### SAFETY DATA SHEET



## Thiophane

Version 2.8

Revision Date 2022-08-18

#### SECTION 1: Identification of the substance/mixture and of the company/undertaking **Product information** Product Name : Thiophane : 1017948, 1103850, 1027462 Material Company : Chevron Phillips Chemical Company LP Specialty Chemicals 10001 Six Pines Drive The Woodlands, TX 77380 **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) 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) SDS Number:10000068738 1/14

SAFETY	DATA	SHEET

# Thiophane Version 2.8

Revision Date 2022-08-18

Malta: +356 2395 2000 The Netherlands: NVIC: Norway: 22 59 13 00 (24 Poland: BIG +32.14.5845 Portugal: CIAV phone nu Romania: +40213183606 Slovakia: +421 2 5477 4 Slovenia: Phone number	2 5500 (24 hours/day, 7 days/week) +31 (0)88 755 8000 hours/day, 7 days/week) 545 (phone) or +32.14583516 (telefax) imber: +351 800 250 250 5 166 : 112 hcy Telephone Number of Spanish Poison Centre: +34 91 562 04 20 (24
Responsible Department E-mail address Website	<ul> <li>Product Safety and Toxicology Group</li> <li>SDS@CPChem.com</li> <li>www.CPChem.com</li> </ul>
CTION 2: Hazards identifica	tion
•	<ul> <li>tance or mixture</li> <li>sified in accordance with the hazard communication standard 29 CFR bels contain all the information as required by the standard.</li> <li>Flammable liquids, Category 2 Acute toxicity, Category 4, Oral Skin irritation, Category 2 Eye irritation, Category 2A</li> </ul>
Labeling	
Labeling Symbol(s)	
-	: Danger
Symbol(s)	: Danger : H225: Highly flammable liquid and vapor. H302: Harmful if swallowed. H315: Causes skin irritation. H319: Causes serious eye irritation.
Symbol(s) Signal Word	<ul> <li>H225: Highly flammable liquid and vapor.</li> <li>H302: Harmful if swallowed.</li> <li>H315: Causes skin irritation.</li> </ul>

iophane sion 2.8		Revision Date 2022-08
	CENTER/ doctor if you fe P303 + P361 + P353 I immediately all contamina shower. P305 + P351 + P338 I water for several minutes and easy to do. Continue P337 + P313 If eye irrit attention. P362 Take off contamin P370 + P378 In case o alcohol-resistant foam to <b>Storage:</b> P403 + P235 Store in a <b>Disposal:</b>	F SWALLOWED: Call a POISON el unwell. Rinse mouth. F ON SKIN (or hair): Take off ated clothing. Rinse skin with water/ F IN EYES: Rinse cautiously with . Remove contact lenses, if present rinsing. :ation persists: Get medical advice/ mated clothing and wash before reuse. f fire: Use dry sand, dry chemical or
Carcinogenicity:		
IARC	equal to 0.1% is identified a	t present at levels greater than or as probable, possible or confirmed
NTP		: of present at levels greater than or as a known or anticipated carcinogen
CTION 3: Composition/infe	ormation on ingredients	
Synonyms	: Tetrahydrothiophene Thiophane THT	
Molecular formula	: C4H8S	
	: C4H8S CAS-No.	Weight %
Molecular formula Component Tetrahydrothiophene		Weight % 99 - 100
Component	CAS-No. 110-01-0	
Component Tetrahydrothiophene	CAS-No. 110-01-0 es : Move out of dangerous at sheet to the doctor in atte	
Component Tetrahydrothiophene CTION 4: First aid measure	CAS-No. 110-01-0 es : Move out of dangerous al sheet to the doctor in atte serious, potentially fatal p : Consult a physician after	99 - 100 rea. Show this material safety data ndance. Material may produce a
Component Tetrahydrothiophene CTION 4: First aid measure General advice	CAS-No.     110-01-0  es      Move out of dangerous at     sheet to the doctor in atte     serious, potentially fatal p      Consult a physician after     place in recovery position	99 - 100 rea. Show this material safety data ndance. Material may produce a neumonia if swallowed or vomited. significant exposure. If unconscious, and seek medical advice. all a physician. If on skin, rinse well
Component Tetrahydrothiophene CTION 4: First aid measur General advice	CAS-No. 110-01-0  es  Consult of dangerous and sheet to the doctor in attered serious, potentially fatal p  Consult a physician aftered place in recovery position  If skin irritation persists, construction with water. If on clothes,  Immediately flush eye(s) for the series. Protect unharmediately flush eye(s) for the series series and the series series and the series series series and the series s	99 - 100 rea. Show this material safety data ndance. Material may produce a neumonia if swallowed or vomited. significant exposure. If unconscious, and seek medical advice. all a physician. If on skin, rinse well

iophane	SAFETY DATA S	ЛЕ
rsion 2.8	Revision Date 2022	-08
If swallowed	: Keep respiratory tract clear. Never give anything by mouth to an unconscious person. If symptoms persist, call a physiciar Take victim immediately to hospital.	
CTION 5: Firefighting measu	es	
Flash point	: 13°C (55°F) Method: Tag closed cup	
Autoignition temperature	: 215°C (419°F) at 1,013.00 hPa Method: EU Method A.15	
Suitable extinguishing media	: Alcohol-resistant foam. Carbon dioxide (CO2). Dry chemica	l.
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 cas 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, he surfaces and sources of ignition.	
Hazardous decomposition products	: Carbon oxides. Sulfur oxides.	
CTION 6: Accidental release	neasures	
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.	v
Environmental precautions	: Prevent product from entering drains. Prevent further leakag 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	
S Number:100000068738	4/14	

liophane		SAFETY DATA SHEE
rsion 2.8		Revision Date 2022-08-1
		absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).
Additional advice	:	No conditions to be specially mentioned.
CTION 7: Handling and store	age	
Handling		
Advice on safe handling	:	Avoid formation of aerosol. Do not breathe vapors/dust. 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.
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.
CTION 8: Exposure controls	s/per	sonal protection
CTION 8: Exposure controls	s/per	sonal protection
CTION 8: Exposure controls Engineering measures	s/per	sonal protection
Engineering measures Adequate ventilation to cont Consider the potential hazar activities, and other substan personal protective equipme exposure to harmful levels of recommended. The user sh	trol a rds o nces i ent. I of this nould	irborned concentrations below the exposure guidelines/limits. If this material (see Section 2), applicable exposure limits, job in the work place when designing engineering controls and selectir If engineering controls or work practices are not adequate to preve is material, the personal protective equipment listed below is read and understand all instructions and limitations supplied with is usually provided for a limited time or under certain circumstances
Engineering measures Adequate ventilation to cont Consider the potential hazar activities, and other substan personal protective equipme exposure to harmful levels of recommended. The user sh	trol al rds o nces i ent. I of this nould tion is	irborned concentrations below the exposure guidelines/limits. If this material (see Section 2), applicable exposure limits, job in the work place when designing engineering controls and selectir of engineering controls or work practices are not adequate to preve s material, the personal protective equipment listed below is read and understand all instructions and limitations supplied with s usually provided for a limited time or under certain circumstances
Engineering measures Adequate ventilation to cont Consider the potential hazar activities, and other substan personal protective equipme exposure to harmful levels of recommended. The user sh the equipment since protect	trol al rds o nces i ent. I of this nould tion is	irborned concentrations below the exposure guidelines/limits. If this material (see Section 2), applicable exposure limits, job in the work place when designing engineering controls and selectir of engineering controls or work practices are not adequate to preve s material, the personal protective equipment listed below is read and understand all instructions and limitations supplied with s usually provided for a limited time or under certain circumstances

niophane	
ersion 2.8	Revision Date 2022-08-
	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:. Flame retardant antistatic protective clothing. Workers should wear antistatic footwear.
Hygiene measures	: When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.
	mical properties sical and chemical properties
	mical properties sical and chemical properties
Information on basic phy	
Information on basic phy Appearance Form Physical state Color	sical and chemical properties : liquid : liquid : Colorless
Information on basic phy Appearance Form Physical state Color Odor	sical and chemical properties : liquid : liquid : Colorless
Information on basic phy Appearance Form Physical state Color Odor Safety data	sical and chemical properties : liquid : liquid : Colorless : Pungent : 13°C (55°F)
Information on basic phy Appearance Form Physical state Color Odor Safety data Flash point	sical and chemical properties : liquid : liquid : Colorless : Pungent : 13°C (55°F) Method: Tag closed cup
Information on basic phy Appearance Form Physical state Color Odor Safety data Flash point Lower explosion limit	sical and chemical properties : liquid : liquid : Colorless : Pungent : 13°C (55°F) Method: Tag closed cup : 1.1 %(V)
Information on basic phy Appearance Form Physical state Color Odor Safety data Flash point Lower explosion limit Upper explosion limit	sical and chemical properties : liquid : liquid : Colorless : Pungent : 13°C (55°F) Method: Tag closed cup : 1.1 %(V) : 12.3 %(V)
Information on basic phy Appearance Form Physical state Color Odor Safety data Flash point Lower explosion limit Upper explosion limit Oxidizing properties	sical and chemical properties : liquid : liquid : Colorless : Pungent : 13°C (55°F) Method: Tag closed cup : 1.1 %(V) : 12.3 %(V) : No : 215°C (419°F) at 1,013.00 hPa
Information on basic phy Appearance Form Physical state Color Odor Safety data Flash point Lower explosion limit Upper explosion limit Oxidizing properties Autoignition temperature	sical and chemical properties : liquid : liquid : Colorless : Pungent : 13°C (55°F) Method: Tag closed cup : 1.1 %(V) : 12.3 %(V) : No : 215°C (419°F) at 1,013.00 hPa Method: EU Method A.15
Information on basic phy Appearance Form Physical state Color Odor Safety data Flash point Lower explosion limit Upper explosion limit Oxidizing properties Autoignition temperature Molecular formula	sical and chemical properties : liquid : liquid : Colorless : Pungent : 13°C (55°F) Method: Tag closed cup : 1.1 %(V) : 12.3 %(V) : No : 215°C (419°F) at 1,013.00 hPa Method: EU Method A.15 : C4H8S
Information on basic phy Appearance Form Physical state Color Odor Safety data Flash point Lower explosion limit Upper explosion limit Oxidizing properties Autoignition temperature Molecular formula Molecular weight	sical and chemical properties : liquid : liquid : Colorless : Pungent : 13°C (55°F) Method: Tag closed cup : 1.1 %(V) : 12.3 %(V) : No : 215°C (419°F) at 1,013.00 hPa Method: EU Method A.15 : C4H8S : 88.1 g/mol

iophane sion 2.8	Revision Date 2022-0
Boiling point/boiling range	: 119°C (246°F)
Vapor pressure	: 5.51 kPa at 38°C (100°F)
Density	: 1 g/cm3
Water solubility	: 5.8 g/l at 20°C (68°F) Method: OECD Test Guideline 105
Partition coefficient: n- octanol/water	: Pow: 1.8 at 20°C (68°F)
Viscosity, dynamic	: 1.6 mPa.s at 20°C (68°F)
Viscosity, kinematic	: No data available
Relative vapor density	: No data available
Evaporation rate	: No data available
Percent volatile	: > 99 %
TION 10: Stability and react	
TION 10: Stability and react Reactivity	: Stable under recommended storage conditions.
Reactivity	<ul> <li>Stable under recommended storage conditions.</li> <li>This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.</li> </ul>
Reactivity Chemical stability	<ul> <li>Stable under recommended storage conditions.</li> <li>This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.</li> </ul>
Reactivity Chemical stability Possibility of hazardous rea	<ul> <li>Stable under recommended storage conditions.</li> <li>This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.</li> <li>actions</li> <li>Hazardous reactions: Hazardous polymerization does not</li> </ul>
Reactivity Chemical stability Possibility of hazardous rea	<ul> <li>Stable under recommended storage conditions.</li> <li>This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.</li> <li>actions</li> <li>Hazardous reactions: Hazardous polymerization does not occur. Hazardous reactions: Vapors may form explosive mixture with</li> </ul>
Reactivity Chemical stability Possibility of hazardous rea Hazardous reactions	<ul> <li>Stable under recommended storage conditions.</li> <li>This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.</li> <li>actions <ul> <li>Hazardous reactions: Hazardous polymerization does not occur.</li> <li>Hazardous reactions: Vapors may form explosive mixture with air.</li> <li>Heat, flames and sparks.</li> <li>May react with oxygen and strong oxidizing agents, such as</li> </ul> </li> </ul>
Reactivity Chemical stability Possibility of hazardous rea Hazardous reactions	<ul> <li>Stable under recommended storage conditions.</li> <li>This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.</li> <li>actions</li> <li>Hazardous reactions: Hazardous polymerization does not occur.</li> <li>Hazardous reactions: Vapors may form explosive mixture with air.</li> <li>Heat, flames and sparks.</li> </ul>
Reactivity Chemical stability Possibility of hazardous rea Hazardous reactions Conditions to avoid Materials to avoid Hazardous decomposition	<ul> <li>Stable under recommended storage conditions.</li> <li>This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.</li> <li>actions</li> <li>Hazardous reactions: Hazardous polymerization does not occur. Hazardous reactions: Vapors may form explosive mixture with air.</li> <li>Heat, flames and sparks.</li> <li>May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.</li> <li>Carbon oxides</li> </ul>

# Thiophane

Version 2.8

SAFETY DATA SHEET

Revision Date 2022-08-18

CTION 11: Toxicological information		
Acute oral toxicity		
Tetrahydrothiophene	: LD50: 1,850 mg/kg Species: Rat Sex: male and female Method: OECD Test Guideline 401	
Acute inhalation toxicity		
Tetrahydrothiophene	: LC50: 22.6 mg/l Exposure time: 4 h Species: Rat Sex: male and female Test atmosphere: vapor Method: OECD Test Guideline 403	
Skin irritation		
Tetrahydrothiophene	: Skin irritation	
<b>Eye irritation</b> Tetrahydrothiophene	: Eye irritation	
Sensitization		
Tetrahydrothiophene	: Did not cause sensitization on laboratory animals. Information given is based on data obtained from simila substances. negative	
Repeated dose toxicity		
Tetrahydrothiophene	<ul> <li>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</li> </ul>	
Genotoxicity in vitro		
Tetrahydrothiophene	: Test Type: Ames test Method: Mutagenicity (Escherichia coli - reverse mutationassay) Result: negative	

SDS Number:100000068738

iophane	SAFETY DATA SHE
sion 2.8	Revision Date 2022-08
	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
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
Thiophane Aspiration toxicity	: May be harmful if swallowed and enters airways.
CMR effects	
Tetrahydrothiophene	<ul> <li>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.</li> </ul>
Thiophane Further information	: Solvents may degrease the skin.
CTION 12: Ecological inform	nation
Toxicity to fish	
-	$\cdot$ 1 CE0: $\sim 24$ mg/
Tetrahydrothiophene	: LC50: > 24 mg/l Exposure time: 96 h Species: Danio rerio (Zebra Fish) Method: OECD Test Guideline 203
Toxicity to daphnia and ot	her aquatic invertebrates
Tetrahydrothiophene	: EC50: 24 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) Method: OECD Test Guideline 202
	9/14

iophane	SAFETY DATA SHE
rsion 2.8	Revision Date 2022-08-
Toxicity to algae	
Tetrahydrothiophene	<ul> <li>EC50: &gt; 153.2 mg/l</li> <li>Exposure time: 72 h</li> <li>Species: Pseudokirchneriella subcapitata (green algae)</li> <li>Method: OECD Test Guideline 201</li> </ul>
Toxicity to bacteria	
Tetrahydrothiophene	: EC50: 1,530 mg/l Exposure time: 3 h Respiration inhibition Method: OECD Test Guideline 209
Biodegradability	
Tetrahydrothiophene	<ul> <li>aerobic Result: Not readily biodegradable.</li> <li>&lt; 10 % Testing period: 28 d Method: Directive 67/548/EEC Annex V, C.4.E.</li> </ul>
Bioaccumulation	
Tetrahydrothiophene	: No bioaccumulation is to be expected (log Pow <= 4).
Mobility	
Tetrahydrothiophene	: 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
Additional ecological information Ecotoxicology Assessmer	: Harmful to aquatic life with long lasting effects.
Short-term (acute) aquatic h Tetrahydrothiophene	azard : Harmful to aquatic life.
Long-term (chronic) aquatic Tetrahydrothiophene	
CTION 13: Disposal conside	erations
The information in this SDS	pertains only to the product as shipped.
S Number:100000068738	10/14

hiophane	SAFETY DATA SHEE
/ersion 2.8	Revision Date 2022-08-1
Use material for its intended p may meet the criteria of a haz other State and local regulation regulated components may be	purpose or recycle if possible. This material, if it must be discarded, zardous waste as defined by US EPA under RCRA (40 CFR 261) or ons. Measurement of certain physical properties and analysis for e necessary to make a correct determination. If this material is ste, federal law requires disposal at a licensed hazardous waste
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.
ECTION 14: Transport information	tion
shipments in non-bulk pack	shown here are for bulk shipments only, and may not apply to kages (see regulatory definition).
Goods Regulations for addition etc.) Therefore, the information	estic or international mode-specific and quantity-specific Dangerous onal shipping description requirements (e.g., technical name or names on shown here, may not always agree with the bill of lading shipping Flashpoints for the material may vary slightly between the SDS and the
<b>US DOT (UNITED STATES D</b> UN2412, TETRAHYDROT	DEPARTMENT OF TRANSPORTATION) THIOPHENE, 3, II
	AL MARITIME DANGEROUS GOODS) THIOPHENE, 3, II, (13 °C c.c.)
IATA (INTERNATIONAL AIR UN2412, TETRAHYDROT	R TRANSPORT ASSOCIATION) THIOPHENE, 3, II
ADR (AGREEMENT ON DAN UN2412, TETRAHYDROT	NGEROUS GOODS BY ROAD (EUROPE)) THIOPHENE, 3, II, (D/E)
RID (REGULATIONS CONC DANGEROUS GOODS (EUR 33,UN2412,TETRAHYDRC	
ADN (EUROPEAN AGREEM OF DANGEROUS GOODS B UN2412, TETRAHYDROT	
-	according to IMO instruments
DS Number:100000068738	11/14

# Thiophane

SAFETY DATA SHEET

Version 2.8

Revision Date 2022-08-18

National legislation	
SARA 311/312 Hazards	: Flammable (gases, aerosols, liquids, or solids) Acute toxicity (any route of exposure) Skin corrosion or irritation Serious eye damage or eye irritation
CERCLA Reportable Quantity	: Calculated RQ exceeds reasonably attainable upper limit. Tetrahydrofuran
SARA 302 Reportable Quantity	: This material does not contain any components with a SARA 302 RQ.
SARA 302 Threshold Planning Quantity	: This material does not contain any components with a section 302 EHS TPQ.
SARA 304 Reportable Quantity	: This material does not contain any components with a section 304 EHS RQ.
SARA 313 Components	: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
Clean Air Act	
Potential Class	product neither contains, nor was manufactured with a Class I or II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR ubpt. A, App.A + B).
This product does not conta Act Section 112 (40 CFR 61	in any hazardous air pollutants (HAP), as defined by the U.S. Clean A ).
	in any chemicals listed under the U.S. Clean Air Act Section 112(r) fo ion (40 CFR 68.130, Subpart F).
This product does not conta Intermediate or Final VOC's	in any chemicals listed under the U.S. Clean Air Act Section 111 SOC (40 CFR 60.489).
JS State Regulations	

	SAFETY DATA SHEE
hiophane	
/ersion 2.8	Revision Date 2022-08-1
Pennsylvania Right To Know	: Tetrahydrothiophene - 110-01-0 Tetrahydrofuran - 109-99-9
California Prop. 65 Components	: WARNING! This product contains a chemical known in the State of California to cause cancer. Tetrahydrofuran 109-99-9
Notification status Europe REACH Switzerland CH INV United States of America (US TSCA Other AIIC New Zealand NZIoC Japan ENCS Korea KECI	<ul> <li>This product is in full compliance according to REACH regulation 1907/2006/EC.</li> <li>On the inventory, or in compliance with the inventory</li> <li>A) On or in compliance with the active portion of the TSCA inventory</li> <li>On the inventory, or in compliance with the inventory</li> <li>On the inventory, or in compliance with the inventory</li> <li>On the inventory, or in compliance with the inventory</li> <li>On the inventory, or in compliance with the inventory</li> <li>On the inventory, or in compliance with the inventory</li> <li>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.</li> </ul>
Philippines PICCS Taiwan TCSI China IECSC	<ul> <li>On the inventory, or in compliance with the inventory</li> <li>On the inventory, or in compliance with the inventory</li> <li>On the inventory, or in compliance with the inventory</li> </ul>
ECTION 16: Other information	
NFPA Classification	: Health Hazard: 2 Fire Hazard: 3 Reactivity Hazard: 0
Further information	
Legacy SDS Number	: 307930
Significant changes since the previous versions.	last version are highlighted in the margin. This version replaces all

## Thiophane

Version 2.8

Revision Date 2022-08-18

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.

K	ey or legend to abbreviations and a	cronyms use	d 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%		