

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 29-Jul-2024 Revision Number 1

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

1.1. Product identifier

Product Code(s) DRE-L20974300CY

Product Name 1,3-Dinitronaphthalene 10 μg/mL in Cyclohexane

Form Not applicable

Unique Formula Identifier (UFI) NDYV-P03S-K00N-UG8U

Pure substance/mixture Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use Laboratory use

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

#### Supplier

LGC Limited Queens Road Teddington Middlesex TW11 0LY UNITED KINGDOM :+44 (0) 20 8943 7000 Fax :+44 (0) 20 8943 2767 eMail : gb@lgcstandards.com

Web: www.lgcstandards.com

For further information, please contact

E-mail address sds-request@lgcgroup.com

1.4. Emergency telephone number

Emergency Telephone For Hazardous Materials or Dangerous Goods Incident

Spill, Leak, Fire Exposure, or Accident

Call CHEMTREC:

USA & Canada 1-800-424-9300 Rest of the world +1 703-741-3877

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Emergency Telephone - §45 - (EC)1272/2008					
Europe	112				
Austria	No information available				
Bulgaria					
Croatia					
Cyprus					
Czech Republic					
Denmark					
France					
Hungary					
Ireland					
Italy					
Lithuania					
Luxembourg					
Netherlands					
Norway					
Portugal					
Romania					
Slovakia					
Slovenia					
Spain					
Sweden					
Switzerland					

## **SECTION 2: Hazards identification**

# **2.1. Classification of the substance or mixture** Classification according to

Regulation (EC) No. 1272/2008 [CLP]

Aspiration hazard	Category 1 - (H304)
Skin corrosion/irritation	Category 2 - (H315)
Specific target organ toxicity — single exposure	Category 3 - (H336)
Category 3 Narcotic effects	
Acute aquatic toxicity	Category 1 - (H400)
Chronic aquatic toxicity	Category 1 - (H410)
Flammable liquids	Category 2 - (H225)

### 2.2. Label elements

Contains Cyclohexane

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#### Signal word Danger

### **Hazard statements**

H304 - May be fatal if swallowed and enters airways

H315 - Causes skin irritation

H336 - May cause drowsiness or dizziness

H410 - Very toxic to aquatic life with long lasting effects

H225 - Highly flammable liquid and vapour

## Precautionary Statements - EU (§28, 1272/2008)

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P273 - Avoid release to the environment

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor

P331 - Do NOT induce vomiting

P370 + P378 - In case of fire: Use dry chemical, CO2, water spray or alcohol-resistant foam to extinguish

P391 - Collect spillage

P403 + P235 - Store in a well-ventilated place. Keep cool

### 2.3. Other hazards

No information available.

This mixture contains no substance considered to be persistent, bioaccumulating or toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

Endocrine Disruptor InformationThis product does not contain any known or suspected endocrine disruptors.Chemical nameEU - REACH (1907/2006) - Article 59(1)EU - REACH (1907/2006) - Endocrine- Candidate List of Substances of Very High Concern (SVHC) for AuthorisationDisruptor Assessment List of SubstancesCyclohexane--

## SECTION 3: Composition/information on ingredients

#### 3.1 Substances

Not applicable

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### 3.2 Mixtures

**Chemical nature** 

Mixture of organic compounds.

	Chemical name	Weight-%	REACH registration	EC No (EU	Classification according	Specific	M-Factor	M-Factor
			number	Index No)	to Regulation (EC) No.	concentration		(long-term)
					1272/2008 [CLP]	limit (SCL)		
Γ	Cyclohexane	80 - 100	-	203-806-2	Flam. Liq. 2 (H225)			
	110-82-7				Skin Irrit. 2 (H315)			
					STOT SE 3 (H336)			
					Asp. Tox. 1 (H304)			
					Aquatic Acute 1 (H400)			
					Aquatic Chronic 1			
					(H410)			
					·			

### Full text of H- and EUH-phrases: see section 16

### **Acute Toxicity Estimate**

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg		Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Cyclohexane 110-82-7	12705	2000	32.88	No data available	No data available

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

## **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is

required.

**Inhalation** Remove to fresh air. Aspiration into lungs can produce severe lung damage. If breathing

has stopped, give artificial respiration. Get medical attention immediately. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen. Get immediate medical attention. Delayed

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pulmonary edema may occur.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep

eye wide open while rinsing. Do not rub affected area.

**Skin contact**Wash off immediately with soap and plenty of water while removing all contaminated clothes

and shoes. Get medical attention if irritation develops and persists.

**Ingestion** Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious

person. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Get immediate medical attention.

**Self-protection of the first aider** Remove all sources of ignition. Ensure that medical personnel are aware of the material(s)

involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. See section 8 for more information. Avoid

contact with skin, eyes or clothing.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms Difficulty in breathing. Coughing and/ or wheezing. Dizziness. Inhalation of high vapour

concentrations may cause symptoms like headache, dizziness, tiredness, nausea and

vomiting.

4.3. Indication of any immediate medical attention and special treatment needed

Note to doctors Because of the danger of aspiration, emesis or gastric lavage should not be used unless the

risk is justified by the presence of additional toxic substances.

## SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the

chemical

Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire

extinguishing water must be disposed of in accordance with local regulations.

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#### 5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment as required. Ensure

adequate ventilation. See section 8 for more information. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the

product must be grounded. Do not touch or walk through spilled material.

Other information Refer to protective measures listed in Sections 7 and 8. Ventilate the area.

6.2. Environmental precautions

**Environmental precautions** Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if

safe to do so. Prevent product from entering drains.

#### 6.3. Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. A

vapour suppressing foam may be used to reduce vapours. Dyke far ahead of spill to collect run-off water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand

or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up Take precautionary measures against static discharges. Dam up. Soak up with inert

absorbent material. Pick up and transfer to properly labelled containers.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

**Reference to other sections**See section 8 for more information. See section 13 for more information.

## SECTION 7: Handling and storage

## 7.1. Precautions for safe handling

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### Advice on safe handling

Use personal protection equipment. Avoid breathing vapours or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. In case of insufficient ventilation, wear suitable respiratory equipment.

#### General hygiene considerations

Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Wear suitable gloves and eye/face protection. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

## 7.2. Conditions for safe storage, including any incompatibilities

## **Storage Conditions**

Please refer to the manufacturer's certificate for specific storage and transport temperature conditions. Store only in the original receptacle unless other advice is given on the CoA. Store locked up. Keep out of the reach of children. Store away from other materials. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labelled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations.

#### 7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

## SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

#### **Exposure Limits**

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Cyclohexane	TWA: 200 ppm	TWA: 200 ppm	TWA: 100 ppm	TWA: 200 ppm	TWA: 200 ppm
110-82-7	TWA: 700 mg/m <sup>3</sup>	TWA: 700 mg/m <sup>3</sup>	TWA: 350 mg/m <sup>3</sup>	TWA: 700.0 mg/m <sup>3</sup>	TWA: 700 mg/m <sup>3</sup>
		STEL 800 ppm			Sk*
		STEL 2800 mg/m <sup>3</sup>			

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Chemical name	T) 4 /	Cyprus	Czech Republic	Denmark		stonia	Finland
Cyclohexane		A: 200 ppm	TWA: 700 mg/m <sup>3</sup>	TWA: 50 ppm		200 ppm	TWA: 100 ppm
110-82-7	IWA	: 700 mg/m <sup>3</sup>	Ceiling: 2000 mg/m <sup>3</sup>	TWA: 172 mg/m <sup>3</sup>	TWA: 7	700 mg/m <sup>3</sup>	TWA: 350 mg/m <sup>3</sup>
				STEL: 100 ppm			STEL: 250 ppm
				STEL: 344 mg/m <sup>3</sup>			STEL: 875 mg/m <sup>3</sup>
Chemical name		France	Germany TRGS	Germany DFG	Gı	reece	Hungary
Cyclohexane	TW	A: 200 ppm	TWA: 200 ppm	TWA: 200 ppm	TWA:	200 ppm	TWA: 200 ppm
110-82-7	TWA	: 700 mg/m <sup>3</sup>	TWA: 700 mg/m <sup>3</sup>	TWA: 700 mg/m <sup>3</sup>	TWA: 7	700 mg/m <sup>3</sup>	TWA: 700 mg/m <sup>3</sup>
	STE	L: 375 ppm		Peak: 800 ppm		Ü	
	STEL	: 1300 mg/m <sup>3</sup>		Peak: 2800 mg/m <sup>3</sup>			
Chemical name		Ireland	Italy MDLPS	Italy AIDII	L	atvia	Lithuania
Cyclohexane	TW	A: 200 ppm	TWA: 100 ppm	TWA: 100 ppm	TWA	23 ppm	TWA: 200 ppm
110-82-7		: 700 mg/m <sup>3</sup>	TWA: 350 mg/m <sup>3</sup>	TWA: 344 mg/m <sup>3</sup>		80 mg/m <sup>3</sup>	TWA: 700 mg/m <sup>3</sup>
110 02 7		L: 600 ppm	1 vv/ t. 556 mg/m	1 vv/ (. 5++ mg/m	1 4 4 7 1.	oo mg/m	1 vv/ (. 7 00 mg/m
		: 2100 mg/m <sup>3</sup>					
Chemical name		xembourg	Malta	Netherlands	Nic	orway	Poland
			111011101				
Cyclohexane		A: 200 ppm	TWA: 200 ppm	TWA: 200 ppm		150 ppm	TWA: 300 mg/m <sup>3</sup>
110-82-7	IVVA	: 700 mg/m <sup>3</sup>	TWA: 700 mg/m <sup>3</sup>	TWA: 700 mg/m <sup>3</sup>		525 mg/m <sup>3</sup>	STEL: 1000 mg/m <sup>3</sup>
				STEL: 400 ppm		187.5 ppm	Sk*
						6.25 mg/m <sup>3</sup>	
Chemical name		Portugal	Romania	Slovakia	Slo	venia	Spain
Cyclohexane	TW	A: 200 ppm	TWA: 200 ppm	TWA: 200 ppm	TWA:	200 ppm	TWA: 200 ppm
110-82-7	TWA	: 700 mg/m <sup>3</sup>	TWA: 700 mg/m <sup>3</sup>	TWA: 700 mg/m <sup>3</sup>	TWA: 7	700 mg/m³	TWA: 700 mg/m <sup>3</sup>
					STEL: 2	800 mg/m <sup>3</sup>	
					STEL:	800 ppm	
Chemical name		Sı	weden	Switzerland			ted Kingdom
Cyclohexane	Cvclohexane NGV		200 ppm	TWA: 200 ppm	)	TV	/A: 100 ppm
110-82-7			700 mg/m <sup>3</sup>	TWA: 700 mg/m		TW.	A: 350 mg/m <sup>3</sup>
			Ĭ	STEL: 800 ppn		1	EL: 300 ppm
				STEL: 2800 mg/l			_: 1050 mg/m <sup>3</sup>
			ii				

## **Biological occupational exposure limits**

Chemical name	European Union	Austria	Bulgaria	Croatia	Czech Republic
Cyclohexane	-	-	-	150 mg/g Creatinine	-
110-82-7				- urine	
				(1,2-Cyclohexanedi	
				ol) - at the end of the	
				work shift; at chronic	
				exposure after	
				several successive	
				shifts	
				450 μg/L - blood	

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Chemical name	Denmark	Finland	Fra		(Cyclohexano during exposu 3.20 mg/g Creat - urine (Cyclohexano during the sec half of the work Germany DF	ure tinine ol) - ond shift	
	Denmark	rifliand	Fra	nce			Germany TRGS
Cyclohexane 110-82-7	-				(urine - tota 1,2-Cyclohexan (after hydrolysis) of shift) 150 mg/g Creat (urine - tota 1,2-Cyclohexan (after hydrolysis long-term exposures: at	ediol ediol end inine l ediol s) for the after s) inine term the after	
Chemical name	Slovenia	Spain		Sw	itzerland		United Kingdom
Cyclohexane 110-82-7	150 mg/g Creatinine - urine (1,2-Cyclohexanediol (after hydrolysis)) - at the end of the work shift; for long-term exposure: at the end of the work shift after several consecutive workdays	-		150 mg/g of 1,2-Cyclol of shift, ar shifts (f exp 146 µmol/l (uri 1,2-Cyclol of shift, ar shifts (f	creatinine (urine total hexanediol end after several for long-term fosures)) mmol creatinine ne - total hexanediol end after several for long-term fosures))		-

Derived No Effect Level (DNEL)
Predicted No Effect Concentration
No information available.
No information available. (PNEC)

8.2. Exposure controls

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Personal protective equipment

**Eye/face protection** Avoid contact with eyes. Wear safety glasses with side shields (or goggles). Tight sealing

safety goggles.

Hand protection Wear protective nitrile rubber gloves. The protective gloves to be used must comply with the

specifications of EC Directive 89/686/EEC and the related standard EN374. Wear suitable

gloves. Impervious gloves.

**Skin and body protection** Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

Antistatic boots.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

**General hygiene considerations** Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this

product. Wash hands before breaks and after work. Wear suitable gloves and eye/face protection. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks

and immediately after handling the product.

**Environmental exposure controls** Do not allow into any sewer, on the ground or into any body of water.

## SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical stateLiquidAppearanceLiquidColourcolourlessOdourOdourless.

Odour threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

Melting point / freezing point6.5 °CNone knownInitial boiling point and boiling range80.7 °CNone knownFlammabilityNo data availableNone knownFlammability Limit in AirNone known

**Upper flammability or explosive** 9,3 Vol% - 326 g/m<sup>3</sup>

limits

Lower flammability or explosive 1 Vol% - 35 g/m<sup>3</sup>

limits

Flash point -20 °C None known

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**Autoignition temperature** 

260 °C

None known

**Decomposition temperature** 

None known

pH (as aqueous solution)

None known

Kinematic viscosity **Dynamic viscosity** 

No data available No data available No information available

0.894 mPas Water solubility No data available Solubility(ies) No data available Partition coefficient 3.44 103 hPa Vapour pressure Relative density 0.78

@ 20°C None known None known None known @ 20°C

None known

**Bulk density Liquid Density**  No data available

No data available

No data available

None known

Relative vapour density

2.9

None known

**Particle characteristics** 

**Particle Size Distribution** 

**Particle Size** 

No information available No information available

9.2. Other information

9.2.1. Information with regards to physical hazard classes Not applicable

9.2.2. Other safety characteristics No information available

## SECTION 10: Stability and reactivity

10.1. Reactivity

No information available. Reactivity

10.2. Chemical stability

Stability Stable under normal conditions.

**Explosion data** 

Sensitivity to mechanical impact None. Sensitivity to static discharge

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

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**Conditions to avoid** Heat, flames and sparks.

10.5. Incompatible materials

**Incompatible materials** Strong acids. Strong bases. Strong oxidising agents.

Hazardous decomposition products None known based on information supplied.

## **SECTION 11: Toxicological information**

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Information on likely routes of exposure

## **Product Information**

**Inhalation** Specific test data for the substance or mixture is not available. Aspiration into lungs can

produce severe lung damage. May cause pulmonary edema. Pulmonary edema can be

fatal. May cause drowsiness or dizziness.

**Eye contact** Specific test data for the substance or mixture is not available. May cause irritation.

**Skin contact** Repeated exposure may cause skin dryness or cracking. Specific test data for the

substance or mixture is not available. Causes skin irritation. (based on components).

**Ingestion** Specific test data for the substance or mixture is not available. Potential for aspiration if

swallowed. May cause lung damage if swallowed. Aspiration may cause pulmonary edema and pneumonitis. May be fatal if swallowed and enters airways. Ingestion may cause

gastrointestinal irritation, nausea, vomiting and diarrhoea.

## Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** Difficulty in breathing. Coughing and/ or wheezing. Dizziness. Redness. May cause redness

and tearing of the eyes. Inhalation of high vapour concentrations may cause symptoms like

headache, dizziness, tiredness, nausea and vomiting.

### Numerical measures of toxicity

### **Acute toxicity**

The following values are calculated based on chapter 3.1 of the GHS document

 ATEmix (oral)
 99,999.00 mg/kg

 ATEmix (dermal)
 99,999.00 mg/kg

 ATEmix (inhalation-gas)
 99,999.00 ppm

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ATEmix (inhalation-dust/mist) 99,999.00 mg/l ATEmix (inhalation-vapour) 99,999.00 mg/l

## **Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Cyclohexane	= 12705 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 32.88 mg/L (Rat)4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Skin corrosion/irritation** Classification based on data available for ingredients. Causes skin irritation.

Serious eye damage/eye irritation No information available.

**Respiratory or skin sensitisation** No information available.

Germ cell mutagenicity No information available.

**Carcinogenicity** No information available.

Reproductive toxicity No information available.

**STOT - single exposure** May cause drowsiness or dizziness.

**STOT - repeated exposure**No information available.

**Aspiration hazard** May be fatal if swallowed and enters airways.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

**Endocrine disrupting properties** No information available.

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11.2.2. Other information

Other adverse effects No information available.

## **SECTION 12: Ecological information**

12.1. Toxicity

**Ecotoxicity** Very toxic to aquatic life with long lasting effects.

**Unknown aquatic toxicity**Contains 0 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Cyclohexane	EC50: >500mg/L (72h, Desmodesmus subspicatus)	LC50: 3.96 - 5.18mg/L (96h, Pimephales promelas) LC50: 23.03 - 42.07mg/L (96h, Pimephales promelas) LC50: 24.99 - 44.69mg/L (96h, Lepomis macrochirus) LC50: 48.87 - 68.76mg/L		EC50: 3.78mg/L (48h, Daphnia magna)

## 12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

**Bioaccumulation** There is no data for this product.

**Component Information** 

Chemical name	Partition coefficient
Cyclohexane	3.44

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

**PBT and vPvB assessment** The product does not contain any substance(s) classified as PBT or vPvB.

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Chemical name	PBT and vPvB assessment
Cyclohexane	The substance is not PBT / vPvB

### 12.6. Endocrine disrupting properties

**Endocrine disrupting properties** No information available.

#### 12.7. Other adverse effects

No information available.

## **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Waste from residues/unused

products

Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging

Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

## **SECTION 14: Transport information**

IATA

**14.1 UN number or ID number** UN1145

**14.2 UN proper shipping name** Cyclohexane mixture

14.3 Transport hazard class(es)14.4 Packing group

**Description** UN1145, Cyclohexane mixture, 3, II

14.5 Environmental hazards Yes

14.6 Special precautions for user

Special Provisions None ERG Code 3H

**IMDG** 

**14.1 UN number or ID number** UN1145

14.2 UN proper shipping name Cyclohexane mixture

14.3 Transport hazard class(es)14.4 Packing group

**Description** UN1145, Cyclohexane mixture, 3, II, (-20°C c.c.), Marine pollutant

14.5 Marine pollutant

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Yes

Environmental hazards

14.6 Special precautions for user

Special Provisions None

EmS-No. F-E, S-D No information available

7 Maritime transport in bulk No information available

14.7 Maritime transport in bulk according to IMO instruments

RID

14.1 UN number or ID number UN1145

**14.2 UN proper shipping name** Cyclohexane mixture

14.3 Transport hazard class(es) 3

14.4 Packing group

**Description** UN1145, Cyclohexane mixture, 3, II, Environmentally Hazardous

14.5 Environmental hazards Yes

14.6 Special precautions for user

**Special Provisions** None **Classification code** F1

ADR

**14.1 UN number or ID number** UN1145

**14.2 UN proper shipping name** Cyclohexane mixture

14.3 Transport hazard class(es) 3
14.4 Packing group

**Description** UN1145, Cyclohexane mixture, 3, II, (D/E), Environmentally Hazardous

14.5 Environmental hazards Yes

14.6 Special precautions for user

Special ProvisionsNoneClassification codeF1Tunnel restriction code(D/E)

## SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

France

Occupational Illnesses (R-463-3, France)

Chemical name	French RG number	Title	
Cyclohexane	RG 84	-	
110-82-7			

Water hazard class (WGK) obviously hazardous to water (WGK 2)

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Poland

SDS created according to the following Polish regulation: Act of February 25, 2011 on chemical substances and their mixtures (Journal of Laws of 2018, item 143, as amended). Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing the European Chemicals Agency (EC) as amended. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labeling and packaging of substances and mixtures, as amended. Regulation of the Minister of Health of 10 August 2012 on the criteria and method of classifying chemical substances and their mixtures (Journal of Laws of 2012, item 1018). Regulation of the Minister of Health of 20 April 2012 on labeling packaging of hazardous substances and mixtures and some mixtures (Journal of Laws of 2012, item 445). Regulation of the Minister of Family, Labor and Social Policy of 12 June 2018 on the maximum allowable concentrations and intensities of factors harmful to health in the work environment (Journal of Laws of 2018, item 1286). Announcement of the Minister of Economy, Labor and Social Policy of August 28, 2003 on the publication of the unified text of the Ordinance of the Minister of Labor and Social Policy on general health and safety at work regulations (Journal of Laws of 2003, No. 169, item 1650). Regulation of the Minister of Health of 30 December 2004 on occupational safety and health related to the presence of chemical agents in the workplace (Journal of Laws of 2005, No. 11, item 86). Act of December 14, 2012 on waste (Journal of Laws of 2013, item 21) Regulation of the Minister of Health of December 30, 2004 on occupational health and safety related to the presence of chemical agents in the workplace (Journal U. of 2005, No. 11, item 86). Waste Act of December 14, 2012 (Journal of Laws of 2013, item 21). Act of 13 June 2013 on the management of packaging and packaging waste, Journal of Laws 2013, item 888). Government statement of September 24, 2002 - European Agreement on the International Carriage of Dangerous Goods by Road (ADR) (Journal of Laws No. 194, item 1629 and Journal of Laws of 2003, No. 207, item 2013 and 2014).

#### **European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

### Authorisations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

#### DIRECTIVE (EU) 2021/1187 on the marketing and use of explosives precursors Not applicable

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorisation per REACH Annex XIV
Cyclohexane - 110-82-7	57 75	

### **Persistent Organic Pollutants**

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Not applicable

Dangerous substance category per Seveso Directive (2012/18/EU)

P5a - FLAMMABLE LIQUIDS P5b - FLAMMABLE LIQUIDS P5c - FLAMMABLE LIQUIDS

E1 - Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

### Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

**International Inventories** 

TSCA LGC has not confirmed that the chemical substances in this product are on the TSCA

Inventory, and LGC is distributing this product solely for use either in applications statutorily exempt from TSCA and regulated under other laws (e.g., FFDCA, FIFRA) or in research and development activities in accordance with the TSCA Inventory R&D exemption provided

at 40 CFR 720.36. It is the end-user's responsibility to understand and follow the

requirements that apply to its use of this product.

DSL/NDSL
EINECS/ELINCS
Contact supplier for inventory compliance status
Contact supplier for inventory compliance status
Contact supplier for inventory compliance status
IECSC
Contact supplier for inventory compliance status
KECI
Contact supplier for inventory compliance status
Contact supplier for inventory compliance status
Contact supplier for inventory compliance status
AllC
Contact supplier for inventory compliance status

## Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

### 15.2. Chemical safety assessment

Chemical Safety Report A Chemical Safety Assessment is not required for this substance

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## **SECTION 16: Other information**

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

## Full text of H-Statements referred to under section 3

H225 - Highly flammable liquid and vapour

H304 - May be fatal if swallowed and enters airways

H315 - Causes skin irritation

H336 - May cause drowsiness or dizziness

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

#### Legend

SVHC: Substances of Very High Concern for Authorisation:

### Legend Section 8: Exposure controls/personal protection

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value Sk\* Skin designation

Classification procedure		
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used	
Acute oral toxicity	Calculation method	
Acute dermal toxicity	Calculation method	
Acute inhalation toxicity - gas	Calculation method	
Acute inhalation toxicity - Vapour	Calculation method	
Acute inhalation toxicity - dust/mist	Calculation method	
Skin corrosion/irritation	Calculation method	
Serious eye damage/eye irritation	Calculation method	
Respiratory sensitisation	Calculation method	
Skin sensitisation	Calculation method	
Mutagenicity	Calculation method	
Carcinogenicity	Calculation method	
Reproductive toxicity	Calculation method	
STOT - single exposure	Calculation method	
STOT - repeated exposure	Calculation method	
Acute aquatic toxicity	Calculation method	
Chronic aquatic toxicity	Calculation method	
Aspiration hazard	Calculation method	
Ozone	Calculation method	
Flammable liquids	On basis of test data	

### Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

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U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications

Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

Organisation for Economic Co-operation and Development Screening Information Data Set

World Health Organization

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This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 Disclaimer

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**End of Safety Data Sheet** 

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