

**Tertiary Butyl Mercaptan**

Version 1.9

Revision Date 2022-07-19

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

Product Name : Tertiary Butyl Mercaptan  
Material : 1069500, 1086416, 1086415, 1070007, 1064730, 1021473,  
1021470, 1017940, 1036143, 1024807, 1021472, 1021471,  
1024806, 1021469, 1028495, 1021474, 1027458, 1029711,  
1017329, 1021468

Use : Chemical intermediate, Odorant

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

Local : See Company Address

**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

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

EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Austria: VIZ +43 1 406 43 43 (24 hours/day, 7 days/week)

Belgium: 070 245 245 (24 hours/day, 7 days/week)

Bulgaria: +359 2 9154 233

Croatia: +3851 2348 342 (24 hours/day, 7 days/week)

Cyprus: 1401

Czech Republic: Toxicological Information Center +420 224 919 293, +420 224 915 402

Denmark: Danish Poison Center (Giftlinjen): +45 8212 1212

Estonia: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Finland: 0800 147 111 09 471 977 (24 hours/day)

France: ORFILA number (INRS): + 33 (0) 1 45 42 59 59 (24 hours/day, 7 days/week)

Germany: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Greece: (0030) 2107793777 (24 hours/day, 7 days/week)

Hungary: +36-80-201-199 (24 hours/day, 7 days/week)

Iceland: 543 2222 (24 hours/day, 7 days/week)

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Ireland: BIG +32.14.584545 (phone) or +32.14583516 (telefax)  
 Italy: BIG +32.14.584545 (phone) or +32.14583516 (telefax)  
 Latvia: State Fire and Rescue Service, phone number: 112; Toxicology and Sepsis Clinic  
 Poisoning and Drug Information Center, Hipokrāta 2, Riga, Latvia, LV-1038, phone number +371  
 67042473. (24 hours.)  
 Liechtenstein: BIG +32.14.584545 (phone) or +32.14583516 (telefax)  
 Lithuania: +370 (85) 2362052  
 Luxembourg: (+352) 8002 5500 (24 hours/day, 7 days/week)  
 Malta: +356 2395 2000  
 The Netherlands: NVIC: +31 (0)88 755 8000  
 Norway: 22 59 13 00 (24 hours/day, 7 days/week)  
 Poland: BIG +32.14.584545 (phone) or +32.14583516 (telefax)  
 Portugal: CIAV phone number: +351 800 250 250  
 Romania: +40213183606  
 Slovakia: +421 2 5477 4166  
 Slovenia: Phone number: 112  
 Spain: National Emergency Telephone Number of Spanish Poison Centre: +34 91 562 04 20 (24  
 hours/day, 7 days/week)  
 Sweden: 112 – ask for Poisons Information

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

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

**GHS Classification and labelling according to JIS Z 7252-2019 and JIS Z 7253-2019 (GHS 2015)**

**Classification**

: Flammable liquids, Category 2  
 Serious eye damage/eye irritation, Category 2B  
 Skin sensitization, Category 1  
 Specific target organ toxicity - single exposure, Category 3,  
 Respiratory tract irritation, Narcotic effects  
 Specific target organ toxicity - repeated exposure, Category 2,  
 Blood system, Liver  
 Short-term (acute) aquatic hazard, Category 2  
 Long-term (chronic) aquatic hazard, Category 2

**Labeling**

Symbol(s)



Signal Word

: Danger

Hazard Statements

: H225: Highly flammable liquid and vapor.  
 H317: May cause an allergic skin reaction.  
 H320: Causes eye irritation.  
 H335: May cause respiratory irritation.  
 H336: May cause drowsiness or dizziness.  
 H373: May cause damage to organs (Blood system, Liver)  
 through prolonged or repeated exposure.

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H411: Toxic to aquatic life with long lasting effects.

**Precautionary Statements****: Prevention:**

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P233: Keep container tightly closed.  
 P240: Ground and bond container and receiving equipment.  
 P241: Use explosion-proof electrical/ ventilating/ lighting/ equipment.  
 P242: Use non-sparking tools.  
 P243: Take action to prevent static discharges.  
 P260: Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.  
 P264: Wash skin thoroughly after handling.  
 P271: Use only outdoors or in a well-ventilated area.  
 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): Take off immediately all contaminated clothing. Rinse skin with water.  
 P304 + P340 + P312: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.  
 P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P314: Get medical advice/ attention if you feel unwell.  
 P333 + P313: If skin irritation or rash occurs: Get medical advice/ attention.  
 P337 + P313: If eye irritation persists: Get medical advice/ attention.  
 P362 + P364: Take off contaminated clothing and wash it before reuse.  
 P370 + P378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.  
 P391: Collect spillage.

**Storage:**

P403 + P233: Store in a well-ventilated place. Keep container tightly closed.  
 P403 + P235: Store in a well-ventilated place. Keep cool.  
 P405: Store locked up.

**Disposal:**

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

**SECTION 3: Composition/information on ingredients**

Synonyms : t-Butyl Mercaptan  
 tert-Butanethiol  
 2-Methyl Propane-2-Thiol  
 TBM  
 TC4SH  
 tert-Butyl Mercaptan

Molecular formula : C<sub>4</sub>H<sub>10</sub>S

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Chemical name	CAS-No.	Concentration	ENCS/ISHL number
t-Butyl Mercaptan	75-66-1	99 % - 100%	2-464

**SECTION 4: First aid measures**

- General advice : Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. Material may produce a serious, potentially fatal pneumonia if swallowed or vomited.
- If inhaled : If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.
- In case of skin contact : 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. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

**SECTION 5: Firefighting measures**

- Flash point : -26°C (-15°F) estimated
- Autoignition temperature : No data available
- Suitable extinguishing media : Alcohol-resistant foam. Carbon dioxide (CO<sub>2</sub>). Dry chemical.
- 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 a naked flame or any incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot

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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**

- 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 a naked flame or any incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.

**Storage**

- Requirements for storage areas and containers : 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 : Chemical intermediate, Odorant

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**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,	

**JP**

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 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, aerosolization, 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.
- Skin and body protection : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Wear as appropriate: Remove and wash contaminated clothing before re-use. Skin should be washed after contact. Footwear protecting against chemicals.
- Hygiene measures : When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

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

SDS Number:100000013356

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Form : liquid  
Physical state : liquid  
Color : clear  
Odor : Repulsive

**Safety data**

Flash point : -26°C (-15°F)  
estimated

Lower explosion limit : No data available

Upper explosion limit : No data available

Oxidizing properties : No

Autoignition temperature : No data available

Molecular formula : C<sub>4</sub>H<sub>10</sub>S

Molecular weight : 90.2 g/mol

pH : Not applicable

Pour point : No data available

Boiling point/boiling range : 63-65°C (145-149°F)

Vapor pressure : 5.90 PSI  
at 38°C (100°F)

Relative density : 0.81  
at 16 °C (61 °F)

Water solubility : negligible

Partition coefficient: n-  
octanol/water : No data available

Relative vapor density : 3  
(Air = 1.0)

Evaporation rate : 1

Percent volatile : > 99 %

**SECTION 10: Stability and reactivity**

**Reactivity** : Stable under recommended storage conditions.

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- 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.  
Hazardous reactions: Vapors may form explosive mixture with air.
- Conditions to avoid** : Heat, flames and sparks.  
**Hazardous decomposition products** : Carbon oxides  
Sulfur oxides
- Other data** : No decomposition if stored and applied as directed.

**SECTION 11: Toxicological information****Acute oral toxicity**

t-Butyl Mercaptan : LD50: 4,729 mg/kg  
Species: Rat  
Sex: male

**Acute inhalation toxicity**

t-Butyl Mercaptan : LC50: 98.3 mg/l  
Exposure time: 4 h  
Species: Rat  
Sex: male and female  
Test atmosphere: vapor  
Method: OECD Test Guideline 403

LC50: 81.9 mg/l  
Exposure time: 4 h  
Species: Rat  
Sex: male  
Test atmosphere: vapor  
Method: OECD Test Guideline 403

LC50: 60.9 mg/l  
Exposure time: 4 h  
Species: Mouse  
Sex: male  
Test atmosphere: vapor  
Method: OECD Test Guideline 403

**Acute dermal toxicity**

t-Butyl Mercaptan : LD50: > 2,000 mg/kg  
Species: Rabbit



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**Skin irritation**

t-Butyl Mercaptan : No skin irritation

**Eye irritation**

t-Butyl Mercaptan : Mild eye irritation

**Sensitization**

t-Butyl Mercaptan : The product is a skin sensitizer, sub-category 1B.

**Repeated dose toxicity**

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

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**

t-Butyl Mercaptan : Test Type: Ames test  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 471  
Result: negative

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Test Type: Mouse lymphoma assay  
 Metabolic activation: with and without metabolic activation  
 Method: OECD Test Guideline 476  
 Result: negative

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

**Genotoxicity in vivo**

t-Butyl Mercaptan : Test Type: Mouse micronucleus assay  
 Species: Mouse  
 Dose: 1250, 2500, 5000 mg/kg  
 Method: OECD Test Guideline 474  
 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**

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

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- Aspiration toxicity** : May be harmful if swallowed and enters airways.
- CMR effects**
- t-Butyl Mercaptan : Carcinogenicity: Not available  
 Mutagenicity: Tests on bacterial or mammalian cell cultures did not show mutagenic effects., In vivo tests did not show mutagenic effects  
 Reproductive toxicity: No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.
- Tertiary Butyl Mercaptan Further information** : Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness, cessation of breathing. Solvents may decrease the skin.

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

- 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**

- 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**

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

**Biodegradability**

- t-Butyl Mercaptan : aerobic  
 Result: Not readily biodegradable.  
 6 %  
 Testing period: 63 d  
 Method: OECD Test Guideline 301

**Bioaccumulation**

- t-Butyl Mercaptan : Bioconcentration factor (BCF): 12  
 Method: QSAR modeled data

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This material is not expected to bioaccumulate.

**Mobility**

t-Butyl Mercaptan : Method: Calculation, Mackay Level III Fugacity Model  
The product will be dispersed amongst the various environmental compartments (soil/ water/ air).

**Results of PBT assessment**

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

Additional ecological information : 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**

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.

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)**

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UN2347, BUTYL MERCAPTAN, 3, II

**IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)**

UN2347, BUTYL MERCAPTAN, 3, II, (-26 °C c.c.), MARINE POLLUTANT, (TERTIARY BUTYL MERCAPTAN)

**IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)**

UN2347, BUTYL MERCAPTAN, 3, II

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

UN2347, BUTYL MERCAPTAN, 3, II, (D/E), ENVIRONMENTALLY HAZARDOUS, (TERTIARY BUTYL MERCAPTAN)

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

33, UN2347, BUTYL MERCAPTAN, 3, II, ENVIRONMENTALLY HAZARDOUS, (TERTIARY BUTYL MERCAPTAN)

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

UN2347, BUTYL MERCAPTAN, 3, II, ENVIRONMENTALLY HAZARDOUS, (TERTIARY BUTYL MERCAPTAN)

**Maritime transport in bulk according to IMO instruments****SECTION 15: Regulatory information****National legislation****Poisonous and Deleterious Substances Control Law**

: Not applicable

**Industrial Safety and Health Law**

Substances Subject to be : Not applicable

Notified Names

Enforcement Order of the : Inflammable Substance

Industrial Safety and Health

Law - Attached table 1

(Dangerous Substances)

Enforcement Order of the : Inflammable Substance

Industrial Safety and Health

Law - Attached table 1

(Dangerous Substances)

Harmful Substances Required : Not applicable

Permission for Manufacture

Hazardous Substances : Not applicable

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Subject to Labeling Requirements

Ordinance on Prevention of Organic Solvent Poisoning : Not applicable

Ordinance on Prevention of Lead Poisoning : Not applicable

Harmful Substances Prohibited from Manufacture : Not applicable

Ordinance on Prevention of Hazards Due to Specified Chemical Substances : Not applicable

Ordinance on Prevention of Tetraalkyl Lead Poisoning : Not applicable

: Not applicable

: Not applicable

Substances Prevented From Impairment of Health : Not applicable Listed

**Chemical Substance Control Law**

: Not applicable for Specified Chemical Substance, Monitoring Chemical Substance and Priority Assessment Chemical Substance.

**Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof**

: Not applicable

**Other regulations**

Fire Service Law : Flammable liquids  
Type 1 petroleums  
Hazardous rank II

High Pressure Gas Safety Act : Not applicable

Explosive Control Law : Not applicable

Vessel Safety Law : Flammable liquids (Article 2 and 3 of rules on shipping and storage of dangerous goods and its Attached Table 1)

Aviation Law : Flammable liquid (Article 194 of The Enforcement Rules of Aviation Law and its Attached Table 1)

**Notification status**

Europe REACH : This product is in full compliance according to REACH regulation 1907/2006/EC.

Switzerland CH INV : On the inventory, or in compliance with the inventory

United States of America (USA) : On or in compliance with the active portion of the TSCA inventory

Other AIIC : On the inventory, or in compliance with the inventory

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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	:	All substances in this product were registered, notified to be registered, or exempted from registration by CPChem through an Only Representative according to K-REACH regulations. Importation of this product is permitted if the Korean Importer of Record was included on CPChem's notifications or if the Importer of Record themselves notified the substances.
Philippines PICCS	:	On the inventory, or in compliance with the inventory
Taiwan TCSI	:	On the inventory, or in compliance with the inventory
China IECSC	:	On the inventory, or in compliance with the inventory

**SECTION 16: Other information****Further information**

Legacy SDS Number : 95900

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	TLV	Threshold Limit Value

**Tertiary Butyl Mercaptan**

Version 1.9

Revision Date 2022-07-19

	on Cancer		
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%		