Material Safety Data Sheet

Benzyl Chloride (RXSOL-19-1239-025)

1. Product and Company Identifaction

Product Name	Benzyl Chloride
Part Number	RXSOL-19-1239-025

Company Details:

RX MARINE INTERNATIONAL
105, A wing , BSEL , TECH PARK.
VASHI ,NEW BOMBAY 400703 INDIA

Branch : Kandla, Mumbai , Chennai, Vizag, Kolkata, UAE , OMAN , CANADA and KENYA

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Email	mail@rxmarine.com
Website	www.rxmraine.comA

2. Composition / informationon ingredients

Chemical Name	CAS	EC number	Weight	Formula
Benzyl chloride	100-44-7	202-853-6	= 100 %	C_7H_7Cl

3. Hazards Identification

Signal Word	Danger
Hazard Statements	H302 Harmful if swallowed. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H331 Toxic if inhaled. H335 May cause respiratory irritation. H340 May cause genetic defects. H350 May cause cancer. H373 May cause damage to organs (Heart, forestomach) through prolonged or repeated exposure if swallowed.
Precautionary statements	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 IF ON SKIN: Wash with plenty of water. P304 + P340 + P311 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor. 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.
Classification of the substance or mixture	Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.
Supplemental Hazard Statements	None.
Other hazards	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. Lachrymator.

4. First Aid Measures

General advice	First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.
If inhaled	After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.
Eye Contact	After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

Swallowed	After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.
Skin Contact	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.
Inhalation	Remove patient to fresh air, keep warm and at rest and get medical assistance in necessary.
Ingestion	Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.
Most important symptoms and effects, both acute and delaye	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

5. Fire-fighting Measures

Flammability	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Flash Point	Dry powder Dry sand
Suitable extinguishing media	Water Foam Carbon dioxide (CO2) Dry powder
Unsuitable extinguishing media	For this substance/mixture no limitations of extinguishing agents are given.
Special hazards arising from the substance or mixture	Carbon oxides Hydrogen chloride gas Mixture with combustible ingredients. 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.
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.
Hazardous combustion products	Fire may cause the evolution of Sulphur oxides, nitrogen oxides.
Advice for firefighters	Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.
Protective Equipment	Use personal protective equipment.
Specific Hazards Arising from the Chemical	Oxides of phosphorus Sodium oxides Not combustible. Fire may cause evolution of: Oxides of phosphorus Ambient fire may liberate hazardous vapours.

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.
Spillage	Oxidizing material. Stop leak if without risk. Avoid contact with a combustible material (wood, paper, oil, clothing...). Keep substance damp using water spray. Do not touch spilled material. Prevent entry into sewers, basements or confined areas dike if needed. Eliminate all ignition sources. Call for assistance on disposal.
Enviromental Precaution	Do not let product enter drains.
Methods and materials for containment and cleaning	Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

7. Handling and Storage

Advice on protection against fire and explosion	Keep away from open flames, hot surfaces and sources of ignition.Take precautionary measures against static discharge.
Incompatible materials	Keep away from alkalis, strong oxidizing agents and metals. Provide containment walls of adequate capacity to hold any accidental spills.
Hygiene measures	Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.
Precautions for safe handling	For precautions see section 2.2.
Storage conditions	Tightly closed. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons. Light sensitive. Moisture sensitive.
Storage class	Storage class (TRGS 510): 6.1A: Combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials
Specific end use(s)	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

Advice on general occupational hygiene	Advice on safe handling Observe label precautions. Change contaminated clothing. Wash hands after working with substance.
Requirements for storage	Keep in cool and store under shade.

8. Exposure controls and personal protection

Exposure controls	Appropriate engineering controls Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Control parameters	Ingredients with workplace control parameters Contains no substances with occupational exposure limit values.
Engineering Control	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
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 goggles
Body Protection	Protective clothing
Skin protection	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 EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Full contact Material: Viton® Minimum layer thickness: 0,7 mm Break through time: 480 min Material tested:Vitoject® (KCL 890 / Aldrich Z677698, Size M) 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 EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Splash contact Material: Chloroprene Minimum layer thickness: 0,65 mm Break through time: 30 min Material tested:KCL 720 Camapren®
Respiratory protection	Recommended Filter type: Respirator. The entrepeneur 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.
Other Protection Measure	Handle in accordance with good industrial hygiene and safety practice.
Control of environmental exposure	Do not let product enter drains.

9. Physical and chemical properties

Physical state	Liquid
Colour	Colorless
Odour	Stinging
Odor Threshold	No data available
pH	No data available
Melting Point	43 °C - lit.
Boiling Point	177 - 181 °C - lit.
Flash Point	67 °C - c.c.
Evaporation Rate	Not Applicable
Flammability (solid, gas)	No data available
Explosive limits	No Data Available
Upper/lower flammability or explosive limits	14 %(V) / 1,1 %(V)
Autoignition temperature	585 °C at 1.013 hPa
Decomposition temperature	No data available
Vapour pressure	1,6 hPa at 25 °C
Density	1,1 g/cm3 at 25 °C - lit
Relative Density	1,1 at 20 °C
Relative vapor density	4,36
Freezing point	No data available
Viscosity dynamic	1,380 mPa.s at 20 °C
Partition coefficient	log Pow: 2,3

Explosive properties	No data available
Solubility	0,46 g/l at 30 °C
Ignition temperature	No information available.
Particle characteristics	No data available

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.
Stability	The product is chemically stable under standard ambient conditions (room temperature) . Contains the following stabilizer(s): propylene oxide (1 %)
Possibility of hazardous reactions	Violent reactions possible with: Strong oxidizing agents amides substances with a catalytic effect numerous inorganic and/or organic compounds Risk of explosion with: polymerisation initiators Acids A risk of explosion and/or of toxic gas formation exists with the following substances: Alkali metals Alkaline earth metals Metals Exothermic reaction with: Water Release of: Hydrogen chloride gas
Conditions to avoid	Strong heating.
Incompatible materials	Various plastics, Strong oxidizing agents
Hazardous decomposition products	In the event of fire: see section 5

11. Toxicological information

Acute toxicity	Acute toxicity estimate Oral - 1.192,37 mg/kg (Calculation method) Acute toxicity estimate Oral - 560 mg/kg (Calculation method) LD50 Oral - Rat - male and female - 560 mg/kg (OECD Test Guideline 401) Symptoms: Possible damages:, Bloody vomiting Acute toxicity estimate Inhalation - 0,74 mg/l(Calculation method) Acute toxicity estimate Inhalation - 4 h - 4,98 mg/l - vapor(Calculation method) Acute toxicity estimate Inhalation - 4 h - 5 mg/l - vapor (Expert judgment) Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2) Symptoms: Cough, Shortness of breath, mucosal irritations, Possible damages:, damage of respiratory tract, Lung edema, Symptoms may be delayed. Acute toxicity estimate Dermal - 124.400 mg/kg (Calculation method) Acute toxicity estimate Dermal - > 2.000 mg/kg (Calculation method)
Skin corrosion/irritation	Remarks: Causes skin irritation. Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)
Serious eye damage/eye irritation	Remarks: Lacrimal irritation due to vapours. Remarks: Causes serious eye damage. Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)
Respiratory or skin sensitization	Local lymph node assay (LLNA) - Mouse Result: positive (OECD Test Guideline 429)
Toxic Effects on Human	May cause damage to the following organs: upper respiratory tract. Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant, sensitizer), of ingestion, of inhalation (lung irritant, lung sensitizer).
Carcinogenicity	No data available
Germ cell mutagenicity	Local lymph node assay (LLNA) - Mouse Result: positive (OECD Test Guideline 429)
Reproductive toxicity	No data available
Specific target organ toxicity - single exposure	Inhalation - May cause respiratory irritation. - Respiratory system Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)
Special Remarks on other Toxi Effects on Humans	Acute Potential Health Effects: Skin: Causes skin irritation. May cause skin sensitization, an allergic reation, which becomes evident upon re-exposure to this material. Eyes: Causes eye irritation. Ingestion: Causes gastrointestinal (digestive) tract irritation with nausea, vomiting, and diarrhea. May be harmful if swallowed. Inhalation: Causes respiratory tract irritation. May cause chemical pneumonitis and pulmonary edema, inflammation, edema of bronchi and larynx. Chronic Potential Health Effects: Repeated or prolonged skin exposure may cause allergic reactions in sensitive individuals. Repeated or prolonged exposure by inhalation may affect respiration and metabolism.
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. RTECS: XS8925000 burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Systemic effects: Unconsciousness CNS disorders Damage to: Kidney Liver Other dangerous properties can not be excluded. This substance should be handled with particular care. Liver - Irregularities - Based on Human Evidence.

12. Ecological information

Bioaccumulative potential	No data available
Persistence and degradability	Biodegradability aerobic - Exposure time 14 d Result: 71 % - Readily biodegradable. (OECD Test Guideline 301C)
Toxicity to fish	Static test LC50 - Danio rerio (zebra fish) - 4 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	Static test EC50 - Daphnia magna (Water flea) - 6,1 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	Flow-through test NOEC - algae - 0,002 mg/l - 7 Days Remarks: (in analogy to similar products) (ECHA) The value is given in analogy to the following substances: sodium hypochlorite solution
Toxicity to bacteria	Static test EC50 - activated sludge - 563 mg/l - 3 h (OECD Test Guideline 209) Remarks: (in analogy to similar products) The value is given in analogy to the following substances: sodium hypochlorite solution
Mobility in soil	No Information available
Results of PBT and vPvB assessment	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (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	Discharge into the environment must be avoided. Stability in water Test substance: Water Remarks: Rapid degradation.

13. Disposal considerations

Disposal methods	The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.
Contaminated packaging	Dispose of as unused product.
Waste treatment Method	See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

14. Transport information

UN number	ADR/RID: 1738 IMDG: 1738 IATA: 1738
UN proper shipping name	ADR/RID: BENZYL CHLORIDE IMDG:BENZYL CHLORIDE IATA:BENZYL CHLORIDE
Transport hazard class(es)	ADR/RID: 6.1 (8) IMDG: 6.1 (8) IATA: 6.1 (8)
Packaging group	ADR/RID: II IMDG: II IATA: II
Environmental hazards	ADR/RID: NO IMDG: NO IATA: NO
Further information	No data available

15. Regulatory information

Inventory status	Components are on the following inventories: Polymaleic acid: - US TSCA, Canadian DSL, EU EINECS, Australian AICS, Korean, Philippine PICCS and Chinese Xi irritant R 36/38 Irritant to eyes & skin R 41 Risk of serious damage to eyes S24/25 Avoid contact with skin and eyes S26/28 In case of contact eyes & skin, rinse with plenty water and seek medical advice Section 312/313: Not listed. Not listed under California proposition 65.
Safety, health and environmental regulations/legislation specific for the substance or mixture	This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.
Authorisations and/or restrictions on use	REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : propylene oxide REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : Benzyl chloride propylene oxide
National legislation	Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. : ACUTE TOXIC
Other regulations	Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable. Take note of Dir 94/33/EC on the protection of young people at work.
Chemical Safety Assessment	For this product a chemical safety assessment was not carried out

16. Other information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and weassume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Rx Marine International has been advised of the possibility of such damages.

Other Information

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