SAFETY DATA SHEET



N-Octyl Mercaptan

Version 1.18

TION 1: Identification of	the substance/mixture and of the company/undertaking
Product information	
Product Name Material	 N-Octyl Mercaptan 1115893, 1086427, 1092079, 1089361, 1086426, 1021507, 1021501, 1021505, 1021503, 1021502, 1021508, 1021506, 1021504, 1024813, 1026777, 1036311, 1021509, 1035162, 1024812, 1033723
Company	 Chevron Phillips Chemical Company LP Specialty Chemicals 10001 Six Pines Drive The Woodlands, TX 77380
Local	: See Company Address
Emergency telephone:	
Asia: CHEMWATCH (EUROPE: BIG +32.14 Mexico CHEMTREC 0	national) 9300 or 703.527.3887(int'l) +612 9186 1132) China: 0532 8388 9090 4.584545 (phone) or +32.14583516 (telefax) 91-800-681-9531 (24 hours) Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600
Responsible Department E-mail address Website	 Product Safety and Toxicology Group SDS@CPChem.com www.CPChem.com
TION 2: Hazards identifi	cation
Classification of the sub GHS Classification and Classification	bstance or mixture labelling according to JIS Z7252-2014 and JIS Z7253-2012 (GHS 2011)
	 Flammable liquids, Category 4 Acute toxicity, Category 4, Oral Acute toxicity, Category 4, Dermal Serious eye damage/eye irritation, Category 2
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	Skin sensitization, Category 1 Specific target organ toxicity - single exposure, Category 2, Central nervous system Specific target organ toxicity - single exposure, Category 3, Narcotic effects Specific target organ toxicity - repeated exposure, Category 2, Hematopoietic system Short-term (acute) aquatic hazard, Category 1 Long-term (chronic) aquatic hazard, Category 1
Labeling	
Symbol(s)	
Signal Word	: Warning
Hazard Statements	 H227: Combustible liquid. H302 + H312: Harmful if swallowed or in contact with skin. H317: May cause an allergic skin reaction. H319: Causes serious eye irritation. H336: May cause drowsiness or dizziness. H371: May cause damage to organs (Central nervous system). H373: May cause damage to organs (Hematopoietic system) through prolonged or repeated exposure. H410: Very toxic to aquatic life with long lasting effects.
Precautionary Statements	 Prevention: P210: Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking. P260: Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. P264: Wash skin thoroughly after handling. P270: Do not eat, drink or smoke when using this product. 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: P301 + P312 + P330: IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth. P302 + P352: IF ON SKIN: Wash with plenty of water. P302 + P352 + P312: IF ON SKIN: Wash with plenty of 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. P308 + P311: IF exposed or concerned: Call a POISON CENTER/ doctor. P333 + P313: If skin irritation or rash occurs: Get medical advice/ attention. P337 + P344: Take off contaminated clothing and wash it

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		before reuse. P370 + P378: alcohol-resista P391: Collec Storage:	ant foam to extinguish	dry sand, dry chemical or
		P403 + P233: tightly closed. P403 + P235: P405: Store Disposal: P501: Dispo disposal plant	Store in a well-vent locked up. se of contents/ contai	tilated place. Keep containe tilated place. Keep cool. ner to an approved waste
CTION 3: Composition/info Synonyms	: 1 r N	n on ingredier I-Octanethiol normal-Octyl m NOM NC8SH		
Molecular formula		C8H18S		
Chemical name		CAS-No.	Concentration	ENCS/ISHL
				numbor
n-Octyl Mercaptan		111-88-6	98.5 % - 100%	2-464
n-Octyl Mercaptan CTION 4: First aid measure General advice	: N s	Move out of dar	ngerous area. Show t	
CTION 4: First aid measure	: N s : I	Move out of dar sheet to the doo serious, potentia	ngerous area. Show t ctor in attendance. Ma ally fatal pneumonia if	2-464 his material safety data aterial may produce a swallowed or vomited. ition and seek medical
CTION 4: First aid measure General advice	: N s : I a	Move out of dar sheet to the doo serious, potentia f unconscious, advice. If symp	ngerous area. Show t ctor in attendance. Ma ally fatal pneumonia if place in recovery pos toms persist, call a ph	2-464 his material safety data aterial may produce a swallowed or vomited. ition and seek medical
CTION 4: First aid measure General advice If inhaled	: N s : I a : I : F	Move out of dar sheet to the doo serious, potentia f unconscious, advice. If symp f on skin, rinse Flush eyes with enses. Protect	ngerous area. Show t tor in attendance. Ma ally fatal pneumonia if place in recovery pos toms persist, call a ph well with water. If on water as a precautior	2-464 his material safety data aterial may produce a swallowed or vomited. ition and seek medical hysician. clothes, remove clothes. h. Remove contact b eye wide open while
CTION 4: First aid measure General advice If inhaled In case of skin contact	: M s s : l' : l l f l r s	Move out of dar sheet to the doo serious, potentia f unconscious, advice. If symp f on skin, rinse Flush eyes with enses. Protect insing. If eye in Keep respirator give anything by	ngerous area. Show t ctor in attendance. Ma ally fatal pneumonia if place in recovery pos toms persist, call a ph well with water. If on water as a precautior unharmed eye. Keep rritation persists, cons y tract clear. Do NOT y mouth to an unconse	2-464 his material safety data aterial may produce a swallowed or vomited. ition and seek medical hysician. clothes, remove clothes. n. Remove contact b eye wide open while sult a specialist.
CTION 4: First aid measure General advice If inhaled In case of skin contact In case of eye contact	: M s s : I a : I i r r s f f r	Move out of dar sheet to the doo serious, potentia f unconscious, advice. If symp f on skin, rinse Flush eyes with enses. Protect insing. If eye in Geep respirator give anything by symptoms pers	ngerous area. Show t ctor in attendance. Ma ally fatal pneumonia if place in recovery pos toms persist, call a ph well with water. If on water as a precautior unharmed eye. Keep rritation persists, cons y tract clear. Do NOT y mouth to an unconse	2-464 his material safety data aterial may produce a swallowed or vomited. ition and seek medical hysician. clothes, remove clothes. n. Remove contact beye wide open while sult a specialist.
CTION 4: First aid measure General advice If inhaled In case of skin contact In case of eye contact If swallowed	: N s s : I : I : F I r : F s s r s s s s s ures	Move out of dar sheet to the doo serious, potentia f unconscious, advice. If symp f on skin, rinse Flush eyes with enses. Protect insing. If eye in Keep respirator give anything by symptoms pers hospital.	ngerous area. Show t ctor in attendance. Ma ally fatal pneumonia if place in recovery pos toms persist, call a ph well with water. If on water as a precautior unharmed eye. Keep rritation persists, cons y tract clear. Do NOT y mouth to an unconse ist, call a physician. T	2-464 his material safety data aterial may produce a swallowed or vomited. ition and seek medical hysician. clothes, remove clothes. n. Remove contact beye wide open while sult a specialist. induce vomiting. Never cious person. If Take victim immediately to
CTION 4: First aid measure General advice If inhaled In case of skin contact In case of eye contact If swallowed	: N s s : I : A : I : F i r s s s s s s s s s s s s s s s s s s	Move out of dar sheet to the doc serious, potentia f unconscious, advice. If symp f on skin, rinse Flush eyes with enses. Protect insing. If eye in Geep respirator give anything by symptoms pers hospital.	ngerous area. Show t ctor in attendance. Ma ally fatal pneumonia if place in recovery pos toms persist, call a ph well with water. If on water as a precautior unharmed eye. Keep rritation persists, cons y tract clear. Do NOT y mouth to an unconse ist, call a physician. T	2-464 his material safety data aterial may produce a swallowed or vomited. ition and seek medical hysician. clothes, remove clothes. n. Remove contact beye wide open while sult a specialist. induce vomiting. Never cious person. If Take victim immediately to

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Suitable extinguishing media	:	Carbon dioxide (CO2).
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. Keep away from open flames, hot surfaces and sources of ignition.
Hazardous decomposition products	:	Carbon oxides. Sulfur oxides.
SECTION 6: Accidental release	me	asures
Personal precautions	:	Use personal protective equipment. Ensure adequate ventilation.
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). Keep in suitable, closed containers for disposal.
SECTION 7: Handling and stora	ge	
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. Provide sufficient air exchange and/or exhaust in work rooms. 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.
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Advice on protection against fire and explosion	: Do not spray on a naked flame or any incandescent material. Keep away from open flames, hot surfaces and sources of ignition.
Storage	
Requirements for storage areas and containers	: No smoking. Keep in a 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 control	s/personal protection
•	<u> </u>
Engineering measures	
personal protective equipme exposure to harmful levels of recommended. The user sl	nces in the work place when designing engineering controls and selecti ent. If engineering controls or work practices are not adequate to preve of this material, the personal protective equipment listed below is hould read and understand all instructions and limitations supplied with tion is usually provided for a limited time or under certain circumstance
Personal protective equip	ment
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.
Hand protection	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
	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.

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	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.
TION 9: Physical and chem	ical properties
Information on basic physi	ical and chemical properties
Appearance	
Form	: liquid
Physical state Color	: liquid : Colorless
Odor	: Pungent
Safety data	
Flash point	: 69-71°C (156-160°F) at 101.325 kPa
	Method: EU Method A.9
Lower explosion limit	: No data available
Upper explosion limit	: No data available
Oxidizing properties	: No
Autoignition temperature	: No data available
Molecular formula	: C8H18S
Molecular weight	: 146.32 g/mol
рН	: Not applicable
Pour point	: No data available
Boiling point/boiling range	: 199°C (390°F)
Vapor pressure	: 0.02 PSI at 37.8°C (100.0°F)
Relative density	: 0.85 at 16 °C (61 °F)
Water solubility	: negligible
Partition coefficient: n-	: No data available
octanol/water Viscosity, kinematic	: 1.04 mm2/s at 40°C (104°F)
Relative vapor density	: 1 (Air = 1.0)
Evaporation rate	: No data available
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	ctivity
Reactivity	: Stable under recommended storage conditions.
Chemical stability	: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Possibility of hazardous re	eactions
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	: Heat, flames and sparks.
Materials to avoid	: May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.
Hazardous decomposition products	Oxidizing solids. Oxidizing liquids. Carbon oxides Sulfur oxides
Other data	: No decomposition if stored and applied as directed.
TION 11: Toxicological inf	ormation
Acute oral toxicity	
n-Octyl Mercaptan	: LD50: 2,436 mg/kg Species: Rat Sex: male and female Method: Fixed Dose Method
Acute inhalation toxicity	
n-Octyl Mercaptan	 LC50: > 0.24 mg/l Exposure time: 4 h Species: Rat Sex: male and female Test atmosphere: vapor Method: OECD Test Guideline 403 An LC50/inhalation/4h/rat could not be determined because no mortality of rats was observed at the maximum achievable concentration.
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Acute dermal toxicity	$L DE0 \rightarrow 1.690 mg/kg$
n-Octyl Mercaptan	: LD50: > 1,680 mg/kg Species: Rat
	Sex: male and female
	Method: OECD Test Guideline 402
Skin irritation	
n-Octyl Mercaptan	: slight irritation. largely based on animal evidence.
Eye irritation n-Octyl Mercaptan	: slight irritation. largely based on animal evidence.
Sensitization	
n-Octyl Mercaptan	: May cause sensitization by skin contact.
	largely based on animal evidence.
Repeated dose toxicity	
n-Octyl Mercaptan	: Species: Rat, males Sex: males
	Application Route: Oral
	Dose: 0, 10, 50, 250 mg/kg
	Exposure time: 35 D
	Number of exposures: once daily NOEL: 50 mg/kg
	Method: OECD Guideline 422
	Species: Rat, females
	Sex: females Application Route: Oral
	Dose: 0, 10, 50, 250 mg/kg
	Number of exposures: once daily
	NOEL: 50 mg/kg
	Method: OECD Guideline 422
Genotoxicity in vitro	
n-Octyl Mercaptan	: Test Type: Reverse mutation assay
	Metabolic activation: with and without metabolic activation Method: Mutagenicity (Escherichia coli - reverse mutation
	assay)
	Result: negative
	Test Type: Chromosome aberration test in vitro
	Test system: Human lymphocytes Metabolic activation: with and without metabolic activation
	Result: negative
	Test Type: Sister chromatid exchange
	Metabolic activation: with and without metabolic activation Result: negative
Genotoxicity in vivo	
Genotoxicity in vivo n-Octyl Mercaptan	: Test Type: Micronucleus test Species: Mouse

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	Method: Mutagenicity (micronucleus test) Result: negative
Reproductive toxicity	
n-Octyl Mercaptan	 Species: Rat Sex: male Application Route: Oral diet Dose: 0, 10, 50, 250 mg/kg Exposure time: 35 D Number of exposures: once daily Method: OECD Guideline 422 NOAEL Parent: 250 mg/kg NOAEL F1: 250 mg/kg
	Species: Rat Sex: female Application Route: Oral diet Dose: 0, 10, 50, 250 mg/kg Number of exposures: once daily Method: OECD Guideline 422 NOAEL Parent: 50 mg/kg NOAEL F1: 250 mg/kg
Developmental Toxicity	
n-Octyl Mercaptan	: Species: Rat Application Route: Oral diet Dose: 0, 10, 50, 250 mg/kg Number of exposures: once daily NOAEL Teratogenicity: 250 mg/kg
Aspiration toxicity	
n-Octyl Mercaptan	: May be harmful if swallowed and enters airways.
CMR effects	
n-Octyl Mercaptan	 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.
N-Octyl Mercaptan Further information	: Solvents may degrease the skin.
TION 12: Ecological inform	nation
Toxicity to fish	
n-Octyl Mercaptan	: LC50: 0.326 mg/l Exposure time: 96 h Species: Oryzias latipes (Orange-red killifish)
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	semi-static test Analytical monitoring: yes Method: OECD Test Guideline 203 Very toxic to fish.
Toxicity to daphnia and ot	her aquatic invertebrates
n-Octyl Mercaptan	 0.0243 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) Immobilization Analytical monitoring: yes Method: OECD Test Guideline 202 Very toxic to aquatic organisms.
Toxicity to algae	
n-Octyl Mercaptan	 0.039 mg/l Exposure time: 72 h Species: Pseudokirchneriella subcapitata (microalgae) semi-static test Analytical monitoring: yes Method: OECD Test Guideline 201 Very toxic to algae.
Toxicity to daphnia and ot	her aquatic invertebrates (Chronic toxicity)
n-Octyl Mercaptan	 > 0.00467 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Toxic effects on fish and plankton
Biodegradability	
n-Octyl Mercaptan	 Result: Not readily biodegradable. 0 % Testing period: 28 Days Method: OECD Test Guideline 301 Information given is based on data obtained from similar substances.
Bioaccumulation	
n-Octyl Mercaptan	: Bioconcentration factor (BCF): 11.83 Method: QSAR modeled data
Mobility	
Mobility n-Octyl Mercaptan	: Medium: Soil Method: Calculation, Mackay Level III Fugacity Model Content: 47.8 % This product may float or sink in water.

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	 Medium: Water Method: Calculation, Mackay Level III Fugacity Model Content: 25 % This product may float or sink in water.
Additional ecological information Ecotoxicology Assessmer	: Very toxic to aquatic life with long lasting effects.
Short-term (acute) aquatic h n-Octyl Mercaptan	nazard : Very toxic to aquatic life.
Long-term (chronic) aquatic n-Octyl Mercaptan	hazard : Very toxic to aquatic life with long lasting effects.
CTION 13: Disposal conside	erations
The information in this SDS	pertains only to the product as shipped.
Use material for its intended may meet the criteria of a ha other State and local regula regulated components may	d purpose or recycle if possible. This material, if it must be discarded, azardous waste as defined by US EPA under RCRA (40 CFR 261) or tions. Measurement of certain physical properties and analysis for be necessary to make a correct determination. If this material is aste, 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.
CTION 14: Transport inform	ation
	s shown here are for bulk shipments only, and may not apply to ckages (see regulatory definition).
Goods Regulations for addit etc.) Therefore, the informa	nestic or international mode-specific and quantity-specific Dangerous tional shipping description requirements (e.g., technical name or names ation shown here, may not always agree with the bill of lading shipping Flashpoints for the material may vary slightly between the SDS and th
	DEPARTMENT OF TRANSPORTATION) E LIQUID, N.O.S., (N-OCTYL MERCAPTAN), III
UN3082, ENVIRONMEN	NAL MARITIME DANGEROUS GOODS) ITALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (N-OCTYL 9-71°C), MARINE POLLUTANT, (N-OCTYL MERCAPTAN)
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N-Octyl Mercaptan Version 1.18 Revision Date 2021-09-27 IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION) UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (N-OCTYL MERCAPTAN), 9, III ADR (AGREEMENT ON DANGEROUS GOODS BY ROAD (EUROPE)) UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (N-OCTYL MERCAPTAN), 9, III, (-) **RID (REGULATIONS CONCERNING THE INTERNATIONAL TRANSPORT OF DANGEROUS GOODS (EUROPE))** UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (N-OCTYL MERCAPTAN), 9, III ADN (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS) UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (N-OCTYL MERCAPTAN), 9, III Other information : n-Octyl Mercaptan, S.T. 1, Cat. X 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 : Industrial Safety and Health Law - Attached table 1 (Dangerous Substances) Harmful Substances Required : Not applicable Permission for Manufacture Hazardous Substances : Not applicable Subject to Labeling Requirements Ordinance on Prevention of : Not applicable Organic Solvent Poisoning

Ordinance on Prevention of : Not applicable Lead Poisoning Harmful Substances : Not applicable Prohibited from Manufacture

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Ordinance on Prevention of Hazards Due to Specified Chemical Substances	: Not applicable
Ordinance on Prevention of	: Not applicable
Tetraalkyl Lead Poisoning	: 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.
	Release Amounts of Specific Chemical Substances in the of Improvements to the Management Thereof
	: Not applicable
Other regulations	
Fire Service Law	: Flammable liquids Type 2 petroleums Hazardous rank III
Explosive Control Law	: Not relevant
Vessel Safety Law	: Miscellaneous dangerous substances and articles (Article 2 and 3 of rules on shipping and storage of dangerous goods and its Attached Table 1), Marine pollutants
Aviation Law	: Miscellaneous dangerous substances and articles (Article 194 of The Enforcement Rules of Aviation Law and its Attached Table 1)
High Pressure Gas Safety Act	: Not applicable
Explosive Control Law	: Not applicable
Vessel Safety Law	: Miscellaneous dangerous substances and articles (Article 2 and 3 of rules on shipping and storage of dangerous goods and its Attached Table 1)
Aviation Law	: Miscellaneous dangerous substances and articles (Article 194 of The Enforcement Rules of Aviation Law and its Attached Table 1)
Notification status Europe REACH Switzerland CH INV	 On the inventory, or in compliance with the inventory On the inventory, or in compliance with the inventory
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sion 1.18 Revision Date 20 United States of America (USA) TSCA : On or in compliance with the active portion of the TSCA inventory Canada DSL : All components of this product are on the Canadia DSL Australia AICS :: On the inventory, or in compliance with the inventor Japan ENCS Korea KECI : On the inventory, or in compliance with the inventor to be registered, or exempted from registration by CPChem through an Only Representative accordin K-REACH regulations. Importation of this product permitted if the Korean Importer of Record was included on CPChem's notifications or if the Impor Record themselves notified the substances. Philippines PICCS : On the inventory, or in compliance with the inventor to be registered, or in compliance with the inventor china IECSC TION 16: Other information : On the inventory, or in compliance with the inventor Significant changes since the last version are highlighted in the margin. This version replace previous versions.
TSCA TSCA inventory Canada DSL All components of this product are on the Canadia DSL Australia AICS On the inventory, or in compliance with the inventor New Zealand NZIoC On the inventory, or in compliance with the inventor Japan ENCS On the inventory, or in compliance with the inventor Korea KECI All substances in this product were registered, noti to be registered, or exempted from registration by CPChem through an Only Representative accordir K-REACH regulations. Importation of this product Philippines PICCS On the inventory, or in compliance with the inventor China IECSC On the inventory, or in compliance with the inventor Taiwan TCSI On the inventory, or in compliance with the inventor Tool 16: Other information Important on the inventory, or in compliance with the inventor Significant changes since the last version are highlighted in the margin. This version replace
Philippines PICCS : On the inventory, or in compliance with the inventor China IECSC : On the inventory, or in compliance with the inventor Taiwan TCSI : On the inventory, or in compliance with the inventor TION 16: Other information : On the inventory, or in compliance with the inventor Further information : : : Significant changes since the last version are highlighted in the margin. This version replace :
Further information Legacy SDS Number : 76100 Significant changes since the last version are highlighted in the margin. This version replace
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Significant changes since the last version are highlighted in the margin. This version replace
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 guidance for safe handling, use, processing, storage, transportation, disposal and release at 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 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 LD50 Lethal Dose 50%
ACGIH American Conference of Government Industrial Hygienists LD50 Lethal Dose 50% AICS Australia, Inventory of Chemical LOAEL Lowest Observed Adverse
ACGIH American Conference of Government Industrial Hygienists LD50 Lethal Dose 50% AICS Australia, Inventory of Chemical Substances LOAEL Lowest Observed Adverse Level
ACGIH American Conference of Government Industrial Hygienists LD50 Lethal Dose 50% AICS Australia, Inventory of Chemical Substances LOAEL Lowest Observed Adverse Level DSL Canada, Domestic Substances List NFPA National Fire Protection Aga
ACGIH American Conference of Government Industrial Hygienists LD50 Lethal Dose 50% AICS Australia, Inventory of Chemical Substances LOAEL Lowest Observed Adverse Level DSL Canada, Domestic Substances NFPA National Fire Protection Age List NDSL Canada, Non-Domestic NIOSH National Institute for Occup
ACGIH American Conference of Government Industrial Hygienists LD50 Lethal Dose 50% AICS Australia, Inventory of Chemical Substances LOAEL Lowest Observed Adverse Level DSL Canada, Domestic Substances List NFPA National Fire Protection Age Substances List NDSL Canada, Non-Domestic Substances List NIOSH National Institute for Occup Safety & Health
ACGIH American Conference of Government Industrial Hygienists LD50 Lethal Dose 50% AICS Australia, Inventory of Chemical Substances LOAEL Lowest Observed Adverse Level DSL Canada, Domestic Substances NFPA National Fire Protection Age List NDSL Canada, Non-Domestic Substances List NIOSH National Institute for Occup Safety & Health CNS Central Nervous System NTP National Toxicology Program
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SAFETY DATA SHEET

Version 1.18

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
	on Cancer		
IECSC	Inventory of Existing Chemical	TWA	Time Weighted Average
	Substances in China		
ENCS	Japan, Inventory of Existing and	TSCA	Toxic Substance Control Act
	New Chemical Substances		
KECI	Korea, Existing Chemical	UVCB	Unknown or Variable Composition,
	Inventory		Complex Reaction Products, and
			Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials
			Information System
LC50	Lethal Concentration 50%		