

SAFETY DATA SHEET

according to 1907/2006/EC, Article 3

Revision date: 12/08/2025

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

1.1 Product identifiers

Product name	Dichloromethane
Product Number	PSR43586 / PSR37589 / PSR38222 / PSR44967
Brand	PureSynth research chemicals
CAS No.	75-09-2

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

Identified uses : PurSolv

1.3 Details of the supplier of the safety data sheet

Company	PureSynth Research Chemicals GmbH. 64683 Einhausen Marie-Curie-StraBe. 3, Germany
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1.4 Emergency telephone number

Worldwide Helpline No.: 1800-8908-260

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin irritation (Category 2), H315

Eye irritation (Category 2), H319

Carcinogenicity (Category 2), H351

Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word Warning

Hazard statement(s)

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H351 Suspected of causing cancer.

H336 May cause drowsiness or dizziness

Precautionary statement(s)

P201 Obtain special instructions before use

P302+P352 IF ON SKIN: Wash with plenty of water

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
Supplemental Hazard Statements	none

2.3 Other hazards:

This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher

SECTION 3: Composition / information on ingredients

3.1 Substances

Common names & Synonyms	Mol. formula	CAS number
Methylene chloride	CH ₂ Cl ₂	75-09-2
Component	Classification	Concentration
Dichloromethane	Skin Irrit. 2; Eye Irrit. 2; Carc. 2; STOT SE 3; H315, H319, H351, H336 Concentration limits: 20 %: STOT SE 3, H336;	<= 100 %

SECTION 4: First aid measures

Description of first aid measures

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash off with soap and plenty of water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Most important symptoms and effects, both acute and delayed	The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
Indication of any immediate medical attention and special treatment needed	No data available

SECTION 5: Fire fighting measures

Extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide
Suitable extinguishing media	
Special hazards arising from the substance or mixture	Carbon oxides Hydrogen chloride gas
Advice for fire-fighters	Wear self-contained breathing apparatus for fire fighting if necessary.
Further information	Remove container from danger zone and cool with water. Suppress

(knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures	Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Methods and materials for containment and cleaning up	Soak up with inert absorbent material and dispose of as hazardous waste. Keep in a suitable, closed containers for disposal.
Reference to other sections	For disposal see section 13.

SECTION 7: Handling and storage

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. For precautions see section 2.2.
Conditions for safe storage, including any incompatibilities	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. For precautions see section 2.2.
Specific end use(s)	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls / Personal protection

Control parameters	No data available.
Exposure controls	
Appropriate engineering controls	No data available.
Personal protective equipment:	
Eye / face protection	Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Skin protection	Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Body Protection	Where risk assessment shows air-purifying respirators are appropriate use a full face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Respiratory protection	

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9: Physical and chemical properties

Appearance	Form: Liquid
Odour	Colour: Colourless ether-like
pH - Value	No data available
Density	1,325 g/mL at 25 °C
Boiling Point	39.8 - 40 °C
Melting Point	-97 °C
Solubility in water	13.2 g/l at 25 °C
Flash point	- closed cup does not flash
Vapour pressure	584 hPa at 25 °C
Auto -ignition temperature	605 °C at 1.013 hPa - DIN 51794
Vapour density	2.93
Flammability (solid, gas)	No data available
Evaporation rate	0.71
Partition coefficient: n- octanol / water	Log Pow: 1.25 at 20 °C - Bioaccumulation is not expected.
Viscosity	No data available
Explosive properties	No data available
Upper / lower flammability or explosive limits	Upper explosion limit: 22 %(V) Lower explosion limit: 13 %(V)
Oxidizing properties	No data available

Other safety information: Relative vapor Density: 2.93

SECTION 10: Stability and reactivity

Reactivity	No data available Stable under recommended storage conditions.
Chemical stability	Contains the following stabilizer(s): 2-methyl-2-butene (0.002 %)
Possibility of hazardous reactions	No data available
Condition to avoid	No data available
Incompatible materials	various plastics, Rubber, Light metals, Metals, Mild steel, Strong oxidizing agents
Hazardous decomposition products	In the event of fire: see section 5

SECTION 11: Toxicological information

Acute toxicity	LD50 Oral - Rat - male and female - > 2.000 mg/kg LC50 Inhalation - Mouse - 4 h - 86 mg/l Symptoms: Possible damages:, mucosal irritations
Skin corrosion/irritation	LD50 Dermal - Rat - male and female - > 2.000 mg/kg Skin - Rabbit

Serious eye damage/eye irritation

Result: Irritations - 4 h
Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product
Eyes - Rabbit

Respiratory or skin sensitization

Result: Eye irritation
Risk of corneal clouding.
Local lymph node assay (LLNA) - Mouse
Result: negative
Test Type: Mutagenicity (mammal cell test): chromosome aberration.
Test system: Chinese hamster ovary cells
Metabolic activation: with and without metabolic activation
Result: positive
Test Type: Ames test

Germ cell mutagenicity

Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Result: positive
Test Type: In vivo micronucleus test
Species: Mouse
Cell type: Bone marrow
Application Route: Oral
Result: negative

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Inhalation - May cause drowsiness or dizziness. - Central nervous system

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available
Repeated dose toxicity - Rat - male and female - Oral - 104 Weeks - NOAEL (No observed adverse effect level) - 6 mg/kg
Repeated dose toxicity - Rat - male and female - Inhalation - 104 Weeks
RTECS: PA8050000
Dizziness, Nausea, Vomiting, narcosis, Cough, irritant effects, Unconsciousness, Shortness of breath, respiratory paralysis, somnolence, depressed respiration, CNS disorders, inebriation

Additional Information

Risk of corneal clouding.
The following applies to aliphatic halogenated hydrocarbons in general: systemic effect: narcosis, cardiovascular disorders. Toxic effect on liver, kidneys. Dichloromethane is metabolized in the body producing carbon monoxide which increases and sustains carboxyhemoglobin levels in the blood, reducing the oxygen-carrying capacity of the blood. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

Toxicity

Toxicity to fish	flow-through test LC50 - Pimephales promelas (fathead minnow) - 193.00 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates	static test LC50 - Daphnia magna (Water flea) - 27 mg/l - 48 h
Toxicity to algae	No data available
Toxicity to bacteria	static test EC50 - activated sludge - 2.590 mg/l - 40 min (OECD Test Guideline 209)

Persistence and degradability

Biodegradability

aerobic - Exposure time 28 d
Result: 68 % - Readily biodegradable.

Bio accumulative potential

No data available
Cyprinus carpio (Carp) - 6 Weeks
- 250 µg/l(Dichloromethane)
Bio concentration factor (BCF): 2 – 5.4
(OECD Test Guideline 305)

Bioaccumulation

Cyprinus carpio (Carp) - 6 Weeks
- 25 µg/l(Dichloromethane)
Bio concentration factor (BCF): 6 - 40
(OECD Test Guideline 305)

Mobility in soil

No data available

Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at Levels of 0.1% or higher.

Endocrine disrupting properties

Other adverse effects

No data available.

SECTION 13: Disposal considerations

Waste treatment methods Products

Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleansed containers like the product itself.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

	UN no.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
ADR / RID	1593	DICHLOROMETHANE	6.1	III	No
IMDG	1593	DICHLOROMETHANE	6.1	III	No
IATA	1593	Dichloromethane	6.1	III	No

SECTION 15: Regulatory information

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Authorisations and/or restrictions on use

REACH - Restrictions on the manufacture, : Dichloromethane
placing on the market and use of certain

dangerous substances, preparations and articles
(Annex XVII)

Chemical safety assessment

For this product a chemical safety assessment was not carried out.

SECTION 16: Other information

The information in this SDS is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. The user must be determined suitability of this information for his application.