acc. to Regulation (EC) No. 1907/2006 (REACH)



#### Dichloromethane PEPTIPURE® ≥99,9 %, for peptide synthesis

#### article number: **P089** Version: **5.0 en** Replaces version of: 2021-11-17 Version: (4)

#### date of compilation: 2016-04-08 Revision: 2023-07-27

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

#### 1.1 Product identifier

Identification of the substance	<b>Dichloromethane</b> PEPTIPURE® ≥99,9 %, for pep- tide synthesis
Article number	P089
Index No (GB CLP)	602-004-00-3
EC number	200-838-9
CAS number	75-09-2
Alternative name(s)	Dichloromethane
Relevant identified uses of the substance or mi	xture and uses advised against

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

Relevant identified uses:

Uses advised against:

Laboratory chemical Laboratory and analytical use

Do not use for products which come into contact with foodstuffs. Do not use for private purposes (household). Food, drink and animal feedingstuffs.

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

Carl Roth GmbH + Co KG Schoemperlenstr. 3-5 D-76185 Karlsruhe Germany

**Telephone:**+49 (0) 721 - 56 06 0 **Telefax:** +49 (0) 721 - 56 06 149 **e-mail:** sicherheit@carlroth.de **Website:** www.carlroth.de

Competent person responsible for the safety data Department Health, Safety and Environment sheet:

#### e-mail (competent person):

#### sicherheit@carlroth.de

#### 1.4 Emergency telephone number

Name	Street	Postal code/city	Telephone	Website
National Poisons Information Service City Hospital	Dudley Rd	B187QH Birmingham	844 892 0111	

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## **SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

#### **Classification acc. to GHS**

Section	Hazard class	Cat- egory	Hazard class and category	Hazard statement
3.2	Skin corrosion/irritation	2	Skin Irrit. 2	H315
3.3	Serious eye damage/eye irritation	2	Eye Irrit. 2	H319
3.6	Carcinogenicity	2	Carc. 2	H351
3.8D	Specific target organ toxicity - single exposure (narcotic effects, drowsiness)	3	STOT SE 3	H336

For full text of abbreviations: see SECTION 16

#### 2.2 Label elements

## Labelling

Signal word

**Pictograms** 

GHS07, GHS08



#### Hazard statements

H315	Causes skin irritation
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness
H351	Suspected of causing cancer

Warning

#### **Precautionary statements**

#### **Precautionary statements - prevention**

P261	Avoid breathing mist/vapours/spray
P280	Wear protective gloves/eye protection

### **Precautionary statements - response**

P302+P352	IF ON SKIN: Wash with plenty of water
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact
	lenses, if present and easy to do. Continue rinsing
P308+P313	IF exposed or concerned: Get medical advice/attention

For professional users only

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#### 2.3 Other hazards

#### **Results of PBT and vPvB assessment**

According to the results of its assessment, this substance is not a PBT or a vPvB.

#### **Endocrine disrupting properties**

Does not contain an endocrine disruptor (EDC) in a concentration of  $\ge 0,1\%$ .

## **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Name of substance	Dichloromethane
Molecular formula	$CH_2CI_2$
Molar mass	84,93 <sup>g</sup> / <sub>mol</sub>
CAS No	75-09-2
EC No	200-838-9
Index No (GB CLP)	602-004-00-3

#### To stabilise:

Name of substance	Identifier	Wt%
Amylene	CAS No 513-35-9	0,002 – 0,006
	EC No 208-156-3	

For full text of abbreviations: see SECTION 16

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

#### 4.1 Description of first aid measures



#### **General notes**

Take off contaminated clothing.

#### **Following inhalation**

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

#### Following skin contact

Rinse skin with water/shower. In case of skin irritation, consult a physician.

#### Following eye contact

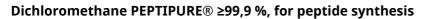
Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. In case of eye irritation consult an ophthalmologist.

#### **Following ingestion**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).



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- **4.2 Most important symptoms and effects, both acute and delayed** Irritation, Nausea, Vomiting, Cough, Vertigo, Dyspnoea, Drowsiness, Dizziness, Narcosis
- **4.3 Indication of any immediate medical attention and special treatment needed** none

## **SECTION 5: Firefighting measures**

## 5.1 Extinguishing media



#### Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings water spray, alcohol resistant foam, dry extinguishing powder, BC-powder, carbon dioxide (CO<sub>2</sub>)

#### Unsuitable extinguishing media

water jet

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

Non-combustible.

#### Hazardous combustion products

In case of fire may be liberated: Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Hydrogen chloride (HCl), Hydrogen halides (HX)

#### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

## **SECTION 6: Accidental release measures**

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



#### For non-emergency personnel

Use personal protective equipment as required. Avoid contact with skin, eyes and clothes. Do not breathe vapour/spray.

#### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

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

#### Advice on how to contain a spill

Covering of drains.

#### Advice on how to clean up a spill

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

#### Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.



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#### 6.4 **Reference to other sections**

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

## **SECTION 7: Handling and storage**

#### 7.1 **Precautions for safe handling**

Avoid exposure. Provide adequate ventilation as well as local exhaustion at critical locations. When not in use, keep containers tightly closed.

#### Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs.

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

Store in a well-ventilated place. Keep container tightly closed.

#### Incompatible substances or mixtures

Observe hints for combined storage.

#### Protect against external exposure, such as

direct light irradiation, UV-radiation/sunlight

#### **Consideration of other advice:**

#### Specific designs for storage rooms or vessels

Recommended storage temperature: 15 – 25 °C

#### 7.3 Specific end use(s)

No information available.

## SECTION 8: Exposure controls/personal protection

#### 8.1 **Control parameters**

#### National limit values

#### **Occupational exposure limit values (Workplace Exposure Limits)**

Cou ntr y	Name of agent	CAS No	Identi- fier	TV A [pp m]	TWA [mg/ m³]	STE L [pp m]	STEL [mg/ m³]	Ceil ing- C [pp m]	Ceil- ing-C [mg/ m³]	Nota- tion	Source
EU	methylene chloride (dichloromethane)	75-09-2	IOELV	100	353	200	706			Н	2017/ 164/EU
GB	dichloromethane	75-09-2	WEL	100	353	200	706				EH40/ 2005

Notation

Ceiling value is a limit value above which exposure should not occur Absorbed through the skin Ceiling-C

STEL

Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified) TWA

Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

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Biological limit values								
Coun try	Name of agent	CAS No	Parameter	Nota tion	Identi- fier	Value	Material	Source
GB	dichloromethane	75-09-2	carbon monoxide		BMGV	30 ppm	end-tidal breath	EH40/ 2005

#### Human health values

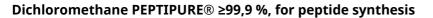
Relevant DNI	Relevant DNELs and other threshold levels									
Endpoint Threshold Protection goal, level route of exposure			Used in	Exposure time						
DNEL	706 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	acute - systemic effects						
DNEL	176 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects						
DNEL	12 mg/kg bw/ day	human, dermal	worker (industry)	chronic - systemic effects						

#### **Environmental values**

Relevant	Relevant PNECs and other threshold levels									
End- point	Threshold level	Organism	Environmental com- partment	Exposure time						
PNEC	0,31 <sup>mg</sup> / <sub>l</sub>	aquatic organisms	freshwater	short-term (single instance)						
PNEC	0,031 <sup>mg</sup> / <sub>l</sub>	aquatic organisms	marine water	short-term (single instance)						
PNEC	26 <sup>mg</sup> / <sub>l</sub>	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)						
PNEC	2,57 <sup>mg</sup> / <sub>kg</sub>	aquatic organisms	freshwater sediment	short-term (single instance)						
PNEC	0,26 <sup>mg</sup> / <sub>kg</sub>	aquatic organisms	marine sediment	short-term (single instance)						
PNEC	0,33 <sup>mg</sup> / <sub>kg</sub>	terrestrial organisms	soil	short-term (single instance)						

Relevant PNECs	of compone	ents of th	e mixture			
Name of sub- stance	CAS No	End- point	Threshol d level	Organism	Environmental compartment	Exposure time
Amylene	513-35-9	PNEC	0,37 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	freshwater	short-term (single instance)
Amylene	513-35-9	PNEC	0,37 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	marine water	short-term (single instance)
Amylene	513-35-9	PNEC	5,77 <sup>mg</sup> / <sub>l</sub>	aquatic organ- isms	sewage treatment plant (STP)	short-term (single instance)
Amylene	513-35-9	PNEC	8,1 <sup>mg</sup> / <sub>kg</sub>	aquatic organ- isms	freshwater sedi- ment	short-term (single instance)
Amylene	513-35-9	PNEC	8,1 <sup>mg</sup> / <sub>kg</sub>	aquatic organ- isms	marine sediment	short-term (single instance)
Amylene	513-35-9	PNEC	1,44 <sup>mg</sup> / <sub>kg</sub>	terrestrial organ- isms	soil	short-term (single instance)

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#### 8.2 Exposure controls

#### Individual protection measures (personal protective equipment)

#### Eye/face protection



Use safety goggle with side protection.

#### Skin protection



#### hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The times are approximate values from measurements at 22 ° C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a consider-able reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

#### • type of material

FKM: fluoro-elastomer

#### • material thickness

0,7mm

#### • breakthrough times of the glove material

>120 minutes (permeation: level 4)

#### other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

#### **Respiratory protection**



Respiratory protection necessary at: Aerosol or mist formation. Type: AX (gas filters and combined filters against low-boiling point organic compounds, colour code: Brown).

#### **Environmental exposure controls**

Keep away from drains, surface and ground water.



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# **SECTION 9: Physical and chemical properties**

9.1	Information on basic physical and chemical pro	operties
	Physical state	liquid
	Colour	colourless
	Odour	mild sweet
	Odour threshold	250 ppm
	Melting point/freezing point	-95 °C at 1.013 hPa (ECHA)
	Boiling point or initial boiling point and boiling range	40 °C at 1.013 hPa (ECHA)
	Flammability	non-combustible
	Lower and upper explosion limit	13 vol% (LEL) - 22 vol% (UEL)
	Flash point	not determined
	Auto-ignition temperature	605 °C
	Decomposition temperature	not relevant
	pH (value)	not determined
	Kinematic viscosity	not determined
	Dynamic viscosity	0,43 mPa s at 20 °C
	Solubility(ies)	
	Water solubility	20 <sup>g</sup> / <sub>l</sub> at 20 °C
	Partition coefficient	
	Partition coefficient n-octanol/water (log value):	1,25 (pH value: 7, 20 °C) (ECHA)
	Vapour pressure	475 hPa at 20 °C
	Density and/or relative density	
	Density	1,33 <sup>g</sup> / <sub>cm³</sub> at 20 °C (ECHA)
	Relative vapour density	2,93 (air = 1)
	Particle characteristics	not relevant (liquid)
	Other safety parameters	
	Oxidising properties	none
9.2	Other information	
	Information with regard to physical hazard classes:	hazard classes acc. to GHS (physical hazards): not relevant
	Other safety characteristics:	There is no additional information.

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## **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

This material is not reactive under normal ambient conditions.

#### **10.2** Chemical stability

May cause decomposition by long-term light influence.

#### 10.3 Possibility of hazardous reactions

**Danger of explosion:** Alkali metals, Nitric acid, Aluminium, Amines, Nitrogen oxides (NOx), **Exothermic reaction with:** Alkaline earth metal, Metal powder, Strong alkali

#### 10.4 Conditions to avoid

Direct light irradiation. UV-radiation/sunlight.

#### 10.5 Incompatible materials

Steel, aluminium, different plastics, Rubber articles

#### **10.6** Hazardous decomposition products

Hazardous combustion products: see section 5.

## **SECTION 11: Toxicological information**

#### **11.1** Information on toxicological effects

#### **Classification acc. to GHS**

#### Acute toxicity

Shall not be classified as acutely toxic.

GHS of the United Nations, annex 4. May be harmful if swallowed or in contact with skin.

Acute toxicity					
Exposure route	Endpoint	Value	Species	Method	Source
oral	LD50	>2.000 <sup>mg</sup> / <sub>kg</sub>	rat		ECHA
dermal	LD50	>2.000 <sup>mg</sup> / <sub>kg</sub>	rat		ECHA

#### Skin corrosion/irritation

Causes skin irritation.

#### Serious eye damage/eye irritation

Causes serious eye irritation.

#### Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

#### Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

#### Carcinogenicity

Suspected of causing cancer.

#### **Reproductive toxicity**

Shall not be classified as a reproductive toxicant.

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#### Specific target organ toxicity - single exposure

May cause drowsiness or dizziness.

#### Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

#### Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

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

#### • If swallowed

vomiting, nausea

#### • If in eyes

Causes serious eye irritation, corneal opacity

#### • If inhaled

vertigo, dizziness, fatigue, narcosis

#### • If on skin

causes skin irritation

#### Other information

Other adverse effects: Liver and kidney damage, Circulatory collapse, Headache, Dyspnoea, Blood pressure drop

#### **11.2** Endocrine disrupting properties

Does not contain an endocrine disruptor (EDC) in a concentration of  $\ge 0,1\%$ .

#### 11.3 Information on other hazards

There is no additional information.

## **SECTION 12: Ecological information**

#### 12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute)						
Endpoint	Value	Value		pecies	Source	Exposure time
LC50	193 <sup>mg</sup> / <sub>l</sub>		fish		ECHA	96 h
Aquatic toxicity (ad	cute) of compo	nents o	f the mix	xture		
Name of sub- stance	CAS No	End	point	Value	Species	Exposure time
Amylene	513-35-9	LC	250	4,99 <sup>mg</sup> / <sub>l</sub>	fish	96 h
Amylene	513-35-9	EC	250	3,84 <sup>mg</sup> / <sub>l</sub>	aquatic invertebrates	48 h
Amylene	513-35-9	Er	C50	12 <sup>mg</sup> / <sub>l</sub>	algae	72 h



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Aquatic toxicity (chronic)					
Endpoint	Value	Species	Source	Exposure time	
LC50	471 <sup>mg</sup> / <sub>l</sub>	fish	ECHA	8 d	
EC50	2.590 <sup>mg</sup> / <sub>l</sub>	microorganisms	ECHA	40 min	

#### 12.2 Persistence and degradability

Theoretical Oxygen Demand: 0,3768 <sup>mg</sup>/<sub>mg</sub> Theoretical Carbon Dioxide: 0,5182 <sup>mg</sup>/<sub>mg</sub>

#### **Biodegradation**

The substance is readily biodegradable.

Process of degradability					
Process	Degradation rate	Time			
biotic/abiotic	5 – 26 %	28 d			
oxygen depletion	68 %	28 d			

#### Degradability of components of the mixture

Name of substance	CAS No	Process	Degrada- tion rate	Time	Method	Source
Amylene	513-35-9	oxygen deple- tion	7 %	28 d		ECHA

#### 12.3 Bioaccumulative potential

Does not significantly accumulate in organisms.

n-octanol/water (log KOW)	1,25 (pH value: 7, 20 °C) (ECHA)
BCF	39 (ECHA)

#### 12.4 Mobility in soil

Henry's law constant	0,002 <sup>Pa m³</sup> / <sub>mol</sub> at 24,8 °C (ECHA)
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#### 12.5 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

#### 12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (EDC) in a concentration of  $\ge 0,1\%$ .

#### 12.7 Other adverse effects

Data are not available.

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## **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Sewage disposal-relevant information

Do not empty into drains.

#### Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Handle contaminated packages in the same way as the substance itself. Completely emptied packages can be recycled.

#### 13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

#### Properties of waste which render it hazardous

- HP 4 irritant skin irritation and eye damage
- HP 7 carcinogenic

#### 13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions. Non-contaminated packages may be recycled.

## **SECTION 14: Transport information**

#### 14.1 UN number or ID number

	ADRRID	UN 1593
	IMDG-Code	UN 1593
	ICAO-TI	UN 1593
14.2	UN proper shipping name	
	ADRRID	DICHLOROMETHANE
	IMDG-Code	DICHLOROMETHANE
	ICAO-TI	Dichloromethane
14.3	Transport hazard class(es)	
	ADRRID	6.1
	IMDG-Code	6.1
	ICAO-TI	6.1
14.4	Packing group	
	ADRRID	III
	IMDG-Code	III
	ICAO-TI	III

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14.5	Environmental hazards	non-environmentally hazardous acc. to the dan-
		gerous goods regulations

14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

**14.7** Maritime transport in bulk according to IMO instruments The cargo is not intended to be carried in bulk.

#### 14.8 Information for each of the UN Model Regulations

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)Additional information
intormation

Proper shipping name	DICHLOROMETHANE
Particulars in the transport document	UN1593, DICHLOROMETHANE, 6.1, III, (E)
Classification code	T1
Danger label(s)	6.1
Special provisions (SP)	516, 802(ADN)
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
Transport category (TC)	2
Tunnel restriction code (TRC)	E
Hazard identification No	60
Emergency Action Code	2Z
Regulations concerning the International Carr information	iage of Dangerous Goods by Rail (RID)Additional
mormation	
Classification code	Τ1
	T1 6.1
Classification code	
Classification code	
Classification code Danger label(s)	6.1
Classification code Danger label(s)	6.1 516, 802(ADN)
Classification code Danger label(s) Special provisions (SP) Excepted quantities (EQ)	6.1 516, 802(ADN) E1
Classification code Danger label(s) Special provisions (SP) Excepted quantities (EQ) Limited quantities (LQ)	6.1 516, 802(ADN) E1 5 L

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International Maritime Dangerous Goods Code	e (IMDG) - Additional information
Proper shipping name	DICHLOROMETHANE
Particulars in the shipper's declaration	UN1593, DICHLOROMETHANE, 6.1, III
Marine pollutant	-
Danger label(s)	6.1
<b>*</b>	
Special provisions (SP)	-
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
EmS	F-A, S-A
Stowage category	A
Segregation group	10 - Liquid halogenated hydrocarbons
International Civil Aviation Organization (ICAC	0-IATA/DGR) - Additional information
Proper shipping name	Dichloromethane
Particulars in the shipper's declaration	UN1593, Dichloromethane, 6.1, III
Danger label(s)	6.1
Excepted quantities (EQ)	E1
Limited quantities (LQ)	2 L

## **SECTION 15: Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Relevant provisions of the European Union (EU)

## **Seveso Directive**

2012/	2012/18/EU (Seveso III)				
Νο	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the ap- plication of lower and upper-tier re- quirements	Notes		
	not assigned				

#### **Deco-Paint Directive**

VOC content	100 %
VOC content	1.330 <sup>g</sup> / <sub>l</sub>

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Industrial Emissions Directive (IED)		
VOC content	100 %	
VOC content	1.330 <sup>g</sup> / <sub>l</sub>	

#### Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

not listed

# Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

Pollutant release and transfer registe	rs (PRTR)	

Name of substance	CAS No	Remarks	Threshold for releases to air (kg/year)
Dichloromethane PEPTIPURE® >=99,9 %, for peptide synthesis	75-09-2		1 000

#### Water Framework Directive (WFD)

List of pollutants (WFD)				
Name of substance	Name acc. to inventory	CAS No	Listed in	Remarks
Dichloromethane PEPTIPURE® >=99,9 %, for peptide synthesis	dichloromethane	75-09-2	b)	
Dichloromethane PEPTIPURE® >=99,9 %, for peptide synthesis	dichloromethane	75-09-2	c)	
Dichloromethane PEPTIPURE® >=99,9 %, for peptide synthesis	Organohalogen compounds and substances which may form such compounds in the aquatic envir- onment		a)	
Dichloromethane PEPTIPURE® >=99,9 %, for peptide synthesis	Substances and preparations, or the breakdown products of such, which have been proved to pos- sess carcinogenic or mutagenic properties or properties which may affect steroidogenic, thyroid, reproduction or other endocrine- related functions in or via the aquatic environment		a)	

Legend

A) B) C)

Indicative list of the main pollutants

List of priority substances in the field of water policy Environmental Quality Standards for Priority Substances and certain other pollutants

#### Regulation on the marketing and use of explosives precursors

not listed

#### **Regulation on drug precursors**

not listed

#### **Regulation on substances that deplete the ozone layer (ODS)**

not listed

#### Regulation concerning the export and import of hazardous chemicals (PIC)

not listed

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#### Regulation on persistent organic pollutants (POP)

not listed

#### National regulations(GB)

# List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list not listed

#### **Restrictions according to GB REACH, Annex 17**

Dangerous substances with restrictions (GB REACH, Annex 17)			
Name of substance	Name acc. to inventory	CAS No	No
Dichloromethane PEPTIPURE® >=99,9 %, for peptide synthesis	Dichloromethane	75-09-2	59
Dichloromethane PEPTIPURE® >=99,9 %, for peptide synthesis	this product meets the criteria for classi- fication in accordance with Regulation No 1272/2008/EC		3

#### **Other information**

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

#### **National inventories**

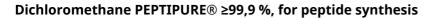
Country	Inventory	Status
AU	AIIC	substance is listed
CA	DSL	substance is listed
CN	IECSC	substance is listed
EU	ECSI	substance is listed
EU	REACH Reg.	substance is listed
JP	CSCL-ENCS	substance is listed
KR	KECI	substance is listed
MX	INSQ	substance is listed
NZ	NZIoC	substance is listed
PH	PICCS	substance is listed
TR	CICR	substance is listed
TW	TCSI	substance is listed
US	TSCA	substance is listed (ACTIVE)
VN	NCI	substance is listed

#### Legend

AIIC	Australian Inventory of Industrial Chemicals
CICR	Chemical Inventory and Control Regulation
CSCL-ENCS	List of Existing and New Chemical Substances (CSCL-ENCS)
DSL	Domestic Substances List (DSL)
ECSI	EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
INSQ	National Inventory of Chemical Substances
KECI	Korea Existing Chemicals Inventory
NCI	National Chemical Inventory
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg	REACH registered substances

REACH Reg. REACH registered substances

acc. to Regulation (EC) No. 1907/2006 (REACH)



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LegendTCSITaiwan Chemical Substance InventoryTSCAToxic Substance Control Act

#### 15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance.

## **SECTION 16: Other information**

#### Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
2.2	Labelling of packages where the contents do not exceed 125 ml: Signal word: Warning		yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.3		Endocrine disrupting properties: Does not contain an endocrine disruptor (EDC) in a concentration of ≥ 0,1%.	yes
14.8		Regulations concerning the International Car- riage of Dangerous Goods by Rail (RID)Addition- al information	yes
14.8		Classification code: T1	yes
14.8		Danger label(s): 6.1	yes
14.8		Danger label(s): change in the listing (table)	yes
14.8		Special provisions (SP): 516, 802(ADN)	yes
14.8		Excepted quantities (EQ): E1	yes
14.8		Limited quantities (LQ): 5 L	yes
14.8		Transport category (TC): 2	yes
14.8		Hazard identification No: 60	yes
15.1	Restrictions according to REACH, Annex XVII		yes
15.1		Dangerous substances with restrictions (REACH, Annex XVII): change in the listing (table)	yes

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Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
15.1	List of substances subject to authorisation (REACH, Annex XIV)/SVHC - candidate list: Not listed.		yes
15.1	VOC content: 100 % , 1.330 <sup>g</sup> / <sub>l</sub>	VOC content: 100 %	yes
15.1		VOC content: 1.330 <sup>g</sup> / <sub>l</sub>	yes
15.1		Pollutant release and transfer registers (PRTR): change in the listing (table)	yes
15.1		List of pollutants (WFD): change in the listing (table)	yes
15.1		National regulations(GB)	yes
15.1		List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list: not listed	yes
15.1		Restrictions according to GB REACH, Annex 17	yes
15.1		Dangerous substances with restrictions (GB REACH, Annex 17): change in the listing (table)	yes
15.1		National inventories: change in the listing (table)	yes

## Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations	
2017/164/EU	Commission Directive establishing a fourth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/ 161/EU	
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concern- ing the International Carriage of Dangerous Goods by Road)	
BCF	Bioconcentration factor	
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)	
Ceiling-C	Ceiling value	
DGR	Dangerous Goods Regulations (see IATA/DGR)	
DNEL	Derived No-Effect Level	
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval	
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identi- fier of substances commercially available within the EU (European Union)	
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-li- cence/)	
EINECS	European Inventory of Existing Commercial Chemical Substances	
ELINCS	European List of Notified Chemical Substances	
EmS	Emergency Schedule	

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Abbr.	Descriptions of used abbreviations	
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control	
GB CLP	The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/720 (as amended)	
GB REACH	The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended)	
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Na- tions	
IATA	International Air Transport Association	
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)	
ICAO	International Civil Aviation Organization	
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air	
IMDG	International Maritime Dangerous Goods Code	
IMDG-Code	International Maritime Dangerous Goods Code	
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008	
IOELV	Indicative occupational exposure limit value	
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval	
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval	
LEL	Lower explosion limit (LEL)	
NLP	No-Longer Polymer	
PBT	Persistent, Bioaccumulative and Toxic	
PNEC	Predicted No-Effect Concentration	
ppm	Parts per million	
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals	
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regula- tions concerning the International carriage of Dangerous goods by Rail)	
STEL	Short-term exposure limit	
TWA	Time-weighted average	
UEL	Upper explosion limit (UEL)	
VOC	Volatile Organic Compounds	
vPvB	Very Persistent and very Bioaccumulative	
WEL	Workplace exposure limit	

#### Key literature references and sources for data

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

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#### List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.

#### Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.