

according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended

Creation Date 07-Dec-2009

Revision Date 09-Feb-2024

**Revision Number** 9

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Description: Cat No. : Synonyms NN'-Dicyclohexylcarbodiimide, 1M solution in dichloromethane 429020000; 429021000 DCC

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

Recommended Use	Laboratory chemicals.
Uses advised against	No Information available

#### 1.3. Details of the supplier of the safety data sheet

Company

**UK entity/business name** Fisher Scientific UK Bishop Meadow Road, Loughborough, Leicestershire LE11 5RG, United Kingdom

**EU entity/business name** Thermo Fisher Scientific Janssen Pharmaceuticalaan 3a, 2440 Geel, Belgium

E-mail address

#### begel.sdsdesk@thermofisher.com

1.4. Emergency telephone number

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe:** +32 14 57 52 99 **CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe:**001-703-527-3887

## **SECTION 2: HAZARDS IDENTIFICATION**

#### 2.1. Classification of the substance or mixture

CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

#### Physical hazards

Based on available data, the classification criteria are not met

#### Health hazards

Acute dermal toxicity Skin Corrosion/Irritation Category 4 (H312) Category 2 (H315)

#### N,N'-Dicyclohexylcarbodiimide, 1M solution in dichloromethane

Serious Eye Damage/Eye Irritation Skin Sensitization Carcinogenicity Specific target organ toxicity - (single exposure)

#### **Environmental hazards**

Chronic aquatic toxicity

Category 1 (H318) Category 1 (H317) Category 2 (H351) Category 3 (H336)

Category 2 (H411)

Full text of Hazard Statements: see section 16



Signal Word

Danger

#### **Hazard Statements**

- H312 Harmful in contact with skin
- H315 Causes skin irritation
- H317 May cause an allergic skin reaction
- H318 Causes serious eye damage
- H336 May cause drowsiness or dizziness
- H351 Suspected of causing cancer
- H411 Toxic to aquatic life with long lasting effects

Combustible liquid

#### **Precautionary Statements**

P280 - Wear protective gloves/protective clothing/eye protection/face protection
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER or doctor/physician

#### 2.3. Other hazards

Toxic to terrestrial vertebrates Contains a known or suspected endocrine disruptor Contains a substance on the National Authorities Endocrine Disruptor Lists

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.2. Mixtures

Component	CAS No	EC No	Weight %	CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567
Methylene chloride	75-09-2	EEC No. 200-838-9	83	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H336)

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				Carc. 2 (H351)
Dicyclohexylcarbodiimide	538-75-0	EEC No. 208-704-1	17	Acute Tox. 4 (H302)
				Acute Tox. 3 (H311)
				Eye Dam. 1 (H318)
				Skin Sens. 1 (H317)
				Aquatic Acute 1 (H400)
				Aquatic Chronic 1 (H410)

#### Full text of Hazard Statements: see section 16

## **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.		
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.		
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.		
Ingestion	Do NOT induce vomiting. Call a physician or poison control center immediately.		
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.		
Self-Protection of the First Aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.		
4.2. Most important symptoms and	effects, both acute and delayed		
	Causes severe eye damage. May cause allergic skin reaction. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting		
4.3. Indication of any immediate me	dical attention and special treatment needed		
Notes to Physician	Treat symptomatically. Symptoms may be delayed.		
SECTION 5: FIREFIGHTING MEASURES			

#### 5.1. Extinguishing media

#### Suitable Extinguishing Media

Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam. Water mist may be used to cool closed containers.

Extinguishing media which must not be used for safety reasons No information available.

#### 5.2. Special hazards arising from the substance or mixture

#### N,N'-Dicyclohexylcarbodiimide, 1M solution in dichloromethane

Combustible material. Containers may explode when heated. Water reactive.

#### **Hazardous Combustion Products**

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Nitrogen oxides (NOx).

#### 5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

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

Use personal protective equipment as required. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas. Remove all sources of ignition. Take precautionary measures against static discharges.

#### 6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

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

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition.

#### 6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

## **SECTION 7: HANDLING AND STORAGE**

#### 7.1. Precautions for safe handling

Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance. Keep away from open flames, hot surfaces and sources of ignition.

#### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

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

Flammables area. Keep under nitrogen. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and flame.

Technical Rules for Hazardous Substances (TRGS) 510 Class 10 Storage Class (LGK) (Germany)

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

Use in laboratories

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### N,N'-Dicyclohexylcarbodiimide, 1M solution in dichloromethane

#### **Exposure limits**

List source(s): **UK** - EH40/2005 Work Exposure Limits, Fourth edition. Published 2020. **IRE -** 2021 Code of Practice for the Chemical Agents Regulations, Schedule 1. Published by the Health and Safety Authority **EU** - Commission Directive (EU) 2019/1831 of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC

Component	The United Kingdom	European Union	Ireland
Methylene chloride	STEL: 200 ppm 15 min	TWA: 353 mg/m <sup>3</sup> (8h)	TWA: 100 ppm 8 hr.
	STEL: 706 mg/m <sup>3</sup> 15 min	TWA: 100 ppm (8h)	TWA: 353 mg/m <sup>3</sup> 8 hr.
	TWA: 353 mg/m <sup>3</sup> 8 hr	STEL: 706 mg/m <sup>3</sup> (15min)	STEL: 200 ppm 15 min
	TWA: 100 ppm 8 hr	STEL: 200 ppm (15min)	STEL: 706 mg/m <sup>3</sup> 15 min
	Skin	Skin	Skin

#### **Biological limit values**

List source(s): **UK** - Biological Monitoring Guidance Values provided by the UK's Health and Safety Executive (HSE) Control of Substances Hazardous to Health Regulations (COSHH) 2002 (as amended) and EH40/2005.

Component	United Kingdom	European Union
Methylene chloride	Carbon monoxide: 30 ppm end-tidal breath	
	post shift	

## Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL)

See table for values

Component	Acute effects local (Dermal)	Acute effects systemic (Dermal)	Chronic effects local (Dermal)	Chronic effects systemic (Dermal)
Methylene chloride				DNEL = 12mg/kg
75-09-2 (83)				bw/day
Dicyclohexylcarbodiimide				DNEL = 0.03428mg/kg
538-75-0 ( 17 )				bw/day

Component	Acute effects local (Inhalation)	Acute effects systemic (Inhalation)	Chronic effects local (Inhalation)	Chronic effects systemic (Inhalation)
Methylene chloride 75-09-2 (83)		DMEL = 132.14mg/m <sup>3</sup>		DNEL = 176mg/m <sup>3</sup>
Dicyclohexylcarbodiimide 538-75-0 (17)				DNEL = 0.2116mg/m <sup>3</sup>

#### Predicted No Effect Concentration (PNEC)

See values below.

Component	Fresh water	Fresh water	Water Intermittent	Microorganisms in	Soil (Agriculture)
		sediment		sewage treatment	
Methylene chloride	PNEC = 130µg/L	PNEC = 163µg/kg	PNEC = 0.27mg/L	PNEC = 26mg/L	PNEC = 173µg/kg
75-09-2 (83)	PNEC = 0.31 mg/L	sediment dw		-	soil dw
		PNEC = 2.57mg/kg			PNEC = 0.33mg/kg
		sediment dw			soil dw
Dicyclohexylcarbodiimide	PNEC = 7ng/L	PNEC =	PNEC = 70ng/L	PNEC = 0.1mg/L	PNEC =
538-75-0 (17)		5.9139µg/kg		-	0.00696mg/kg soil
		sediment dw			dw

Component	Marine water	Marine water sediment	Marine water intermittent	Food chain	Air
Methylene chloride 75-09-2 (83)	PNEC = 130µg/L PNEC = 0.031mg/L	sediment dw	PNEC = 0.027mg/L		
		PNEC = 0.26mg/kg sediment dw			
Dicyclohexylcarbodiimide 538-75-0 (17)	PNEC = 0.7ng/L	PNEC = 0.59139µg/kg sediment dw	PNEC = 7ng/L	PNEC = 3.33mg/kg food	

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#### 8.2. Exposure controls

#### **Engineering Measures**

Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location. Use explosion-proof electrical/ventilating/lighting equipment. Ensure adequate ventilation, especially in confined areas. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

#### Personal protective equipment

Hand Protection	Protective gloves
-----------------	-------------------

Glove material	Breakthroug	gh time	Glove thickness	EU standard	Glove comments
Viton (R)	See manufa		-	EN 374	(minimum requirement)
	recommend	dations			
Skin and body pro	tection	Long sle	eved clothing.		

#### Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

Respiratory Protection	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly
Large scale/emergency use	Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced <b>Recommended Filter type:</b> low boiling organic solvent Type AX Brown conforming to EN371
Small scale/Laboratory use	Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. <b>Recommended half mask:-</b> Valve filtering: EN405; or; Half mask: EN140; plus filter, EN 141 When RPE is used a face piece Fit Test should be conducted
Environmental exposure controls	Prevent product from entering drains. Do not allow material to contaminate ground water system.

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

#### 9.1. Information on basic physical and chemical properties

Physical State	Liquid
Appearance Odor Odor Threshold Melting Point/Range Softening Point Boiling Point/Range Flammability (liquid) Flammability (solid,gas) Explosion Limits	Light yellow sweet No data available No data available No data available No information available Combustible liquid Not applicable No data available
Flash Point	87 °C / 188.6 °F

On basis of test data Liquid

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**Autoignition Temperature** No data available **Decomposition Temperature** No data available No information available pН Viscosity No data available Water Solubility Insoluble Solubility in other solvents No information available Partition Coefficient (n-octanol/water) log Pow Component Methylene chloride 1.25 Dicyclohexylcarbodiimide 6.83 Vapor Pressure No data available Density / Specific Gravity 1.240 Bulk Density Not applicable Liquid Vapor Density No data available (Air = 1.0)**Particle characteristics** Not applicable (liquid) 9.2. Other information **Explosive Properties** explosive air/vapour mixtures possible SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

None known, based on information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous Polymerization Hazardous Reactions	Hazardous polymerization does not occur. None under normal processing.
10.4. Conditions to avoid	Incompatible products. Excess heat. Keep away from open flames, hot surfaces and sources of ignition. Exposure to moist air or water.
10.5. Incompatible materials	

<u>10.6. Hazardous decomposition products</u> Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Nitrogen oxides (NOx).

## **SECTION 11: TOXICOLOGICAL INFORMATION**

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

#### **Product Information**

(a) acute toxicity;	
Oral	Based on available data, the classification criteria are not met
Dermal	Category 4
Inhalation	Based on available data, the classification criteria are not met

Strong oxidizing agents.

## Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Methylene chloride	> 2000 mg/kg (Rat)	> 2000 mg/kg(Rat)	53 mg/L(Rat)6 h
			76000 mg/m <sup>3</sup> ( Rat ) 4 h
Dicyclohexylcarbodiimide	LD50 = 400 mg/kg (Rat)	LD50 = 79.1 mg/kg (Rabbit)	159 mg/m³/6h

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b) skin corrosion/irritation;	Category 2								
c) serious eye damage/irritation;	Category 1								
d) respiratory or skin sensitization; Respiratory Skin	No data available Category 1								
	May cause sensitization by skin contact								
e) germ cell mutagenicity;	No data available								
f) carcinogenicity;	Category 2								
	Possible cancer has whether each agen				data The table below en	v indica			
Component	EU	UK		Germany	IARC	;			
Methylene chloride					Group	2A			

- (h) STOT-single exposure; Category 3
- Results / Target organs Central nervous system (CNS).
- (i) STOT-repeated exposure; No data available
- Target OrgansNo information available.
- (j) aspiration hazard; No data available

Symptoms / effects,both acute and delayed Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

#### 11.2. Information on other hazards

#### Endocrine Disrupting Properties Assess endocrine disrupting properties for human health

Contains a substance on the National Authorities Endocrine Disruptor Lists

## **SECTION 12: ECOLOGICAL INFORMATION**

#### 12.1. Toxicity Ecotoxicity effects

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.

	Component	Freshwater Fish	Water Flea	Freshwater Algae
	Methylene chloride	Pimephales promelas: LC50:193	EC50: 140 mg/L/48h	EC50:>660 mg/L/96h
		mg/L/96h		
Dicyclohexylcarbodiimide Oryzias latipes:		Oryzias latipes:		
		LC50=250mg/L/48h		

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Component	Microtox	M-Factor
Methylene chloride	EC50: 1 mg/L/24 h	
Discussion in a state of the state	EC50: 2.88 mg/L/15 min	
Dicyclohexylcarbodiimide	EC50>1000mg/L/3h	
12.2. Persistence and degradability		
Persistence	Persistence is unlikely.	
Degradability	Reacts with water.	
Degradation in sewage	Contains substances known to be hazardous to	the environment or not degradable in wast
treatment plant	water treatment plants.	
12.3. Bioaccumulative potential	Bioaccumulation is unlikely	
Component	log Pow	Bioconcentration factor (BCF)
Methylene chloride	1.25	6.4 - 40 dimensionless
Dicyclohexylcarbodiimide	6.83	No data available
<u>12.4. Mobility in soil</u>	Reacts with water Spillage unlikely to penetrate water . Is not likely mobile in the environment. its low water solubility.	
12.5. Results of PBT and vPvB assessment	No data available for assessment.	
<u>12.6. Endocrine disrupting</u> properties Endocrine Disruptor Information	This product does not contain any known or su	spected endocrine disruptors
12.7. Other adverse effects Persistent Organic Pollutant Ozone Depletion Potential	This product does not contain any known or sus This product does not contain any known or sus	
SE	CTION 13: DISPOSAL CONSIDER	ATIONS
13.1. Waste treatment methods		
Waste from Residues/Unused Products	Waste is classified as hazardous. Dispose of in regulations. Dispose of in accordance with the hazardous waste. Dispose of in accordance with	European Directives on waste and
Contaminated Packaging	Do not reuse empty containers. Dispose of in a this container to hazardous or special waste co	
European Waste Catalogue (EWC)	According to the European Waste Catalog, Waapplication specific.	ste Codes are not product specific, but
Other Information	Do not flush to sewer. Waste codes should be a application for which the product was used. Do chemical enter the environment.	

# **SECTION 14: TRANSPORT INFORMATION**

# SAFETY DATA SHEET N,N'-Dicyclohexylcarbodiimide, 1M solution in dichloromethane

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<u>14.1. UN number</u>	UN1593
14.2. UN proper shipping name	Dichloromethane (Mixture)
14.3. Transport hazard class(es)	6.1
14.4. Packing group	III
ADR	
14.1. UN number	UN1593
14.2. UN proper shipping name	Dichloromethane (Mixture)
14.3. Transport hazard class(es)	6.1
14.4. Packing group	III
IATA_	
14.1. UN number	UN1593
14.2. UN proper shipping name	Dichloromethane (Mixture)
14.3. Transport hazard class(es)	6.1
14.4. Packing group	III
14.5. Environmental hazards	Dangerous for the environment
	Product is a marine pollutant according to the criteria set by IMDG/IMO
14.6. Special precautions for user	No special precautions required.
<u></u>	
14.7. Maritime transport in bulk	Not applicable, packaged goods
according to IMO instruments	
SE	CTION 15: REGULATORY INFORMATION

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

#### International Inventories

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia (AICS), New Zealand (NZIoC), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

Component	CAS No	EINECS	ELINCS	NLP	IECSC	TCSI	KECL	ENCS	ISHL
Methylene chloride	75-09-2	200-838-9	-	-	Х	Х	KE-23893	Х	Х
Dicyclohexylcarbodiimide	538-75-0	208-704-1	-	-	Х	Х	KE-23191	Х	Х
Component	CAS No	TSCA	TSCA In	ventory	DSL	NDSL	AICS	NZIoC	PICCS

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	AICS	NZIoC	PICCS
Methylene chloride	75-09-2	Х	ACTIVE	Х	-	Х	Х	Х
Dicyclohexylcarbodiimide	538-75-0	Х	ACTIVE	Х	-	Х	Х	Х

Legend: X - Listed '-' - Not Listed

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

#### Authorisation/Restrictions according to EU REACH

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Methylene chloride	75-09-2	-	Use restricted. See item 59. (see link for restriction details) Use restricted. See item 75. (see link for restriction details)	-

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Dicyclohexylcarbodiimide	538-75-0	-	Use restricted. See item	-
			75.	
			(see link for restriction	
			details)	

#### **REACH links**

https://echa.europa.eu/substances-restricted-under-reach

#### Seveso III Directive (2012/18/EC)

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements
Methylene chloride	75-09-2	Not applicable	Not applicable
Dicyclohexylcarbodiimide	538-75-0	Not applicable	Not applicable

# Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals

Not applicable

#### Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)? Not applicable

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 .

Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values

#### National Regulations

UK - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

**WGK Classification** 

Water endangering class = 2 (self classification)

Component	Germany - Water Classification (AwSV)	Germany - TA-Luft Class
Methylene chloride	WGK2	Class I : 20 mg/m <sup>3</sup> (Massenkonzentration)

Component	France - INRS (Tables of occupational diseases)
Methylene chloride	Tableaux des maladies professionnelles (TMP) - RG 12
Dicyclohexylcarbodiimide	Tableaux des maladies professionnelles (TMP) - RG 65,RG 66

Component	Switzerland - Ordinance on the Reduction of Risk from handling of hazardous substances preparation (SR 814.81)	Switzerland - Ordinance on Incentive Taxes on Volatile Organic Compounds (OVOC)	Switzerland - Ordinance of the Rotterdam Convention on the Prior Informed Consent Procedure
Methylene chloride 75-09-2(83)	Persistent Organic Pollutants (POPs) Prohibited and Restricted Substances	Group I	

#### 15.2. Chemical safety assessment

Chemical Safety Assessment/Reports (CSA/CSR) are not required for mixtures

#### N,N'-Dicyclohexylcarbodiimide, 1M solution in dichloromethane

- Full text of H-Statements referred to under sections 2 and 3
- H312 Harmful in contact with skin
- H315 Causes skin irritation

H317 - May cause an allergic skin reaction

- H318 Causes serious eye damage
- H371 May cause damage to organs
- H336 May cause drowsiness or dizziness
- H351 Suspected of causing cancer
- H411 Toxic to aquatic life with long lasting effects
- H302 Harmful if swallowed
- H311 Toxic in contact with skin
- H319 Causes serious eye irritation
- H400 Very toxic to aquatic life
- H410 Very toxic to aquatic life with long lasting effects

#### Legend

CAS - Chemical Abstracts Service	<b>TSCA</b> - United States Toxic Substances Control Act Section 8(b)	
	Inventory	
EINECS/ELINCS - European Inventory of Existing Commercial Chemical	DSL/NDSL - Canadian Domestic Substances List/Non-Domestic	
Substances/EU List of Notified Chemical Substances	Substances List	
<b>PICCS</b> - Philippines Inventory of Chemicals and Chemical Substances	ENCS - Japanese Existing and New Chemical Substances	
IECSC - Chinese Inventory of Existing Chemical Substances	AICS - Australian Inventory of Chemical Substances	
KECL - Korean Existing and Evaluated Chemical Substances	NZIOC - New Zealand Inventory of Chemicals	
WEL Markelana Evenenus Limit	TWA Time Weighted Average	
WEL - Workplace Exposure Limit	TWA - Time Weighted Average	
ACGIH - American Conference of Governmental Industrial Hygienists	IARC - International Agency for Research on Cancer	

ACGIH - American Conference of Governmental Industrial Hygienists DNEL - Derived No Effect Level RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50% NOEC - No Observed Effect Concentration PBT - Persistent, Bioaccumulative, Toxic

> ICAO/IATA - International Civil Aviation Organization/International Air Transport Association MARPOL - International Convention for the Prevention of Pollution from Ships ATE - Acute Toxicity Estimate VOC - (Volatile Organic Compound)

Predicted No Effect Concentration (PNEC)

POW - Partition coefficient Octanol:Water

vPvB - very Persistent, very Bioaccumulative

EC50 - Effective Concentration 50%

LD50 - Lethal Dose 50%

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code OECD - Organisation for Economic Co-operation and Development BCF - Bioconcentration factor

Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:			
Physical hazards	On basis of test data		
Health Hazards	Calculation method		
Environmental hazards	Calculation method		

#### **Training Advice**

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers. Chemical incident response training.

Creation Date	07-Dec-2009
Revision Date	09-Feb-2024
Revision Summary	Not applicable.

This safety data sheet complies with Regulation UK SI 2019/758 and UK SI 2020/1577 as amended.

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#### Disclaimer

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# End of Safety Data Sheet