary to open the system. Consider the need to render equipment or piping

systems non-hazardous before opening.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties

Appearance Liquid suspension

Physical State
Color
Off-white
Odor
Glue-like

Odor threshold No information available

pH 4.22 @ 20 °C Melting point/freezing point < 0 °C

Boiling Point/Range No information available

Flash point None. The flame is extinguished at 80°C in the Pensky-Martens closed cup tester.

**Evaporation Rate** No information available

Flammability (solid, gas) Not applicable (Product is a liquid)

Flammability Limit in Air

Upper flammability limit: No information available Lower flammability limit: No information available

Page 5/11

Version 1

Vapor pressure 4.5 x 10<sup>-4</sup> Pa at 25°C

1.9 x 10<sup>-2</sup> Pa at 45°C

Vapor densityNo information availableRelative density1.100 g/mL @ 20°CSpecific gravityNo information available

Water solubility Emulsifies

Solubility in other solvents No information available

Partition coefficient log Kow = 2.75 Autoignition temperature >400 °C

**Decomposition temperature**No information available

Viscosity, kinematic 16.4 - 187 mN/m depending on shear rate

Viscosity, dynamic No information available

Explosive properties Not explosive Oxidizing properties Non-oxidizing

Molecular weightNo information availableBulk densityNo information available

# 10. STABILITY AND REACTIVITY

**Reactivity**To our knowledge, the product has no special reactivities.

Chemical Stability Heating above this temperature may cause explosive decomposition. Malathion will

decompose rapidly when heated to temperatures above 140°C, significantly increasing the risk of explosion. Direct local heating such as electric heating or by steam must be avoided.

The decomposition is dependent on time as well as temperature due to self-accelerating exothermic and autocatalytic reactions. The reactions involve rearrangements and polymerisation releasing volatile malodorous and inflammable compounds such as dimethyl

sulphide and methyl mercaptan.

Possibility of Hazardous Reactions None known.

**Hazardous polymerization** Hazardous polymerization does not occur.

**Conditions to avoid** Heating of the product will produce harmful and irritant vapors.

**Incompatible materials** Strong alkalis, Amines, Strong oxidizing agents.

Hazardous Decomposition Products See Section 5 for more information.

#### 11. TOXICOLOGICAL INFORMATION

#### **Product Information**

LD50 Oral : > 5000 mg/kg (rat)
LD50 Dermal : > 5000 mg/kg (rat)
LC50 Inhalation : > 7.74 mg/L 4 hr (rat)

Serious eye damage/eye irritation Minimally irritating. Skin corrosion/irritation Non-irritating. Sensitization Non-sensitizing

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Malathion Technical	= 1390 mg/kg (Rat)	= 4100 mg/kg ( Rabbit )	= 43790 μg/m³(Rat)4 h
(121-75-5)	= 290 mg/kg ( Rat )		

#### Information on toxicological effects

**Symptoms**The active ingredient malathion is a cholinesterase inhibitor of low mammalian toxicity.

However, prolonged storage or storage at too high temperatures may induce formation of the much more toxic and synergistic contaminant isomalathion (LD50, oral, rat, 89 mg/kg). Both malathion and isomalathion rapidly enter the body on contact with all skin surfaces

and eyes.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Version 1

Mutagenicity The product contains no ingredients known to be mutagenic. Malathion: Limited evidence of a carcinogenic effect Carcinogenicity

Neurological effects Malathion: No information available

Reproductive toxicity This product does not contain any known or suspected reproductive hazards.

No specific effects after single exposure have been observed. STOT - single exposure STOT - repeated exposure Based on available data, the classification criteria are not met.

Nervous System, Acetylcholinesterase Inhibition **Target organ effects** 

Neurological effects Malathion: No information available

Aspiration hazard The product does not present an aspiration pneumonia hazard.

Chemical name	ACGIH	IARC	NTP	OSHA
Malathion Technical		Group 2A		X
121-75-5		•		

IARC (International Agency for Research on Cancer) Group 2A - Probably Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

# 12. ECOLOGICAL INFORMATION

# **Ecotoxicity**

Malathion Technical (121-75-5)				
Active Ingredient(s)	Duration	Species	Value	Units
Malathion	96 h LC50	Oncorhynchus mykiss (rainbow trout)	0.18	mg/L
	37-day NOEC	Oncorhynchus mykiss (rainbow trout)	21	μg/L
	48 h EC50	Daphnia magna	0.72	μg/L
	21 d NOEC	Daphnia magna	0.06	μg/L
	72-h IC50	Selenastrum capricornutum	4.06	mg/L
	LD50	Bobwhite quail	359	mg/kg
	5-day dietary LC50	Bobwhite quail	3497	mg/kg
	LD50	Mallard duck	1485	mg/kg
	14-day LC50	Earthworm	613	mg/kg
	LD50 acute oral	Honey bees	0.38	μg/bee
·	LD50 topical	Honey bees	0.27	μg/bee

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Malathion Technical	72 h EC50: = 4.06 mg/L	96 h LC50: 0.0022 - 0.0074 mg/L	48 h EC50: 0.00014 - 0.014 mg/L
121-75-5	(Pseudokirchneriella subcapitata)	(Oncorhynchus mykiss) static 96 h	(Daphnia magna)
		LC50: 0.010 - 0.088 mg/L (Lepomis	
		macrochirus) static 96 h LC50:	
		0.094 - 0.146 mg/L (Oncorhynchus	
		mykiss) semi-static 96 h LC50: 0.24	
		- 1.24 mg/L (Cyprinus carpio) static	
		96 h LC50: 12.3 - 16.1 mg/L	
		(Pimephales promelas) flow-through	
		96 h LC50: 6.45 - 11.5 mg/L	
		(Pimephales promelas) static 96 h	
		LC50: = 0.002 mg/L (Cyprinus	
		carpio) 96 h LC50: = 0.028 mg/L	
		(Oncorhynchus mykiss) 96 h LC50:	
		= 0.085 mg/L (Cyprinus carpio)	
		semi-static 96 h LC50: = 0.089 mg/L	
		(Lepomis macrochirus) 96 h LC50:	
		= 0.34 mg/L (Lepomis macrochirus)	
		flow-through 96 h LC50: = 1.2 mg/L	
		(Poecilia reticulata) 96 h LC50: =	

Version 1

			version 1
		10.1 mg/L (Pimephales promelas)	
		96 h LC50: = 3.1 mg/L (Poecilia	
		reticulata) static 96 h LC50: = 9.7	
		mg/L (Oryzias latipes) static	
Sodium Hydroxide		96 h LC50: = 45.4 mg/L	
1310-73-2		(Oncorhynchus mykiss) static	
Propylene glycol	96 h EC50: = 19000 mg/L	96 h LC50: 41 - 47 mL/L	48 h EC50: > 1000 mg/L (Daphnia
57-55-6	(Pseudokirchneriella subcapitata)	(Oncorhynchus mykiss) static 96 h	magna) Static 24 h EC50: > 10000
	. ,	LC50: = 51400 mg/L (Pimephales	mg/L (Daphnia magna)
		promelas) static 96 h LC50: = 51600	
		mg/L (Oncorhynchus mykiss) static	
		96 h LC50: = 710 mg/L (Pimephales	
		promelas)	
Sodium chloride		96 h LC50: 4747 - 7824 mg/L	48 h EC50: 340.7 - 469.2 mg/L
7647-14-5		(Oncorhynchus mykiss)	(Daphnia magna) Static 48 h EC50:
		flow-through 96 h LC50: 5560 -	= 1000 mg/L (Daphnia magna)
		6080 mg/L (Lepomis macrochirus)	3 ( 4 4 5 3 4)
		flow-through 96 h LC50: 6020 -	
		7070 mg/L (Pimephales promelas)	
		static 96 h LC50: 6420 - 6700 mg/L	
		(Pimephales promelas) static 96 h	
		LC50: = 12946 mg/L (Lepomis	
		macrochirus) static 96 h LC50: =	
		7050 mg/L (Pimephales promelas)	
		semi-static	
Hydrogen peroxide	72 h EC50: = 2.5 mg/L (Chlorella	96 h LC50: 10.0 - 32.0 mg/L	48 h EC50: 18 - 32 mg/L (Daphnia
7722-84-1	vulgaris)	(Oncorhynchus mykiss) static 96 h	magna) Static 24 h EC50: = 7.7
	lga.no,	LC50: 18 - 56 mg/L (Lepomis	mg/L (Daphnia magna)
		macrochirus) static 96 h LC50: =	mg/2 (Bapilina magna)
		16.4 mg/L (Pimephales promelas)	
Methyl ethyl ketone		96 h LC50: 3130 - 3320 mg/L	48 h EC50: 4025 - 6440 mg/L
78-93-3		(Pimephales promelas) flow-through	
10000		(i internaled premidae) new aneagri	= 5091 mg/L (Daphnia magna) 48 h
			EC50: > 520 mg/L (Daphnia magna)
Polyacrylic acid		96 h LC50: = 580 mg/L (Lepomis	96 h EC50: = 168 mg/L (water flea)
9003-01-4		macrochirus)	00 11 2000. = 100 mg/2 (water flea)
3003-01-4		macrociii us)	

#### Persistence and degradability

Malathion: Biodegradable, but does not meet the criteria for being readily biodegradable, It undergoes rapid degradation in the environment and in waste water treatment plants. No adverse effects are found at concentrations up to 100 mg/l in waste water treatment plants. Degradation occurs both aerobically and anaerobically, mostly biologically.

Primary degradation half-lives vary with circumstances, from a few weeks to a few months in aerobic water and soil. The product contains minor amounts of not readily biodegradable components, which may not be degradable in waste water treatment plants.

**Bioaccumulation** See section 9 for n-octanol/water partition coefficient.

Mobility Malathion: Medium mobility; has some potential to reach groundwater.

Other Adverse Effects No other adverse effects relevant to the environment are known.

# 13. DISPOSAL CONSIDERATIONS

#### Waste disposal methods

Improper disposal of excess pesticide, spray mixture, or rinsate is prohibited. If these wastes cannot be disposed of by use according to label instructions, contact appropriate disposal authorities for guidance. Proper personal protective equipment, as described in Sections 7 and 8, must be worn while handling materials for waste disposal.

#### **Contaminated Packaging**

It is recommended to consider possible ways of disposal in the following order:

- 1. Reuse or recycling should first be considered. Reuse is prohibited except by the authorisation holder. If offered for recycling, containers must be emptied and triply rinsed (or equivalent). Do not discharge rinsing water to sewer systems.
- 2. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

Version 1

- 3. Delivery of the packaging to a licensed service for disposal of hazardous waste.
- 4. Disposal in a landfill or burning in open air should only occur as a last resort. For disposal in a landfill containers should be emptied completely, rinsed and punctured to make them unusable for other purposes. If burned, stay out of smoke.

# 14. TRANSPORT INFORMATION

**DOT** Not applicable

TDG Not applicable

#### ICAO/IATA

UN/ID no UN3082

Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s. (malathion)

Hazard class 9
Packing Group III

**Description** UN3082, Sustancia peligrosa para el medio ambiente, líquido, n.e.p. (malatión), 9, III,

contaminante marino

IMDG/IMO

UN/ID no UN3082

Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s. (malathion)

Hazard class 9
Packing Group III

**Special Provisions**Do not release to the environment

Marine Pollutant Yes

**Description** UN3082, Sustancia peligrosa para el medio ambiente, líquido, n.e.p. (malatión), 9, III,

contaminante marino

# 15. REGULATORY INFORMATION

# U.S. Federal Regulations

# **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical name	CAS-No	Weight %	SARA 313 - Threshold Values %
Malathion Technical - 121-75-5	121-75-5	40	1.0

# SARA 311/312 Hazard Categories

Acute health hazard Yes
Chronic health hazard Yes
Fire hazard Yes
Sudden release of pressure hazard No
Reactive Hazard No

# **Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Malathion Technical 121-75-5	100 lb			X
Sodium Hydroxide 1310-73-2	1000 lb			X

Version 1

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Malathion Technical	100 lb	
121-75-5	45.4 kg	
Sodium Hydroxide	1000 lb	
1310-73-2	454 kg	
Hydrogen peroxide		1000 lb
7722-84-1		
Methyl ethyl ketone	5000 lb	
78-93-3	2270 kg	

# **US State Regulations**

# **California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical name	California Prop. 65	
Malathion Technical - 121-75-5	Carcinogen	

# U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Malathion Technical	X	X	X
121-75-5			

# **International Inventories**

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELINC S (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Malathion Technical 121-75-5		Х	Х	Х	Х	Х	Х	Х
Tristyryl phenol-polyethylene glycol-phosphoric acid 114535-82-9	X	Х						Х

Chemical name	Carcinogen Status	Mexico
Malathion Technical		Mexico: TWA 10 mg/m <sup>3</sup>

16. OTHER INFORMATION

NFPA	Health Hazards 2	Flammability 1	Instability 0	Special Hazards -
HMIS	Health Hazards 2*	Flammability 1	Physical hazard 0	Personal Protection X

<sup>\*</sup>Indicates a chronic health hazard.

Version 1

Revision date: 2019-03-28 Reason for revision: Format Change

# Key or legend to abbreviations and acronyms used in the safety data sheet

B.o.a.d.t.c.c.a.n.m. = Based on available data, the classification criteria are not met

CAS = Chemical Abstracts Service

COFEPRIS = Federal Commission for Protection against Health Risks

COTRA = Committee on Transport and Storage

EINECS = European Inventory of Existing Commercial Chemical Substances

GHS = Globally Harmonized classification and labelling System of chemicals

HNOC = Hazards Not Otherwise Classified (US OSHA)

IARC = International Agency for Research on Cancer

IC<sub>50</sub> = 50% Inhibition Concentration

IUPAC = International Union of Pure and Applied Chemistry

LC<sub>50</sub> = 50% Lethal Concentration

LD<sub>50</sub> = 50% Lethal Dose

LTEL-TWA: = Long-Term Exposure Limit - Time Weighed Average

n.o.s. = Not otherwise specified

OECD = Organisation for Economic Cooperation and Development

OPPTS = Office of Prevention, Pesticides & Toxic Substances

OSHA = Occupational Safety and Health Administration (US)

PMCC = Pensky-Martens Closed Cup

PROFEPA = Attorney General for Environmental Protection

SDS = Safety Data Sheet

SEMARNAT = Secretariat of Environment and Natural Resources

SETIQ = Emergency Transportation System for the Chemical Industry

STOT = Specific Target Organ Toxicity

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**End of Safety Data Sheet**