

SAFETY DATA SHEET



1. Identification

Product identifier Mitaban Liquid Concentrate

Other means of identification

Synonyms Mitaban® * Mitaban Liquid * Amitraz Liquid Concentrate

Recommended use Veterinary antiparasitic

Recommended restrictions Not for human use

Manufacturer/Importer/Supplier/Distributor information

Company Name (US) Zoetis Inc.
10 Sylvan Way
Parsippany, New Jersey 07054 (USA)

Rocky Mountain Poison and Drug Center 1-866-531-8896

Product Support/Technical Services 1-800-366-5288

Emergency telephone numbers CHEMTREC (24 hours): 1-800-424-9300
International CHEMTREC (24 hours): +1-703-527-3887

Company Name (EU) Zoetis Belgium S.A.
Mercuriusstraat 20
1930 Zaventem
Belgium

Emergency telephone number International CHEMTREC (24 hours): +1-703-527-3887

Contact E-Mail VMIPSrecords@zoetis.com

2. Hazard(s) identification

Physical hazards	Flammable liquids	Category 2
Health hazards	Acute toxicity, oral	Category 4
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Sensitization, skin	Category 1
	Germ cell mutagenicity	Category 1
	Carcinogenicity	Category 1
	Reproductive toxicity	Category 2
	Specific target organ toxicity, repeated exposure	Category 2 (central nervous system, kidney, liver)
Environmental hazards	Aspiration hazard	Category 1
	Hazardous to the aquatic environment, acute hazard	Category 2
OSHA defined hazards	Hazardous to the aquatic environment, long-term hazard	Category 2
	Not classified.	

Label elements



Signal word Danger

Hazard statement Highly flammable liquid and vapor. Harmful if swallowed. May be fatal if swallowed and enters airways. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child. May cause damage to organs (central nervous system, kidney, liver) through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response

If exposed or concerned: Get medical advice/attention. If swallowed: Immediately call a poison center/doctor. Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. In case of fire: Use appropriate media to extinguish. Collect spillage.

Storage

Store in a well-ventilated place. Keep cool. Store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information

None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Xylenes		1330-20-7	76
Amitraz		33089-61-1	19.9
PROPYLENE OXIDE		75-56-9	1

4. First-aid measures

Inhalation

Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Call a physician or poison control center immediately.

Ingestion

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Never give anything by mouth to a victim who is unconscious or is having convulsions.

Most important symptoms/effects, acute and delayed

Aspiration may cause pulmonary edema and pneumonitis. Narcosis. Behavioral changes. Decrease in motor functions. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash. Edema. Jaundice. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information

For personal protection, see section 8 of the SDS. IF exposed or concerned: Get medical advice/attention. Take off all contaminated clothing immediately. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Highly flammable liquid and vapor.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate the contaminated area. Use appropriate containment to avoid environmental contamination. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	<p>Ensure adequate ventilation. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. Prevent product from entering drains. Prevent entry into waterways, sewer, basements or confined areas.</p> <p>Large Spills: Ground container and transfer equipment to eliminate static electric sparks. Stop the flow of material, if this is without risk. Use water spray to disperse vapors and dilute spill to a nonflammable mixture. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Clean surface thoroughly to remove residual contamination.</p> <p>Small Spills: Absorb spill with vermiculite or other inert material. Clean surface thoroughly to remove residual contamination.</p> <p>Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.</p>
Environmental precautions	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

7. Handling and storage

Precautions for safe handling	<p>Highly flammable. Do not handle until all safety precautions have been read and understood. May be ignited by open flame. Vapors may form explosive mixtures with air. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Use only with adequate ventilation. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment. When using, do not eat, drink or smoke. Wash thoroughly after handling. Observe good industrial hygiene practices. Avoid release to the environment.</p> <p>Also, Industrial use: Static electricity and formation of sparks must be prevented. Take precautionary measures against static discharges. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Ground/bond container and receiving equipment. Use only non-sparking tools. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations.</p> <p>For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code".</p>
--------------------------------------	---

Conditions for safe storage, including any incompatibilities

Store locked up. Keep containers tightly closed in a cool, well-ventilated place. @ 20 - 25C / 68 - 77F. Do not handle or store near an open flame, heat or other sources of ignition. Store away from direct sunlight. Keep away from food, drink and animal feedings. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS).

Also, Industrial use: This material can accumulate static charge which may cause spark and become an ignition source. Take measures to prevent the build up of electrostatic charge. Prevent electrostatic charge build-up by using common bonding and grounding techniques.

8. Exposure controls/personal protection**Occupational exposure limits**

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

Zoetis

Components	Type	Value
Amitraz (CAS 33089-61-1)	TWA	10 µg/m ³

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
PROPYLENE OXIDE (CAS 75-56-9)	PEL	240 mg/m ³
Xylenes (CAS 1330-20-7)	PEL	100 ppm
		435 mg/m ³
		100 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
PROPYLENE OXIDE (CAS 75-56-9)	TWA	2 ppm
Xylenes (CAS 1330-20-7)	STEL	150 ppm
	TWA	100 ppm

Biological limit values**ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
Xylenes (CAS 1330-20-7)	1.5 g/g	Methylhippuric acids	Creatinine in urine	*

* - For sampling details, please see the source document.

Control banding approach

Not available.

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. General ventilation normally adequate. Eye wash fountain and emergency showers are recommended.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Wear safety glasses or goggles if eye contact is possible.

Skin protection**Hand protection**

Wear appropriate chemical resistant gloves. Impervious gloves are recommended if skin contact with drug product is possible and for bulk processing operations.

Other

Wear suitable protective clothing. Impervious protective clothing is recommended if skin contact with drug product is possible and for bulk processing operations.

Respiratory protection

No personal respiratory protective equipment normally required. In case of insufficient ventilation, wear suitable respiratory equipment. Whenever air contamination (mist, vapor or odor) is generated, respiratory protection is recommended as a precaution to minimize exposure. If the applicable Occupational Exposure Limit (OEL) is exceeded, wear an appropriate respirator with a protection factor sufficient to control exposures to below the OEL.

Thermal hazards

Not applicable.

General hygiene considerations

Observe any medical surveillance requirements. When using do not smoke. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties**Appearance**

Physical state	Liquid.
Form	Liquid.
Color	Pale amber brown.

Odor Aromatic.

Odor threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling range Not available.

Flash point 55.4 °F (13.0 °C)

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure Not available.

Vapor density Not available.

Relative density Not available.

Solubility(ies)

Solubility (water) Insoluble

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

Explosive properties Not explosive.

Oxidizing properties Not oxidizing.

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions Hazardous polymerization does not occur.

Conditions to avoid Contact with incompatible materials. Keep away from heat, spark, open flames and other sources of ignition.

Incompatible materials Strong acids. Strong oxidizing agents. Halogens. Peroxides. Phenols.

Hazardous decomposition products Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful. May cause drowsiness and dizziness. Headache. Nausea, vomiting. May cause mucous membrane and respiratory tract irritation.
Skin contact	Causes skin irritation. May cause an allergic skin reaction. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
PROPYLENE OXIDE	Species: Rabbit Severity: Irritant
Xylenes	Species: Rabbit Severity: Moderate
Amitraz	Species: Rabbit Severity: Non-irritating
Eye contact	Causes serious eye irritation.
PROPYLENE OXIDE	Species: Rabbit Severity: Irritant
Amitraz	Species: Rabbit Severity: Non-irritating
Xylenes	Species: Rabbit Severity: Slight

Ingestion Harmful if swallowed. Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

Symptoms related to the physical, chemical and toxicological characteristics Aspiration may cause pulmonary edema and pneumonitis. Narcosis. Behavioral changes. Decrease in motor functions. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash. Edema. Jaundice.

Information on toxicological effects

Acute toxicity May be fatal if swallowed and enters airways.

Product	Species	Test Results
Mitaban Liquid Concentrate		
Acute		
Dermal		
ATE		5000 mg/kg
Inhalation		
ATE		> 5 mg/l
Oral		
ATE		1000 mg/kg
Components	Species	Test Results
Amitraz (CAS 33089-61-1)		
Acute		
Dermal		
LD50	Mouse	1085 mg/kg
	Rabbit	> 200 mg/kg
Inhalation		
LD50	Rat	2.4 mg/L
Intraperitoneal		
LD50	Rat	800 mg/L
Oral		
LD50	Rat	400 mg/kg

Components	Species	Test Results
<u>Chronic</u>		
Oral		
NOAEL	Mouse	15 mg/kg/day, 80 weeks (Effects: Tumors)
		11 mg/kg/day, 104 weeks (Effects: Liver, Tumors)
	Rat	2.5 mg/kg/day, 2 years (Effects: Central nervous system)
<u>Subacute</u>		
Dermal		
NOEL	Rabbit	50 mg/kg/day, 21 days (Effects: Skin, Lymphatic system, Central Nervous System)
<u>Subchronic</u>		
Oral		
LOEL	Rat	12 mg/kg/day, 90 days (Effects: Heart)
NOEL	Dog	0.25 mg/kg/day, 90 days (Effects: Liver, Central Nervous System)
	Mouse	3 mg/kg/day, 90 days (Effects: Liver)
PROPYLENE OXIDE (CAS 75-56-9)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	1245 mg/kg
Inhalation		
LC50	Rat	4000 ppm, 4 hours
Oral		
LD50	Rat	380 mg/kg
<u>Chronic</u>		
Inhalation		
LOEL	Rat	200 ppm, 2 years Tumors, neoplasms
Xylenes (CAS 1330-20-7)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 43 g/kg
Inhalation		
LC50	Rat	6350 ppm
Oral		
LD50	Mouse	1590 mg/kg
	Rat	4.3 - 8.8 g/kg
		3523 - 8600 mg/kg
Skin corrosion/irritation	Causes skin irritation.	
Corrosivity		
Amitraz		Species: Rabbit Severity: Non-irritating
Serious eye damage/eye irritation	Causes serious eye irritation.	
Eye Contact		
PROPYLENE OXIDE		Species: Rabbit Severity: Irritant
Amitraz		Species: Rabbit Severity: Non-irritating

Eye Contact

Xylenes

Species: Rabbit

Severity: Slight

Respiratory or skin sensitization**ACGIH sensitization**

PROPYLENE OXIDE (CAS 75-56-9)

Dermal sensitization

Respiratory sensitization

Not a respiratory sensitizer.

Skin sensitization

May cause an allergic skin reaction.

Germ cell mutagenicity

May cause genetic defects.

Mutagenicity

Amitraz

In Vitro Bacterial Mutagenicity (Ames)

Result: Negative

Species: Salmonella

Xylenes

In Vitro Bacterial Mutagenicity (Ames)

Result: Negative

Species: Salmonella

PROPYLENE OXIDE

In Vitro Bacterial Mutagenicity (Ames)

Result: Positive

Species: Salmonella , E. coli

Amitraz

In Vitro Chromosome Aberration

Result: Negative

Species: Human Lymphocytes

PROPYLENE OXIDE

In Vitro Chromosome Aberration

Result: Positive

Species: Human Lymphocytes

In Vitro Mammalian Cell Mutagenicity

Result: Positive

Species: Mouse Lymphoma

In Vitro Sister Chromatid Exchange

Result: Positive

Species: Human Lymphocytes

Xylenes

In Vivo Chromosome Aberration

Result: Negative

Species: Rat Bone Marrow

In Vivo Dominant Lethal Assay

Result: Negative

Species: Mouse

In Vivo Micronucleus

Result: Negative

Species: Mouse

PROPYLENE OXIDE

In Vivo

Result: Positive

Species: Mouse Bone Marrow

Amitraz

Mammalian Cell Mutagenicity

Result: Negative

Species: Mouse Lymphoma

Unscheduled DNA Synthesis (Human embryonic cells)

Result: Negative

Carcinogenicity

May cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

PROPYLENE OXIDE (CAS 75-56-9)

2B Possibly carcinogenic to humans.

Xylenes (CAS 1330-20-7)

3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

PROPYLENE OXIDE (CAS 75-56-9)

Reasonably Anticipated to be a Human Carcinogen.

Reproductive toxicity

Components in this product have been shown to cause birth defects and reproductive disorders in laboratory animals. Suspected of damaging fertility or the unborn child.

Developmental effects

Amitraz

12 mg/kg/day Embryo / Fetal Development, Not Teratogenic
Result: NOAEL
Species: Rabbit
Organ: Oral

20 mg/kg/day Prenatal & Postnatal Development,
Developmental toxicity
Result: LOAEL
Species: Rat
Organ: Oral

30 mg/kg/day Embryo / Fetal Development, Not teratogenic
Result: NOAEL
Species: Rat
Organ: Oral

Reproductivity

Amitraz

20 mg/kg/day Reproductive & Fertility, Fertility
Result: NOAEL
Species: Rat
Organ: Oral

Specific target organ toxicity - single exposure

Not classified.

Specific target organ toxicity - repeated exposure

May cause damage to organs (central nervous system, kidney, liver) through prolonged or repeated exposure.

Aspiration hazard

May be fatal if swallowed and enters airways.

Chronic effects

Prolonged exposure may cause chronic effects.

Further information

CAUTION! May be harmful if absorbed through skin. Breathing high vapor concentrations may cause central nervous system (CNS) depression resulting in dizziness, light-headedness, headache, nausea, and loss of coordination. Continued inhalation may result in unconsciousness and death. Adverse effects most commonly reported in clinical use include sedation and skin effects.

12. Ecological information

Ecotoxicity

Toxic to aquatic life with long lasting effects. Avoid release to the environment.

Components	Species	Test Results
Amitraz (CAS 33089-61-1)	LC50 Lepomis macrochirus (Bluegill Sunfish)	0.34 ppm, 96 Hours
	Oncorhynchus mykiss (Rainbow Trout)	0.74 ppm, 96 Hours
PROPYLENE OXIDE (CAS 75-56-9)	EC50 Daphnia magna (Water Flea)	350 mg/L, 48 Hours
	LC50 Salmo gairdneri (Trout)	52 mg/L, 96 Hours
Xylenes (CAS 1330-20-7)	LC50 Oncorhynchus mykiss (Rainbow Trout)	13.5 mg/L, 96 Hours
	Pimephales promelas (Fathead Minnow)	42 mg/L, 96 Hours
Aquatic		
Fish	LC50 Bluegill (Lepomis macrochirus)	7.711 - 9.591 mg/l, 96 hours

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential

No data available for this product.

Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Avoid release to the environment. Do not discharge into drains, water courses or onto the ground. Do not contaminate ponds, waterways or ditches with chemical or used container. Considering the relevant known environmental and human health hazards of the material, review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure and environmental release. It is recommended that waste minimization be practiced. The best available technology should be utilized to prevent environmental releases. This may include destructive techniques for waste and wastewater. Dispose of contents/container in accordance with local/regional/national/international regulations. Waste of this product may qualify as a RCRA Hazardous Waste. Status should be confirmed by testing for RCRA hazardous characteristics (i.e. corrosivity, toxicity, reactivity, or ignitability).
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT	
UN number	UN1993
UN proper shipping name	Flammable liquid, n.o.s. (Xylenes, Propylene oxide RQ = 10000 LBS)
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	II
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling. Excepted Quantity.
IATA	
UN number	UN1993
UN proper shipping name	Flammable liquid, n.o.s. (Xylenes, Propylene oxide)
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	II
Environmental hazards	No.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling. Excepted Quantity.
IMDG	
UN number	UN1993
UN proper shipping name	Flammable liquid, n.o.s. (Xylenes, Propylene oxide), MARINE POLLUTANT (Xylenes, Amitraz), Limited Quantity
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Packing group	II
Environmental hazards	
Marine pollutant	Yes
EmS	F-E, S-E
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not established.

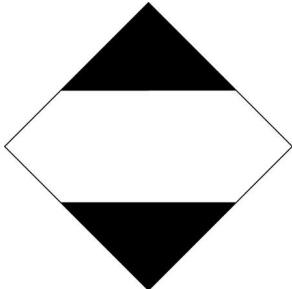
DOT



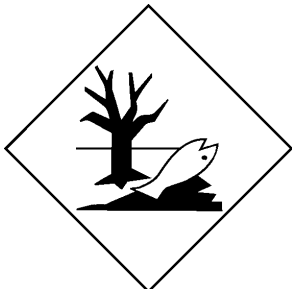
IATA



IMDG



Marine pollutant



General information

Excepted Quantity. IMDG Regulated Marine Pollutant. Marine pollutant requirements apply only to quantities >5 Liters for liquids / >5 Kilograms for solids (per inner package) when shipped as per IMDG or ADR (effective year 2015 or greater) regulations. Transport according to the requirements of the appropriate regulatory body.

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

PROPYLENE OXIDE (CAS 75-56-9)

Listed.

Xylenes (CAS 1330-20-7)

Listed.

SARA 304 Emergency release notification

PROPYLENE OXIDE (CAS 75-56-9)

100 LBS

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
 Immediate Hazard - Yes
 Delayed Hazard - Yes
 Fire Hazard - Yes
 Pressure Hazard - No
 Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity (pounds)	Threshold planning quantity (pounds)	Threshold planning quantity, lower value (pounds)	Threshold planning quantity, upper value (pounds)
PROPYLENE OXIDE	75-56-9	100	10000		

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Amitraz	33089-61-1	19.9
PROPYLENE OXIDE	75-56-9	1
Xylenes	1330-20-7	76

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

PROPYLENE OXIDE (CAS 75-56-9)
 Xylenes (CAS 1330-20-7)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

PROPYLENE OXIDE (CAS 75-56-9)

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

PROPYLENE OXIDE (CAS 75-56-9) Listed: October 1, 1988

US - California Proposition 65 - CRT: Listed date/Developmental toxin

Amitraz (CAS 33089-61-1) Listed: March 30, 1999

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

PROPYLENE OXIDE (CAS 75-56-9)
 Xylenes (CAS 1330-20-7)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 06-08-2017

Material name: Mitaban Liquid Concentrate

384 Version #: 01 Issue date: 06-08-2017

SDS US

12 / 13

Version #	01
List of abbreviations	ATE: Acute Toxicity Estimate according to REGULATION (EC) No 1272/2008 (CLP).
Disclaimer	Zoetis Inc. believes that the information contained in this Safety Data Sheet is accurate, and while it is provided in good faith, it is without warranty of any kind, expressed or implied. If data for a hazard are not included in this document there is no known information at this time. The information in the sheet was written based on the best knowledge and experience currently available.
Revision information	This document has undergone significant changes and should be reviewed in its entirety.