

SAFETY DATA SHEET

according to 1907/2006/EC, Article 3

Revision date: 30/03/2019

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

1.1 Product identifiers

Product name	1-Chloro-2-(chloromethyl)benzene
Product Number	PSR41537
Brand	PureSynth research chemicals
CAS No.	611-19-8

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

Identified uses : PurCert Standard

1.3 Details of the supplier of the safety data sheet

Company	PureSynth Research Chemicals Pvt. Ltd.
	A-27, A.P.I.E, Hyderabad, Telangana-500037

1.4 Emergency telephone number

Worldwide Helpline No.: 1800-120-1234-34

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Oral (Category 4), H302
Acute toxicity, Inhalation (Category 4), H332
Acute toxicity, Dermal (Category 4), H312
Skin irritation (Category 2), H315
Eye irritation (Category 2), H319
Skin sensitization (Category 1), H317
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335
Short-term (acute) aquatic hazard (Category 1), H400
Long-term (chronic) aquatic hazard (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word

Warning

Hazard statement(s)

H302 + H312 + H332

Harmful if swallowed, in contact with skin or if inhaled.

H315	Causes skin irritation.
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P312	IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.
P302 + P352 + P312	IF ON SKIN: Wash with plenty of water.Call a POISON CENTER/ doctor if you feel unwell.
P304 + P340 + P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
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
α ,2-Dichlorotoluene	$C_7H_6Cl_2$	611-19-8
Component	Classification	Concentration
α ,2-Dichlorotoluene	Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; Skin Sens. 1; STOT SE 3; Aquatic Acute 1; Aquatic Chronic 1; H302, H332, H312, H315, H319, H317, H335, H400, H410 M-Factor - Aquatic Acute: 1 – Aquatic Chronic: 1	<= 100 %

SECTION 4: First aid measures

Description of first aid measures

General advice	Show this material safety data sheet to the doctor in attendance.
If inhaled	After inhalation: fresh air.
In case of skin contact	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.
In case of eye contact	After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

If swallowed	After swallowing: immediately make victim drink water (two glasses at most). 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	Water Foam Carbon dioxide (CO ₂) Dry powder.
Unsuitable extinguishing media	For this substance/mixture no limitations of extinguishing agents are given. Carbon oxides Hydrogen chloride gas
Special hazards arising from the substance or mixture	Combustible. Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air on intense heating. Development of hazardous combustion gases or vapours possible in the event of fire.
Advice for fire-fighters	Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.
Further information	Remove container from danger zone and cool with water. 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	Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.
Environmental precautions	Do not let product enter drains. Risk of explosion.
Methods and materials for containment and cleaning up	Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb). Dispose of properly. Clean up affected area.
Reference to other sections	For disposal see section 13.

SECTION 7: Handling and storage

Precautions for safe handling	Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge. Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.
Conditions for safe storage, including any incompatibilities	Store at -2-8°C, tightly closed. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons

Specific end use(s)

Storage class (TRGS 510): 6.1C: Combustible, acute toxic Cat.3 / toxic compounds or compounds which causing chronic effects.
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls / Personal protection

Control parameters

Ingredients with workplace control parameters

Exposure controls

Personal protective equipment

Appropriate engineering controls

Personal protective equipment:

Eye / face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Tightly fitting safety goggle

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Skin protection

Material tested: KCL 741 Dermatril® This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other

substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 I, Internet: www.kcl.de).

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested:KCL 741 Dermatril® L

Body Protection

protective clothing.

Respiratory protection

Recommended Filter type: Filter A (acc. to DIN 3181) for vapours of organic compounds The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Control of environmental exposure

Do not let product enter drains. Risk of explosion.

SECTION 9: Physical and chemical properties

Appearance	Form: Liquid
Odour	Colour: Colorless pungent
pH - Value	No data available
Density	1.274 g/cm ³ at 25 °C
Boiling Point	213 - 214 °C
Melting Point	-17 °C
Solubility in water	0.1 g/l at 25 °C
Flash point	82 °C - closed cup
Vapour pressure	4 hPa at 84 °C
Auto -ignition temperature	> 600 °C at 1.013 hPa
Vapour density	No data available
Flammability (solid, gas)	No data available
Evaporation rate	No data available
Partition coefficient: n- octanol / water	log Pow: 3.32 at 25 °C - Bioaccumulation is not expected.
Viscosity	No data available
Explosive properties	No data available
Upper / lower flammability or explosive limits	Upper explosion limit: 7.8 %(V) Lower explosion limit: 1.5 %(V)
Oxidizing properties	none

Other safety information: Relative vapor density 5.56 - (Air = 1.0).

SECTION 10: Stability and reactivity

Reactivity	Forms explosive mixtures with air on intense heating. A range from approx. 15 Kelvin below the flash point is to be rated as critical.
Chemical stability	The product is chemically stable under standard ambient conditions (room temperature) . Violent reactions possible with: Strong oxidizing agents
Possibility of hazardous reactions	Metals metallic salts alkali hydroxides alkaline earth hydroxides Amines
Condition to avoid	Heat. Avoid moisture. Strong heating.
Incompatible materials	No data available
Hazardous decomposition products	In the event of fire: see section 5

SECTION 11: Toxicological information

Acute toxicity	LD50 Oral - Rat - male and female - 430 mg/kg Acute toxicity estimate Oral - 430 mg/kg LC50 Inhalation - Rat - male and female - 4 h – 2.8 mg/l - dust/mist
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	<p>Symptoms: mucosal irritations, Cough, Shortness of breath, Inhalation may lead to the formation of oedemas in the respiratory tract., Symptoms may be delayed., Possible damages:, damage of respiratory tract Acute toxicity estimate Inhalation – 2.8 mg/l - dust/mist LD50 Dermal - Rabbit - male and female - 1.900 mg/kg Acute toxicity estimate Dermal - 1.900 mg/kg Skin - Rabbit Result: Irritations - 4 h Eyes - Rabbit Result: slight irritation - 24 h Maximization Test - Guinea pig Result: Causes sensitization. Test Type: Ames test Test system: Escherichia coli/Salmonella typhimurium Metabolic activation: with and without metabolic activation Result: negative Test Type: Micronucleus test Species: Rat Cell type: Bone marrow Application Route: Gavage Result: negative No data available</p>
Skin corrosion/irritation	
Serious eye damage/eye irritation	
Respiratory or skin sensitization	
Germ cell mutagenicity	
Carcinogenicity	
Reproductive toxicity	
Specific target organ toxicity - single exposure	Inhalation - May cause respiratory irritation. - Respiratory system
Specific target organ toxicity - repeated exposure	No data available
Aspiration hazard	No data available
	<p>The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Repeated dose toxicity - Rat - female - Gavage - 41 - 48 d - NOAEL (No observed adverse effect level) - 10 mg/kg Repeated dose toxicity - Rat - male and female - Inhalation - 28 d - NOAEL (No observed adverse effect level) – 0.03 mg/kg. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Depending on the intensity and duration of exposure, effects may vary from mild irritation to severe destruction of tissue., Cough, Shortness of breath, Headache, Nausea, Vomiting, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. After absorption: gastric pain shock Further data: Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.</p>
Additional Information	

SECTION 12: Ecological information

Toxicity

Toxicity to fish	No data available
Toxicity to daphnia and other aquatic invertebrates	flow-through test EC50 - Daphnia magna (Water flea) – 0.38 mg/l - 48 h
Toxicity to bacteria	No data available
Toxicity to algae	static test EbC50 - Raphidocelis subcapitata (freshwater green alga) – 0.78 mg/l - 72 h

Persistence and degradability

aerobic - Exposure time 28 d Result: 0 % - Not biodegradable

Biodegradability

No data available

Bio accumulative potential

The value / statement given is based on a (Q)SAR approach

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

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Other adverse effects

Biological effects:

Reacts with water to form toxic decomposition products.

Further information on ecology

Discharge into the environment must be avoided.

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	2235	CHLOROBENZYL CHLORIDES, LIQUID	6.1	III	no
IMDG	2235	CHLOROBENZYL CHLORIDES, LIQUID	6.1	III	yes
IATA	2235	Chlorobenzyl chlorides, liquid	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.

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.