

**Scentinel® TB Gas Odorant**

Version 2.0

Revision Date 2018-12-04

SECTION 1: Identification of the substance/mixture and of the company/undertaking**Product information**

Product Name : Scentinel® TB Gas Odorant
Material : 1119678, 1086437, 1086436, 1103087, 1103086, 1103855,
1024798, 1024799

Use : Odorant

Company : Chevron Phillips Chemical Company LP
Specialty Chemicals
10001 Six Pines Drive
The Woodlands, TX 77380

Local : CHEVRON PHILLIPS CHEMICALS ASIA PTE. LTD.
C/O DONG WOO CORPORATION
#B-2601, JEONGJAIL-RO,
BUNDANG-GU, SEONGNAMI-SI,
GYEONGGI-DO, 13557
SOUTH KOREA
Telephone no.: +612-9186-1132

Emergency telephone:**Health:**

866.442.9628 (North America)
1.832.813.4984 (International)

Transport:

CHEMTREC 800.424.9300 or 703.527.3887(int'l)
Asia: CHEMWATCH (+612 9186 1132) China: 0532 8388 9090
EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)
Mexico CHEMTREC 01-800-681-9531 (24 hours)
South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600
Argentina: +(54)-1159839431

Responsible Department : Product Safety and Toxicology Group
E-mail address : SDS@CPChem.com
Website : www.CPChem.com

ODOR-FADE WARNING

A GAS LEAK CAN CAUSE A FIRE OR EXPLOSION RESULTING IN SERIOUS INJURY OR DEATH.

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Be aware that the stenching chemical added to gas to make it detectable may not warn of a gas leak or the presence of propane or natural gas to all persons in every instance.

Instances where the odorant in an odorized gas may be undetectable include:

- Odor intensity may fade or be eliminated for a variety of chemical and physical causes, including the oxidation of rusting pipes, adsorption into or sticking onto the interior of pipes or appliances, or absorption into liquids.
- Contact with soil in underground leaks may de-odorize or remove odorant from the gas.
- Some people have a diminished ability, or inability to smell the stench. Factors that negatively affect a person's sense of smell include age, gender, medical conditions, and alcohol/tobacco usage.
- The stench of odorized gas may not awaken sleeping persons.
- Other odors may mask or hide the stench.
- Exposure to the odor for even a short period of time, may cause nasal fatigue, where a person can no longer smell the stench.

Gas detectors listed by the Underwriters Laboratories (UL) can be used as an extra measure of safety for detecting gas leaks, especially under conditions where the odorant alone may not provide an adequate warning. Gas detectors emit a loud, shrill sound when gas is present and do not depend on sense of smell. Because the odor intensity can fade or people may have problems with their sense of smell, we recommend installing, per manufacturer's instructions, one or more combustible gas detectors, in suitable locations to ensure adequate coverage to detect gas leaks.

Educate yourself, your employees, and your customers with the content of this warning and other important facts associated with the so-called "odor-fade phenomenon."

SECTION 2: Hazards identification**Classification of the substance or mixture**

Standards for classification and labeling of chemical substances and material safety data sheet (ministry of employment and labor public notice No. 2013-37) (GHS 2009)

Classification

- : Flammable liquids, Category 2
- Acute toxicity, Category 4, Inhalation
- Acute toxicity, Category 4, Dermal
- Skin irritation, Category 2
- Eye irritation, Category 2
- Skin sensitization, Category 1
- Aspiration hazard, Category 2
- Long-term (chronic) aquatic hazard, Category 2

Labeling

Symbol(s)



Signal Word

: Danger

Hazard Statements

- : H225: Highly flammable liquid and vapor.
- H305: May be harmful if swallowed and enters airways.
- H312: Harmful in contact with skin.
- H315: Causes skin irritation.
- H317: May cause an allergic skin reaction.
- H319: Causes serious eye irritation.

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H332: Harmful if inhaled.
H411: Toxic to aquatic life with long lasting effects.

Precautionary Statements : **Prevention:**
P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Response:
P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331: Do NOT induce vomiting.
P370 + P378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
Storage:
P403 + P233: Store in a well-ventilated place. Keep container tightly closed.
Disposal:
P501: Dispose of contents/ container to an approved waste disposal plant.

Please refer to the MSDS/SDS for further precautionary phrases

SECTION 3: Composition/information on ingredients

Synonyms : Scentinel® T-70 Gas Odorant

Molecular formula : Mixture

Chemical name	CAS-No.	Concentration	KECI Number
Tetrahydrothiophene	110-01-0	70%	KE-33509
t-Butyl Mercaptan	75-66-1	30%	KE-24873

SECTION 4: First aid measures

General advice : Move out of dangerous area. Consult a physician. Show this material safety data sheet to the doctor in attendance. Symptoms of poisoning may appear several hours later. Do not leave the victim unattended.

If inhaled : Call a physician or poison control center immediately. Move to fresh air. If unconscious, place in recovery position and seek medical advice.

In case of skin contact : If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.

In case of eye contact : Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear. Do NOT induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. Take victim immediately to hospital.

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SECTION 5: Firefighting measures

Flash point	: < -17.8 °C (< -0.0 °F) Method: Tagliabue Open Cup
Autoignition temperature	: No data available
Suitable extinguishing media	: Dry chemical. Carbon dioxide (CO ₂). Alcohol-resistant foam.
Unsuitable extinguishing media	: High volume water jet.
Specific hazards during fire fighting	: Do not allow run-off from fire fighting to enter drains or water courses.
Special protective equipment for fire-fighters	: Wear self-contained breathing apparatus for firefighting if necessary.
Further information	: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.
Fire and explosion protection	: Do not spray on an open flame or any other incandescent material. Use only explosion-proof equipment. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Keep away from open flames, hot surfaces and sources of ignition.
Hazardous decomposition products	: Carbon oxides. Sulfur oxides.

SECTION 6: Accidental release measures

Personal precautions	: Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.
Environmental precautions	: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
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).

SECTION 7: Handling and storage**Handling**

SDS Number:100000014177

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Advice on safe handling : Avoid formation of aerosol. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations. Persons susceptible to skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Advice on protection against fire and explosion : Do not spray on an open flame or any other incandescent material. Use only explosion-proof equipment. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Keep away from open flames, hot surfaces and sources of ignition.

Storage

Requirements for storage areas and containers : Prevent unauthorized access. No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

Use : Odorant

SECTION 8: Exposure controls/personal protection**Ingredients with workplace control parameters****Chevron Phillips Chemical Company LP**

Components	Basis	Value	Control parameters	Note
t-Butyl Mercaptan	Manufacturer	TWA	0.5 ppm,	

KR

Components	Basis	Value	Control parameters	Note
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Engineering measures

Adequate ventilation to control airborne concentrations below the exposure guidelines/limits. Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

Personal protective equipment

Respiratory protection : Wear a supplied-air NIOSH approved respirator unless ventilation or other engineering controls are adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure. Wear a NIOSH approved respirator that provides protection when working with this

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	material if exposure to harmful levels of airborne material may occur, such as:. Air-Purifying Respirator for Organic Vapors. Use a positive pressure, air-supplying respirator if there is potential for uncontrolled release, exposure levels are not known, or other circumstances where air-purifying respirators may not provide adequate protection.
Hand protection	: The suitability for a specific workplace should be discussed with the producers of the protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Eye protection	: Eye wash bottle with pure water. Tightly fitting safety goggles. Wear face-shield and protective suit for abnormal processing problems.
Skin and body protection	: Choose body protection according to the amount and concentration of the dangerous substance at the work place. Wear as appropriate:. Protective suit. Safety shoes.
Hygiene measures	: Avoid contact with skin, eyes and clothing. When using do not eat or drink. When using do not smoke. Wash hands before breaks and immediately after handling the product.

SECTION 9: Physical and chemical properties**Information on basic physical and chemical properties****Appearance**

Physical state	: Liquid
Color	: Colorless
Odor	: Pungent

Safety data

Flash point	: < -17.8 °C (< -0.0 °F) Method: Tagliabue Open Cup
Lower explosion limit	: No data available
Upper explosion limit	: No data available
Oxidizing properties	: no
Autoignition temperature	: No data available
Thermal decomposition	: No data available
Molecular formula	: Mixture
Molecular weight	: Not applicable
pH	: Not applicable

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Freezing point	: No data available
Pour point	No data available
Boiling point/boiling range	: 85 °C (185 °F)
Vapor pressure	: 20.00 mbar at 20 °C (68 °F) 3.60 PSI at 50 °C (122 °F)
Relative density	: 0.94 at 15.6 °C (60.1 °F)
Water solubility	: Insoluble
Partition coefficient: n-octanol/water	: No data available
Viscosity, kinematic	: No data available
Relative vapor density	: 3.04 (Air = 1.0)
Evaporation rate	: No data available
Percent volatile	: > 99 %

SECTION 10: Stability and reactivity

Chemical stability : This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Possibility of hazardous reactions

Hazardous reactions : Hazardous reactions: Hazardous polymerization does not occur.

Further information: No decomposition if stored and applied as directed.

Hazardous reactions: Vapors may form explosive mixture with air.

Conditions to avoid : No data available.

Thermal decomposition : No data available

Hazardous decomposition products : Carbon oxides
Sulfur oxides

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Other data : No decomposition if stored and applied as directed.

SECTION 11: Toxicological information**Scentinel® TB Gas Odorant****Acute oral toxicity**

: Acute toxicity estimate: 2,600 mg/kg
Method: Calculation method

Acute toxicity estimate: > 2,000 mg/kg
Method: Calculation method

Scentinel® TB Gas Odorant**Acute inhalation toxicity**

: Acute toxicity estimate: 15 mg/l
Test atmosphere: vapor
Method: Calculation method

Scentinel® TB Gas Odorant**Acute dermal toxicity**

: Acute toxicity estimate: 1,500 mg/kg
Method: Calculation method

Scentinel® TB Gas Odorant**Skin irritation**

: May cause skin irritation and/or dermatitis.

Scentinel® TB Gas Odorant**Eye irritation**

: May cause irreversible eye damage.

Scentinel® TB Gas Odorant**Sensitization**

: Causes sensitization.

Repeated dose toxicity**Tetrahydrothiophene**

: Species: Rat, Male and female
Sex: Male and female
Application Route: Inhalation
Dose: 0, 51, 236, 1442 ppm
Exposure time: 13 wk
Number of exposures: 6 h/d, 5 d/wk
NOEL: 51 ppm
Method: OECD Guideline 413
Target Organs: Upper respiratory tract

t-Butyl Mercaptan

Species: Rat, Male and female
Sex: Male and female
Application Route: Inhalation
Dose: 9, 97, 196 ppm
Exposure time: 13 wks
Number of exposures: 6 hrs/d, 5 d/wk
NOEL: > 196 ppm

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Species: Rat, Male and female
 Sex: Male and female
 Application Route: oral gavage
 Dose: 10, 50, 200 mg/kg bw/day
 Exposure time: 42-53 days
 Number of exposures: Daily
 NOEL: 50 mg/kg bw/day
 Lowest observable effect level: 200 mg/kg bw/day
 Method: OECD Guideline 422

Species: Rat, Male and female
 Sex: Male and female
 Application Route: Inhalation
 Dose: 25.1, 99.6, 403.4 ppm
 Exposure time: 13 wks
 Number of exposures: 6 hrs/d, 5 d/wk
 NOEL: 99.6 ppm
 Lowest observable effect level: 403.4 ppm
 Method: OECD Guideline 413
 Target Organs: Liver, Kidney, Blood, Upper respiratory tract
 Information given is based on data obtained from similar substances.

Genotoxicity in vitro

Tetrahydrothiophene

: Test Type: Ames test
 Method: Mutagenicity (Escherichia coli - reverse mutation assay)
 Result: negative

Test Type: Cytogenetic assay
 Result: negative

Test Type: HGPRT assay
 Result: negative

Test Type: Sister Chromatid Exchange Assay
 Method: OECD Guideline 473
 Result: negative

Test Type: Unscheduled DNA synthesis assay
 Result: negative

t-Butyl Mercaptan

Test Type: Mouse lymphoma assay
 Metabolic activation: with and without metabolic activation
 Result: negative

Test Type: Sister Chromatid Exchange Assay
 Metabolic activation: with and without metabolic activation
 Result: negative

Test Type: Ames test
 Metabolic activation: with and without metabolic activation
 Result: negative

Genotoxicity in vivo

t-Butyl Mercaptan

: Test Type: Mouse micronucleus assay
 Species: Mouse

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Dose: 1250, 2500, 5000 mg/kg
 Method: Mutagenicity (micronucleus test)
 Result: negative

Reproductive toxicity

t-Butyl Mercaptan : Species: Rat
 Sex: male and female
 Application Route: oral gavage
 Dose: 10, 50, 200 mg/kg bw/day
 Number of exposures: Daily
 Test period: 42 -53 days
 Method: OECD Guideline 422
 NOAEL Parent: 200 mg/kg bw/day
 NOAEL F1: 50 mg/kg bw/day
 No adverse effects expected

Developmental Toxicity

Tetrahydrothiophene : Species: Rat
 Application Route: Inhalation
 Dose: 234, 782, 1910 ppm
 Method: OECD Guideline 414
 NOAEL Teratogenicity: 1910 ppm
 NOAEL Maternal: 234 ppm
 No adverse effects expected

t-Butyl Mercaptan : Species: Mouse
 Application Route: Inhalation
 Dose: 11, 99, 195 ppm
 Exposure time: GD 6-16
 Number of exposures: 6 hrs/d
 NOAEL Teratogenicity: > = 195 ppm
 NOAEL Maternal: > = 195 ppm

Species: Rat
 Application Route: Inhalation
 Dose: 11, 99, 195 ppm
 Exposure time: GD6-19
 Number of exposures: 6 hrs/d
 NOAEL Teratogenicity: > =195 ppm
 NOAEL Maternal: > = 195 ppm

Species: Rat
 Application Route: oral gavage
 Dose: 10, 50, 200 mg/kg bw/day
 Exposure time: 42-53 days
 Number of exposures: Daily
 NOAEL Teratogenicity: 50 mg/kg bw /day
 NOAEL Maternal: 200 mg/kg bw /day

**Scentinel® TB Gas Odorant
Aspiration toxicity**

: May be harmful if swallowed and enters airways.
 Substances known to cause human aspiration toxicity hazards
 or to be regarded as if they cause human aspiration toxicity
 hazard.

CMR effects

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Tetrahydrothiophene	: Mutagenicity: Tests on bacterial or mammalian cell cultures did not show mutagenic effects. Teratogenicity: Animal testing did not show any effects on fetal development. Reproductive toxicity: Animal testing did not show any effects on fertility.
t-Butyl Mercaptan	Carcinogenicity: Not available Mutagenicity: Did not show mutagenic effects in animal experiments. Teratogenicity: Did not show teratogenic effects in animal experiments. Reproductive toxicity: No toxicity to reproduction
Scentinel® TB Gas Odorant Further information	: Solvents may degrease the skin.

SECTION 12: Ecological information**Toxicity to fish**

Tetrahydrothiophene	: LC50: > 24 mg/l Exposure time: 96 h Species: Danio rerio (Zebra Fish) Method: OECD Test Guideline 203
t-Butyl Mercaptan	LC50: 34 mg/l Exposure time: 96 h Species: Oncorhynchus mykiss (rainbow trout) semi-static test Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates

Tetrahydrothiophene	: EC50: 24 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) Method: OECD Test Guideline 202
t-Butyl Mercaptan	EC50: 6.7 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) static test Method: OECD Test Guideline 202

Toxicity to algae

Tetrahydrothiophene	: EC50: > 153.2 mg/l Exposure time: 72 h Species: Pseudokirchneriella subcapitata (green algae) Method: OECD Test Guideline 201
t-Butyl Mercaptan	EC50: 24 mg/l Exposure time: 72 h Species: Pseudokirchneriella subcapitata (green algae) Method: OECD Test Guideline 201

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Toxicity to bacteria

Tetrahydrothiophene : EC50: 1,530 mg/l
Exposure time: 3 h
Respiration inhibition
Method: OECD Test Guideline 209

Biodegradability : This material is not expected to be readily biodegradable.

Elimination information (persistence and degradability)

Bioaccumulation

Tetrahydrothiophene : Bioaccumulation is unlikely.

t-Butyl Mercaptan : Bioconcentration factor (BCF): 12
Bioaccumulation is unlikely.

Mobility

Tetrahydrothiophene : The product will be dispersed amongst the various environmental compartments (soil/ water/ air).

t-Butyl Mercaptan : The product will be dispersed amongst the various environmental compartments (soil/ water/ air).

Results of PBT assessment

Tetrahydrothiophene : Non-classified PBT substance, Non-classified vPvB substance

t-Butyl Mercaptan : Non-classified PBT substance, Non-classified vPvB substance

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Toxic to aquatic life with long lasting effects.

Ecotoxicology Assessment

Short-term (acute) aquatic hazard

t-Butyl Mercaptan : Toxic to aquatic life.

Long-term (chronic) aquatic hazard

Tetrahydrothiophene : Harmful to aquatic life with long lasting effects.

t-Butyl Mercaptan : Toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

The information in this SDS pertains only to the product as shipped.

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Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

- Product : The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.
- Contaminated packaging : Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

SECTION 14: Transport information

The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).

Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.) Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the SDS and the bill of lading.

US DOT (UNITED STATES DEPARTMENT OF TRANSPORTATION)

UN3336, MERCAPTAN MIXTURE, LIQUID, FLAMMABLE, N.O.S.,
(TETRAHYDROTHIOPHENE, TERTIARY BUTYL MERCAPTAN), 3, II

IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)

UN3336, MERCAPTAN MIXTURE, LIQUID, FLAMMABLE, N.O.S.,
(TETRAHYDROTHIOPHENE, TERTIARY BUTYL MERCAPTAN), 3, II, (< -17.8 °C), MARINE
POLLUTANT, (TERTIARY BUTYL MERCAPTAN)

IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)

UN3336, MERCAPTAN MIXTURE, LIQUID, FLAMMABLE, N.O.S.,
(TETRAHYDROTHIOPHENE, TERTIARY BUTYL MERCAPTAN), 3, II

ADR (AGREEMENT ON DANGEROUS GOODS BY ROAD (EUROPE))

UN3336, MERCAPTAN MIXTURE, LIQUID, FLAMMABLE, N.O.S.,
(TETRAHYDROTHIOPHENE, TERTIARY BUTYL MERCAPTAN), 3, II, (D/E),
ENVIRONMENTALLY HAZARDOUS, (TERTIARY BUTYL MERCAPTAN)

RID (REGULATIONS CONCERNING THE INTERNATIONAL TRANSPORT OF DANGEROUS GOODS (EUROPE))

UN3336, MERCAPTAN MIXTURE, LIQUID, FLAMMABLE, N.O.S., (TETRAHYDROTHIOPHENE,
TERTIARY BUTYL MERCAPTAN), 3, II, ENVIRONMENTALLY HAZARDOUS, (TERTIARY
BUTYL MERCAPTAN)

ADN (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS)

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UN3336, MERCAPTAN MIXTURE, LIQUID, FLAMMABLE, N.O.S.,
(TETRAHYDROTHIOPHENE, TERTIARY BUTYL MERCAPTAN), 3, II, ENVIRONMENTALLY
HAZARDOUS, (TERTIARY BUTYL MERCAPTAN)

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information**National legislation****Regulation under the Occupational Safety and Health Act**

A Material Safety Datasheet (MSDS) for this product is not required according to article 41 of the ISHA.

Regulation	Chemical name	Threshold limits
Harmful Substances Prohibited from Manufacturing	: Not relevant	
Harmful Substances Required Permission for Manufacture	: Not relevant	

Act on the Registration and Evaluation, etc. of Chemical Substances, Chemicals Control Act

Regulation	Chemical name	Threshold limits
Toxic Chemicals	: Not relevant	
Prohibited Chemicals	: Not relevant	
Observational chemicals	: Not relevant	
Restricted Chemicals	: Not relevant	
Toxic Release Inventory	: Not relevant	

Dangerous Substances Safety Management Act

Dangerous Substances : Flammable liquids, Type 1 petroleums, Water insoluble liquid
Safety Management Act

Notification status

Europe REACH	: On the inventory, or in compliance with the inventory
United States of America (USA) TSCA	: On the inventory, or in compliance with the inventory
Canada DSL	: On the inventory, or in compliance with the inventory
Australia AICS	: On the inventory, or in compliance with the inventory
New Zealand NZIoC	: On the inventory, or in compliance with the inventory
Japan ENCS	: On the inventory, or in compliance with the inventory
Korea KECI	: On the inventory, or in compliance with the inventory
Philippines PICCS	: On the inventory, or in compliance with the inventory
China IECSC	: On the inventory, or in compliance with the inventory

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SECTION 16: Other information**Further information**

Legacy SDS Number : E027

Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information in this SDS pertains only to the product as shipped.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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

ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50	Lethal Concentration 50%		