SAFETY DATA SHEET



Cyclohexane

Version 2.10

Revision Date 2022-04-04

according to GB/T 16483 and GB/T 17519

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

Product information Product Name :: Cyclohexane Material :: 1015388, 1098296, 1080331, 1059057, 1026806, 1025303, 1026803, 1026805 Company :: Chevron Phillips Chemical Company LP 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!) Asia: CHEMWATCH (+612 9186 1132) China: 0532 8388 9090 Mexico CHEMTREC 01.480643431 EUROPE ISIG 432.14.584545 (phone) or +32.14583516 (telefax) Austria: VIZ +431 406 43 43 (24 hours/day, 7 days/week) Belgium: 070 245 245 (24 hours/day, 7 days/week) Belgium: 070 245 245 (24 hours/day, 7 days/week) Belgium: 070 245 245 (24 hours/day, 7 days/week) Bulgaria: +359 2 9154 233 Croatia: +3851 2248 342 (24 hours/day, 7 days/week) Cypurs: 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: C0301 2107793777 (24 hours/day, 7 days/week) Greece: (0030) 2107793777 (24 hours/day, 7 days/week) Greece: (0030) 2107793777 (24 hours/day, 7 days/week) Healar)		
Material : 1015388, 1098296, 1080331, 1059057, 1026806, 1025303, 1026803, 1026803, 1026805 Company :: Chevron Phillips Chemical Company LP 10001 Six Pines Drive The Woodlands, TX 77380 Emergency telephone: Health: 866.442.9628 (North America) 1.332.813.4984 (International) Transport: CHEMWATCH (+612 9186 1132) China: 0532 8388 9090 Mexico CHEMTREC 800.424.9300 or 703.527.3887(int'l) Asia: CHEMWATCH (+612 9186 1132) China: 0532 8388 9090 Mexico CHEMTREC 10.800-681-9531 (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) Belgium: 070 245 245 (24 hours/day, 7 days/week) Coratia: +359 2 915 42 33 Croatia: +354 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 (Giftlinen): +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) Greace: (0030) 2107793777 (24 hou		
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) Bulgaria: +359 2 9154 233 Croatia: +3851 2348 342 (24 hours/day, 7 days/week) Bulgaria: +359 2 9154 233 Croatia: +3851 2348 342 (24 hours/day, 7 days/week) Bulgaria: +359 2 9154 233 Croatia: +3851 2348 342 (24 hours/day, 7 days/week) Bulgaria: +359 2 9154 233 Croatia: +3851 2348 342 (24 hours/day, 7 days/week) Bulgaria: +359 2 9154 233 Croatia: +3851 2348 342 (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 (Gittlinjen): +45 8212 1212 Estonia: BIG +32.14.584545 (phone) or +32.14583516 (telefax) Finland: BIG +32.14.584545 (phone) or +32.14583516 (telefax) Greece: (O030) 2107793777 (24 hours/day, 7 days/week) Hungary: +36-80-201-1199 (24 hours/day, 7 days/week) Iceland: 543 2222 (24 hours/day, 7 days/week)		: 1015388, 1098296, 1080331, 1059057, 1026806, 1025303,
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) Finland: 0800 147 711 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) Finland: 0800 147 711 09 471 977 (24 hours/day, 7 days/week) Hungary: +36-80-201-199 (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) 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) Italy: 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 +37 67042473. (24 hours.)	Company	10001 Six Pines Drive
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): + 43 (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) Iceland: 543 2222 (24 hours/day, 7 days/week) Ireland: BIG +32.14.584545 (phone) or +32.14583516 (telefax) Iralend: 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 +37 67042473. (24 hours.)	Emergency telephone:	
S Number:10000068314 1/14	1.832.813.4984 (Interna Transport : CHEMTREC 800.424.9 Asia: CHEMWATCH (+ Mexico CHEMTREC 01 South America SOS-Co Argentina: +(54)-11598 EUROPE: BIG +32.14.9 Austria: VIZ +43 1 406 Belgium: 070 245 245 (Bulgaria: +359 2 9154 2 Croatia: +3851 2348 34 Cyprus: 1401 Czech Republic: Toxico Denmark: Danish Poiso Estonia: BIG +32.14.58 Finland: 0800 147 111 France: ORFILA number Germany: BIG +32.14.58 Finland: 0800 147 111 France: ORFILA number Germany: BIG +32.14.58 Iteland: 543 2222 (24 h Ireland: BIG +32.14.584 Italy: BIG +32.14.58454 Latvia: State Fire and R Poisoning and Drug Inf	ational) 1300 or 703.527.3887(int'l) 612 9186 1132) China: 0532 8388 9090 1-800-681-9531 (24 hours) btec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600 39431 584545 (phone) or +32.14583516 (telefax) 43 43 (24 hours/day, 7 days/week) 24 hours/day, 7 days/week) 233 12 (24 hours/day, 7 days/week) bological Information Center +420 224 919 293, +420 224 915 402 on Center (Giftlinjen): +45 8212 1212 4545 (phone) or +32.14583516 (telefax) 09 471 977 (24 hours/day) er (INRS): + 33 (0) 1 45 42 59 59 (24 hours/day, 7 days/week) 584545 (phone) or +32.14583516 (telefax) 3777 (24 hours/day, 7 days/week) 99 (24 hours/day, 7 days/week) 99 (24 hours/day, 7 days/week) 99 (24 hours/day, 7 days/week) 15455 (phone) or +32.14583516 (telefax) 3777 (24 hours/day, 7 days/week) 99 (24 hours/day, 7 days/week) 99 (24 hours/day, 7 days/week) 155 (phone) or +32.14583516 (telefax) 15
	S Number:100000068314	1/14

Version 2.10

Revision Date 2022-04-04

Lithuania: +370 (85) 230 Luxembourg: (+352) 80 Malta: +356 2395 2000 The Netherlands: NVIC Norway: 22 59 13 00 (2 Poland: BIG +32.14.584 Portugal: CIAV phone n Romania: +4021318360 Slovakia: +421 2 5477 4 Slovenia: Phone number	02 5500 (24 hours/day, 7 days/week) : +31 (0)88 755 8000 4 hours/day, 7 days/week) 4545 (phone) or +32.14583516 (telefax) humber: +351 800 250 250 06 4166 er: 112 ency Telephone Number of Spanish Poison Centre: +34 91 562 04 20 (24 c)
Responsible Department	 Product Safety and Toxicology Group SDS@CPChem.com
E-mail address Website	: sDS@CPCnem.com : www.CPChem.com
CTION 2: Hazards identific	ation
Classification of the subs GHS Classification and L (GHS 2011) Emergency Overview Danger	stance or mixture abeling: Follow GB 13690, GB 15258 and GB 30000.2 to GB 30000.29.
Physical state: liquid	Color: Colorless Odor: chlorform-like,irritating
Physical state: liquid	Color: Colorless Odor: chlorform-like,irritating

: Highly flammable liquid and vapor. Causes skin irritation. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

Classification

Hazards

: Flammable liquids, Category 2 Skin corrosion/irritation, Category 2
Specific target organ toxicity - single exposure, Category 3, Narcotic effects
Aspiration hazard, Category 1 Short-term (acute) aquatic hazard, Category 1
Long-term (chronic) aquatic hazard, Category 1

Labeling

Symbol(s)

Signal Word

Hazard Statements

H225: Highly flammable liquid and vapor.
 H304: May be fatal if swallowed and enters airways.
 H315: Causes skin irritation.

SDS Number:100000068314

:

Danger

clohexane	
sion 2.10	Revision Date 2022-04
	H336: May cause drowsiness or dizziness. 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. P233: Keep container tightly closed. P240: Ground/bond container and receiving equipment. P241: Use explosion-proof electrical/ ventilating/ lighting/ equipment. P242: Use only non-sparking tools. P243: Take precautionary measures against static discharge P261: Avoid breathing dust/fume/gas/mist/vapors/spray. P264: Wash skin thoroughly after handling. P271: Use only outdoors or in a well-ventilated area. P273: Avoid release to the environment. P280: Wear protective gloves/ eye protection/ face protection Response: P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor. P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. P304 + P340 + P312: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell. P331: Do NOT induce vomiting. P332 + P313: If skin irritation occurs: Get medical advice/ attention. P362+P364: Take off contaminated clothing and wash it before reuse. P370+P376: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. P391: Collect spillage. Storage: P403 + P235: Store in a well-ventilated place. Keep containet tightly closed. P403 + P235: Store in a well-ventilated place. Keep cool. P405: Store locked up. P501: Dispose of contents/ container to an approved waste disposal plant.
TION 3: Composition/inform	nation on ingredients
Synonyms	: Not Established
Molecular formula	: C6H12
Chemical name	CAS-No. / EINECS-No. Concentration [wt%]
Cyclohexane	110-82-7 99.9 - 100
Number:100000068314	3/14

Version 2.10

SAFETY DATA SHEET

Revision Date 2022-04-04

SECTION 4: First aid measure	es	
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	:	Consult a physician after significant exposure. 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	:	Flush eyes with water as a precaution. 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. If symptoms persist, call a physician. Take victim immediately to hospital.

SECTION 5: Firefighting measures

Flash point	:	-18.3°C (-0.9°F) Method: closed cup
Autoignition temperature	:	260°C (500°F)
Suitable extinguishing media	:	Alcohol-resistant foam. Carbon dioxide (CO2). 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 surfaces and sources of ignition.
SDS Number:100000068314		4/14

Version 2.10

Revision Date 2022-04-04

SAFETY DATA SHEET

Personal precautions Environmental precautions Methods for cleaning up CTION 7: Handling Handling Advice on safe handling	e	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. 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. 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).
Methods for cleaning up CTION 7: Handling and storage Handling	e	or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities. 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
CTION 7: Handling and storage Handling	e	absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to
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.
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/p	ore	sonal protoction
		· · · ·
Ingredients with workplace c	501	ittor parameters
mponents Ba	asis	s Value Control parameters Note
•	N O	
applicable Engineering measures		
S Number:100000068314		5/14

SAFETY DATA SHEET

Cyclohexane

Version 2.10

Revision Date 2022-04-04

Adequate ventilation to control airborned 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:. 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.

SECTION 9: Physical and chemical properties

Appearance	
Physical state Color Odor	: liquid : Colorless : chlorform-like,irritating
Safety data	
Flash point	: -18.3°C (-0.9°F) Method: closed cup
Lower explosion limit	: 1.3 %(V)

clohexane	SAFETY DATA SI	ΗE
rsion 2.10	Revision Date 2022-	J4
Upper explosion limit	: 8 %(V)	
Oxidizing properties	: no	
Autoignition temperature	: 260°C (500°F)	
Molecular formula	: C6H12	
Molecular weight	: 84.18 g/mol	
рН	: Not applicable	
Pour point	: No data available	
Melting point/range	6.59°C (43.86°F)	
Boiling point/boiling range	: 80.7°C (177.3°F)	
Vapor pressure	: 3.26 PSI at 37.8°C (100.0°F)	
Relative density	: 0.78 at 15.6 °C (60.1 °F)	
Density	: 0.8 g/cm3	
Water solubility	: Soluble in hydrocarbon solvents, natural oils, fats, and waxes insoluble in water.	;;
Partition coefficient: n-	: No data available	
octanol/water Viscosity, kinematic	: 0.953 cSt at 37.8°C (100.0°F)	
Relative vapor density	: 2.9 (Air = 1.0)	
Evaporation rate	: 1.95	
Conductivity	: < 5 pSm	
CTION 10: Stability and reac	ivity	
Reactivity	: Stable at normal ambient temperature and pressure.	
Chemical stability	: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.	
Possibility of hazardous re	actions	
S Number:100000068314	7/14	

clohexane	SAFETY DATA SHE
rsion 2.10	Revision Date 2022-04-
Hazardous reactions	: 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.
Other data	: No decomposition if stored and applied as directed.
CTION 11: Toxicological info	rmation
Acute oral toxicity	
Cyclohexane	: LD50: > 5,000 mg/kg Species: Rat
	Sex: male and female
	Method: OECD Test Guideline 401
Acute inhalation toxicity	
Cyclohexane	: LC50: >32,880 mg/m3Exposure time: 4 h
	Species: Rat Sex: male and female
	Test atmosphere: vapor
	Method: OECD Test Guideline 403
Skin irritation	
Cyclohexane	: May cause skin irritation in susceptible persons.
Eye irritation	
Cyclohexane	: No eye irritation
Sensitization	
Cyclohexane	: Did not cause sensitization on laboratory animals.
Repeated dose toxicity	
Cyclohexane	: Species: Rat
C JOIOTOXAIIO	Application Route: Inhalation
	Dose: 0, 500, 2000, 7000 ppm Exposure time: 90 day
	Number of exposures: 6 h/d, 5 d/wk
	NOEL: 2000 ppm
S Number:100000068314	8/14

Cyclohexane	SAFETY DATA SHEE
Version 2.10	Revision Date 2022-04-04
	Species: Rat, Male and female Sex: Male and female Application Route: Inhalation Dose: 0, 500, 2,000, 7000 ppm Exposure time: 13-14 wk Number of exposures: 6 hr/d, 5 d/wk NOEL: 7000 ppm
	Species: Mouse, Male and female Sex: Male and female Application Route: Inhalation Dose: 0, 500, 2000, 7000 ppm Exposure time: 13-14 wk Number of exposures: 6 hr/d, 5 d/wk NOEL: 2000 ppm Target Organs: Blood
Genotoxicity in vitro	
Cyclohexane	: Test Type: Ames test Metabolic activation: with and without metabolic activation Method: Mutagenicity (Escherichia coli - reverse mutation assay) Result: negative
	Test Type: Mouse lymphoma assay Metabolic activation: with and without metabolic activation Result: negative
	Test Type: Mouse lymphoma assay Metabolic activation: with and without metabolic activation Method: OECD Guideline 476 Result: negative
Genotoxicity in vivo	
Cyclohexane	: Test Type: Cytogenetic assay Species: Rat Cell type: Bone marrow Dose: 96.6, 307.2, 10141.6 ppm Result: negative
Reproductive toxicity	
Cyclohexane	: Species: Rat Application Route: Inhalation Dose: 0, 500, 2000, 7000 ppm Number of exposures: 6 hr/d, 5 d/wk Method: OECD Test Guideline 416 NOAEL Parent: 500 ppm NOAEL F1: 7000 ppm NOAEL F2: 7000 ppm
Developmental Toxicity	
Cyclohexane	: Species: Rat Application Route: Inhalation Dose: 0, 500, 2,000, 7,000 PPM
SDS Number:100000068314	9/14

clohexane	SAFETY DATA SHE	
rsion 2.10	Revision Date 2022-04-	
	Number of exposures: 6 hr/d Test period: GD 6-15 Method: OECD Guideline 414 NOAEL Teratogenicity: 7,000 ppm NOAEL Maternal: 500 ppm	
	Species: Rabbit Application Route: Inhalation Dose: 0, 500, 2,000, 7,000 PPM Number of exposures: 6 hr/d Test period: GD 6-18 Method: OECD Guideline 414 NOAEL Teratogenicity: 7,000 ppm NOAEL Maternal: 500 ppm	
Cyclohexane Aspiration toxicity	: May be fatal 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		
Cyclohexane	 Carcinogenicity: Weight of evidence does not support classification as a carcinogen Mutagenicity: Did not show mutagenic effects in animal experiments. Teratogenicity: Did not show teratogenic effects in animal experiments. Reproductive toxicity: No toxicity to reproduction 	
Cyclohexane Further information	: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Concentrations substantially above the TLV value may cause narcotic effects. Solvents may degrease the skin.	
CTION 12: Ecological infor	mation	
Ecotoxicity effects Toxicity to fish		
Cyclohexane	 LC50: 4.53 mg/l Exposure time: 96 h Species: Pimephales promelas (fathead minnow) Method: OECD Test Guideline 203 	
Toxicity to daphnia and o	other aquatic invertebrates	
Cyclohexane	: EC50: 0.9 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) Method: OECD Test Guideline 202	
	10/14	

Cyclohexane	SAFETY DATA SHEET					
Version 2.10	Revision Date 2022-04-04					
Toxicity to algae						
Cyclohexane	: EbC50: 3.4 mg/l Exposure time: 72 h Species: Selenastrum capricornutum (algae)					
	NOEC: 0.925 mg/l Exposure time: 72 h Species: Pseudokirchneriella subcapitata (microalgae) Method: OECD Test Guideline 201					
M-Factor cyclohexane	: M-Factor (Acute Aquat. Tox.) 1					
Biodegradability						
Cyclohexane	 77 % Testing period: 28 d Method: OECD Test Guideline 301 This material is expected to be readily biodegradable. 					
Elimination information (persist	tence and degradability)					
Bioaccumulation						
Cyclohexane	: Bioconcentration factor (BCF): 167 This material is not expected to bioaccumulate.					
Mobility	: No data available					
Results of PBT assessment Cyclohexane	: Non-classified PBT substance, Non-classified vPvB substance					
Additional ecological information Ecotoxicology Assessment	: Very toxic to aquatic life with long lasting effects.					
Short-term (acute) aquatic haz Cyclohexane	ard : Very toxic to aquatic life.					
Long-term (chronic) aquatic ha Cyclohexane	zard : Very toxic to aquatic life with long lasting effects.					
SECTION 13: Disposal considerations						
The information in this SDS pertains only to the product as shipped.						
may meet the criteria of a haza other State and local regulation regulated components may be	urpose or recycle if possible. This material, if it must be discarded, ardous waste as defined by US EPA under RCRA (40 CFR 261) or ns. Measurement of certain physical properties and analysis for necessary to make a correct determination. If this material is the, federal law requires disposal at a licensed hazardous waste					
SDS Number:100000068314	11/14					

Cyclohexane	SAFETY DATA SHEE
/ersion 2.10	Revision Date 2022-04-0
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	on and a second s
	own here are for bulk shipments only, and may not apply to ges (see regulatory definition).
Goods Regulations for additiona etc.) Therefore, the information	ic or international mode-specific and quantity-specific Dangerous al shipping description requirements (e.g., technical name or names shown here, may not always agree with the bill of lading shipping shpoints for the material may vary slightly between the SDS and the
US DOT (UNITED STATES DE UN1145, CYCLOHEXANE, 3	PARTMENT OF TRANSPORTATION) 3, II, RQ (CYCLOHEXANE)
	. MARITIME DANGEROUS GOODS) 3, II, (-18.3 °C c.c.), MARINE POLLUTANT, (CYCLOHEXANE)
IATA (INTERNATIONAL AIR T UN1145, CYCLOHEXANE, 3	
	GEROUS GOODS BY ROAD (EUROPE)) 3, II, (D/E), ENVIRONMENTALLY HAZARDOUS,
DANGEROUS GOODS (EURO	RNING THE INTERNATIONAL TRANSPORT OF PE)) E., 3, II, ENVIRONMENTALLY HAZARDOUS, (CYCLOHEXANE)
OF DANGEROUS GOODS BY UN1145, CYCLOHEXANE, 3 For Tank Vessels and/or Ba	3, II, ENVIRONMENTALLY HAZARDOUS, (CYCLOHEXANE)
Other information	: Cyclohexane, S.T. 2, Cat. Y

Version 2.10

SAFETY DATA SHEET

Revision Date 2022-04-04

SECTION 15: Regulatory information

Notification status Europe REACH Switzerland CH INV United States of America (USA) TSCA Canada DSL Australia AICS New Zealand NZIoC Japan ENCS Korea KECI		This product is in full compliance according to REACH regulation 1907/2006/EC. On the inventory, or in compliance with the inventory On or in compliance with the active portion of the TSCA inventory All components of this product are on the Canadian DSL On the inventory, or in compliance with the inventory On the inventory, or in compliance with the inventory On the inventory, or in compliance with the inventory On the inventory, or in compliance with the inventory A substance(s) in this product was not registered, notified to be registered, or exempted from registration by CPChem according to K-REACH regulations. Importation or manufacture of this product is still
Philippines PICCS China IECSC Taiwan TCSI	:	permitted provided the Korean Importer of Record has themselves notified the substance or the exported amount does not exceed the minimum threshold quantity of the non-registered substance(s). On the inventory, or in compliance with the inventory On the inventory, or in compliance with the inventory On the inventory, or in compliance with the inventory
Other regulations	:	Law on the Prevention and Control of Occupational Diseases

SECTION 16: Other information

Further information

Legacy SDS Number : 895

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.

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 Occupationa Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program

SAFETY DATA SHEET

Version 2.10

Revision Date 2022-04-04

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%		

SDS Number:100000068314

14/14