

SPOTLEAK® 1001**1. PRODUCT AND COMPANY IDENTIFICATION****Company**

Arkema Canada Inc.
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Thio and Fine Chemicals

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Emergency Information

Transportation: CANUTEC: (613) 996-6666
(24 hrs., 7 days a week)

Medical: Rocky Mountain Poison Center: (866) 767-5089
(24 hrs., 7 days a week)

Product Information

Product name: SPOTLEAK® 1001
Synonyms: Not available
Molecular formula: Mixture
Chemical family: mercaptans
Product use: Odour agents

2. HAZARDS IDENTIFICATION**Emergency Overview**

Color: Colourless to yellow.
Physical state: liquid
Odor: strong, stinging

***Classification of the substance or mixture:**

Flammable liquid., Category 2, H225
Eye irritation, Category 2A, H319
Skin sensitisation, Category 1, H317
Chronic aquatic toxicity, Category 2, H411

*For the full text of the H-Statements mentioned in this Section, see Section 16.

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GHS-Labeling

Hazard pictograms:



Signal word:

Danger**Hazard statements:**

- H225 : Highly flammable liquid and vapour.
- H317 : May cause an allergic skin reaction.
- H319 : Causes serious eye irritation.
- H411 : Toxic to aquatic life with long lasting effects.

Supplemental Hazard Statements:

- Objectionable odor may cause nausea, headache or dizziness.
- May displace oxygen and cause rapid suffocation.

SPOTLEAK® 1001**Precautionary statements:****Prevention:**

P210 : Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233 : Keep container tightly closed.
P240 : Ground/bond container and receiving equipment.
P241 : Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 : Use only non-sparking tools.
P243 : Take precautionary measures against static discharge.
P261 : Avoid breathing gas/mist/vapours/spray.
P264 : Wash skin thoroughly after handling.
P272 : Contaminated work clothing should not be allowed out of the workplace.
P273 : Avoid release to the environment.
P280 : Wear protective gloves/ eye protection/ face protection.

Response:

P303 + P361 + P353 : IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P305 + P351 + P338 : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333 + P313 : If skin irritation or rash occurs: Get medical advice/ attention.
P337 + P313 : If eye irritation persists: Get medical advice/ attention.
P363 : Wash contaminated clothing before reuse.
P370 + P378 : In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P391 : Collect spillage.

Storage:

P403 + P235 : Store in a well-ventilated place. Keep cool.

Disposal:

P501 : Dispose of contents/ container to an approved waste disposal plant.

Supplemental information:**Potential Health Effects:**

Objectionable odor may cause nausea, headache or dizziness. Vapor is heavier than air and can cause suffocation by reducing oxygen available for breathing.
May also cause: chest discomfort, accumulation of fluid in the lungs, (severity of effects depends on extent of exposure).

3. COMPOSITION/INFORMATION ON INGREDIENTS

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Chemical Name	CAS-No.	Wt/Wt	GHS Classification**
2-Propanethiol, 2-methyl-	75-66-1	>= 78 - <= 80 %	H225, H317, H411
Methane, thiobis-	75-18-3	>= 18 - < 20 %	H225, H319

**For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

4.1. Description of necessary first-aid measures:

Inhalation:

If inhaled, remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Skin:

In case of contact, immediately flush skin with soap and plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eyes:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Ingestion:

If swallowed, DO NOT induce vomiting. Get medical attention. Never give anything by mouth to an unconscious person.

4.2. Most important symptoms/effects, acute and delayed:

For most important symptoms and effects (acute and delayed), see Section 2 (Hazard Statements and Supplemental Information) and Section 11 (Toxicology Information) of this SDS.

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

Unless otherwise noted in Notes to Physician, no specific treatment noted; treat symptomatically.

SPOTLEAK® 1001**5. FIREFIGHTING MEASURES****Extinguishing media (suitable):**

Carbon dioxide (CO₂), Foam, Dry chemical

Extinguishing media (unsuitable):

High volume water jet

Protective equipment:

Fire fighters and others who may be exposed to products of combustion should wear full fire fighting turn out gear (full Bunker Gear) and self-contained breathing apparatus (pressure demand / NIOSH approved or equivalent).

Further firefighting advice:

Cool closed containers exposed to fire with water spray.

Do not use a solid water stream as it may scatter and spread fire.

Closed containers of this material may explode when subjected to heat from surrounding fire.

After a fire, wait until the material has cooled to room temperature before initiating clean-up activities.

Do not allow run-off from fire fighting to enter drains or water courses.

Fire fighting equipment should be thoroughly decontaminated after use.

Hazardous combustion products:

Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by heat, pilot lights, and other flames and ignition sources at locations distant from material handling point.

Vapours may form explosive mixture with air.

When burned, the following hazardous products of combustion can occur:

Carbon oxides

sulfur oxides

hydrogen sulfide

6. ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures:**

Prevent further leakage or spillage if you can do so without risk. Evacuate area of all unnecessary personnel. Eliminate all ignition sources. Ventilate area only if odor control is not an issue. Cover spill area with closed-cell foam to reduce odors (use of Aqueous Film Forming Foam (AFFF) with polymeric layer is acceptable). If foam is unavailable, absorb spill with liquid-binding material (e.g. diatomaceous earth, saw dust universal binder) and deodorize residue on ground with 3-10% hydrogen peroxide. Wash with water and recover it. If spill is contained within a large containment area, add 5% bleach solution (sodium hypochlorite) in a 50 parts bleach solution to one part product dilution ratio. Swimming pool chemicals (hypochlorite compounds) work effectively in deodorizing product. If these are applied to product, the crystals must be accompanied by sufficient water of dilution so that the considerable heat of reaction will be absorbed. Enzyme or bacteria based deodorizers are also acceptable for use. Sweep or scoop up using non-sparking tools and place into suitable properly labeled containers for prompt disposal. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Consult a regulatory specialist to determine appropriate provincial or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

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Appropriate personal protective equipment is set forth in Section 8.

6.2. Methods and materials for containment and cleaning up:**Methods for cleaning up:**

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

Elimination: See chapter 13

7. HANDLING AND STORAGE**Handling****General information on handling:**

Avoid breathing vapor or mist.

Avoid contact with eyes.

Avoid prolonged or repeated contact with skin.

Keep away from heat, sparks and flames.

No smoking.

Keep container closed.

Use only with adequate ventilation.

Wash thoroughly after handling.

Check that all equipment is properly grounded and installed to satisfy electrical classification requirements.

Container hazardous when empty.

Follow label warnings even after container is emptied.

Do not enter confined spaces unless adequately ventilated.

RESIDUAL VAPORS MAY EXPLODE ON IGNITION.

DO NOT CUT, DRILL, GRIND, OR WELD ON OR NEAR THIS CONTAINER.

Improper disposal or reuse of this container may be dangerous and/or illegal.

Emptied container retains vapor and product residue.

Storage**General information on storage conditions:**

Keep in a dry, cool place. Keep away from direct sunlight. Keep container closed when not in use. Store in closed containers, in a secure area to prevent container damage and subsequent spillage. Store in well ventilated area away from heat and sources of ignition such as flame, sparks and static electricity. Ensure that all storage and handling equipment is properly grounded and installed to satisfy electrical classification requirements. Static electricity may accumulate when transferring material. All metal and groundable storage containers, including but not limited to drums, cylinders, Returnable Intermodal Bulk Containers (RIBCs) and Class C Flexible Intermodal Bulk Containers (FIBCs) must be bonded and grounded during filling and emptying operations.

Storage incompatibility – General:

Store separate from: Strong oxidizing agents

Acids (concentrated solutions)

Alkali metals

Bases

Reducing agents

Hypochlorites

Nitric acid

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Hydrogen peroxide

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Airborne Exposure Guidelines:****Methane, thiobis- (75-18-3)**

US. ACGIH Threshold Limit Values

Time weighted average 10 ppm

Only those components with exposure limits are printed in this section. Limits with skin contact designation above have skin contact effect. Air sampling alone is insufficient to accurately quantitate exposure. Measures to prevent significant cutaneous absorption may be required. Limits with a sensitizer designation above mean that exposure to this material may cause allergic reactions.

Engineering controls:

Investigate engineering techniques to reduce exposures below airborne exposure limits or to otherwise reduce exposures. Provide ventilation if necessary to minimize exposures or to control exposure levels to below airborne exposure limits (if applicable see above). If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment.

Monitor carbon monoxide and oxygen levels in tanks and enclosed spaces. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

Respiratory protection:

Avoid breathing vapor or mist., Where airborne exposure is likely or airborne exposure limits are exceeded (if applicable, see above), use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical goggles., Consult respirator manufacturer to determine appropriate type equipment for a given application., Observe respirator use limitations specified by NIOSH or the manufacturer., For emergency and other conditions where there may be a potential for significant exposure or where exposure limit may be significantly exceeded, use an approved full face positive-pressure, self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply.

Skin protection:

Wear appropriate chemical resistant protective clothing and chemical resistant gloves to prevent skin contact. Consult glove manufacturer to determine appropriate type glove material for given application. Wear chemical goggles, a face shield, and chemical resistant clothing such as a rubber apron when splashing may occur. Rinse immediately if skin is contaminated. Remove contaminated clothing immediately and wash before reuse. Clean protective equipment before reuse. Provide a safety shower at any location where skin contact can occur. Wash thoroughly after handling.

Eye protection:

Where there is potential for eye contact, wear chemical goggles and have eye flushing equipment immediately available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Product code: 001001

Version 2.0

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Color:	Colourless to yellow.
Physical state:	liquid
Odor:	strong, stinging
Odor threshold:	0.1 ppb
Flash point	< 0 °F (< -18 °C) (Tag closed cup)
Auto-ignition temperature:	464 °F (240 °C)
Lower flammable limit (LFL):	Not determined
Upper flammable limit (UFL):	Not determined
pH:	not determined
Density:	0.816 g/cm ³ (59.9 °F (15.5 °C))
Specific Gravity (Relative density):	No data available
Vapor pressure:	460 mmHg (100.0 °F (37.8 °C))
Vapor density:	not determined
Initial boiling point/boiling range:	= 122 - 156.0 °F (50 - 68.9 °C)
Melting point/range:	No data available
Freezing point:	No data available
Evaporation rate:	No data available
Solubility in water:	Negligible
Solubility in other solvents: [qualitative and quantitative]	Soluble in: Ethyl ether Alcohols
Viscosity, dynamic:	No data available
% Volatiles:	100 %
Oil/water partition coefficient:	No data available.

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Thermal decomposition: 842 °F (450 °C)

Flammability (solid, gas): Not applicable

Flammability (liquids): See GHS Classification in Section 2

10. STABILITY AND REACTIVITY**Reactivity/Stability:**

This material is chemically stable under normal and anticipated storage, handling and processing conditions.

Hazardous reactions:

None known.

Materials to avoid:

- Reacts violently with :
Strong oxidizing agents
Acids
Bases
Reducing agents
Hydrogen peroxide
Nitric acid
Hypochlorites
Alkali metals

Conditions / hazards to avoid:

Keep away from heat and sources of ignition. To avoid thermal decomposition, do not overheat.

Hazardous decomposition products:

Thermal decomposition giving flammable and toxic products :
Carbon oxides
sulfur oxides
hydrogen sulfide

11. TOXICOLOGICAL INFORMATION

Data on this material and/or its components are summarized below.

Oral:

Acute toxicity estimate > 5,000 mg/kg.

Data for 2-Propanethiol, 2-methyl- (75-66-1)**Acute toxicity****Oral:**

May be harmful if swallowed.. (rat) LD50 = 4,729 mg/kg.

Dermal:

No deaths occurred.. (rabbit) LD0 > 2,000 mg/kg.

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Inhalation:

Practically nontoxic.. (rat) 4 h LC50 = 82 - 98 mg/l. (vapor)

Skin Irritation:

Not irritating.. (rabbit) Irritation Index: 0/8. (4 h) (occluded exposure)

Eye Irritation:

Causes mild eye irritation.. (rabbit)

Skin Sensitization:

May cause an allergic skin reaction.. Buehler method. (guinea pig) Skin allergy was observed.

May cause allergic skin reaction.. LLNA: Local Lymph Node Assay. (mouse) Produced an allergic reaction.

Repeated dose toxicity

Subchronic inhalation administration to rat / affected organ(s): kidney / signs: inflammation, degeneration, increased organ weight / (not considered relevant to humans)

Repeated oral administration to rat / affected organ(s): kidney / signs: hyaline droplet nephropathy / (not considered relevant to humans)

Genotoxicity**Assessment in Vitro:**

No genetic changes were observed in laboratory tests using: bacteria, animal cells

Genotoxicity**Assessment in Vivo:**

No genetic changes were observed in laboratory tests using: mice

Developmental toxicity

Exposure during pregnancy. inhalation (rat and mouse) / No birth defects were observed.
Reproductive/Developmental Effects Screening Assay. oral (rat) / No birth defects were observed.

Reproductive effects

Reproductive/Developmental Effects Screening Assay. oral (rat) / No toxicity to reproduction.

Other information

Due to the viscosity, this substance may present an aspiration hazard.
Symptoms of aspiration may include increased breathing and heart rate, coughing and related signs of respiratory distress.

Data for Methane, thiobis- (75-18-3)**Acute toxicity****Oral:**

Harmful if swallowed.. (rat and mouse) LD50 = 535 - 3,700 mg/kg.

Dermal:

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Practically nontoxic.. (Rabbit) LD50 > 5,000 mg/kg.

Inhalation:

Practically nontoxic.. (Rat) 4 h LC50 = 102.3 mg/l (40250 ppm). (vapor)

Skin Irritation:

Practically non-irritating.. (Rabbit) Irritation Index: 0.4/8. (24 h)

Eye Irritation:

Causes serious eye irritation.. (Rabbit)

Repeated dose toxicity

Subchronic oral administration to Rat / No adverse systemic effects reported.

Genotoxicity**Assessment in Vitro:**

No genetic changes were observed in laboratory tests using: bacteria, animal cells

Genotoxicity**Assessment in Vivo:**

No genetic changes were observed in laboratory tests using: mice

Developmental toxicity

Exposure during pregnancy. Oral (Rat) / No birth defects were observed.

Other information

Due to the viscosity, this substance may present an aspiration hazard.

Symptoms of aspiration may include increased breathing and heart rate, coughing and related signs of respiratory distress.

Human experience**Skin contact:**

No skin allergy was observed. (repeated or prolonged exposure)

12. ECOLOGICAL INFORMATION**Chemical Fate and Pathway**

Data on this material and/or its components are summarized below.

Data for 2-Propanethiol, 2-methyl- (75-66-1)**Biodegradation:**

Not readily biodegradable. (63 d) biodegradation 6 %

Data for Methane, thiobis- (75-18-3)**Biodegradation:**

Readily biodegradable. (28 d) biodegradation 67 - 77 %

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Octanol Water Partition Coefficient:
log Pow: = 0.84(Method: calculated)

Ecotoxicology

Data on this material and/or its components are summarized below.

Data for 2-Propanethiol, 2-methyl- (75-66-1)

Aquatic toxicity data:
Harmful. Oncorhynchus mykiss (rainbow trout) 96 h LC50 = 34 mg/l

Aquatic invertebrates:
Toxic. Daphnia magna (Water flea) 48 h EC50 = 6.7 mg/l

Algae:
Harmful. Pseudokirchneriella subcapitata (green algae) 72 h EC50 = 24 mg/l

Data for Methane, thiobis- (75-18-3)

Aquatic toxicity data:
Practically nontoxic. Oncorhynchus mykiss (rainbow trout) 96 h LC50 = 213 mg/l

Aquatic invertebrates:
Harmful. Daphnia magna (Water flea) 48 h LC50 = 29 - 81 mg/l

Algae:
Practically nontoxic. Pseudokirchneriella subcapitata (green algae) 72 h EC50 > 113 mg/l

13. DISPOSAL CONSIDERATIONS

Waste disposal:
Disposal via incineration is recommended. Dispose of in accordance with federal, provincial and local regulations. Consult a regulatory specialist to determine appropriate provincial or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits. Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, provincial and local waste disposal requirements may be more restrictive or otherwise different from federal laws and regulations.

14. TRANSPORT INFORMATION

Canadian Transportation of Dangerous Goods (TDG)

UN Number	:	3336
Proper shipping name	:	Mercaptans, liquid, flammable, n.o.s.
Technical name	:	(tert-Butylmercaptan)
Class	:	3
Packaging group	:	II
Marine pollutant	:	no

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International Maritime Dangerous Goods Code (IMDG)

UN Number : 3336
Proper shipping name : MERCAPTANS, LIQUID, FLAMMABLE, N.O.S.
 Technical name : (T-BUTYLMERCAPTAN)
Class : 3
Packaging group : II
Marine pollutant : no
Flash point : < 0 °F (< -18 °C) Tag closed cup

15. REGULATORY INFORMATION

Chemical Inventory Status

EU. EINECS	EINECS	Conforms to
United States TSCA Inventory	TSCA	The components of this product are all on the TSCA Inventory.
Canadian Domestic Substances List (DSL)	DSL	All components of this product are on the Canadian DSL
China. Inventory of Existing Chemical Substances in China (IECSC)	IECSC (CN)	Conforms to
Japan. ENCS - Existing and New Chemical Substances Inventory	ENCS (JP)	Conforms to
Japan. ISHL - Inventory of Chemical Substances	ISHL (JP)	Conforms to
Korea. Korean Existing Chemicals Inventory (KECI)	KECI (KR)	Conforms to
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	PICCS (PH)	Conforms to
Australia Inventory of Chemical Substances (AICS)	AICS	Conforms to
New Zealand. Inventory of Chemical Substances	NZIOC	Conforms to

Canada - Federal Regulations

National Pollution Release Inventory (NPRI)

<u>Chemical name</u>	<u>CAS-No.</u>
Methane, thiobis-	75-18-3

16. OTHER INFORMATION

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Full text of H-Statements referred to under sections 2 and 3.

H225 Highly flammable liquid and vapour.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H411 Toxic to aquatic life with long lasting effects.

Miscellaneous:

Other information: Refer to National Fire Protection Association (NFPA) Codes 30, 70, 77, and 497 for safe handling.

Latest Revision(s):

Reference number: 200010554
Date of Revision: 04/27/2017
Date Printed: 04/28/2017

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