Product Name	DICHLORO PROPANE
Part Number	RXSOL-19-1116-025

Company Details:

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Chemical Name CAS EC number Weight Formula

1,3-Dichloropropane 142-28-9 205-531-3 C3H6Cl2

Signal Word Warning **Hazard Statements** H226 Flammable liquid and vapor. H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation. Precautionary statements P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. 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. Classification of the substance or mixture Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008. Supplemental Hazard Statements This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic None. Other hazards (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

General advice Consult a physician. Show this material safety data sheet to the doctor in attendance. If inhaled lf breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. Eye Contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Swallowed Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. Skin Contact Wash off with soap and plenty of water. Consult a Remove patient to fresh air, keep warm and at rest and get medical assistance in necessary. physician. Inhalation Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center Most important symptoms and effects, both acute and delaye The most important known symptoms and effects are immediately. 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

Flammability Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Suitable extinguishing media Dry powder Dry sand Unsuitable extinguishing media Do NOT use water jet. Special hazards arising

Carbon oxides Hydrogen chloride gas Further information Use water spray to cool unopened from the substance or mixture containers. Hazardous combustion Advice for firefighters products Fire may cause the evolution of Sulphur oxides, nitrogen oxides. Wear self-contained breathing apparatus for firefighting if necessary. 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.

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. 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.

Environmental Precaution

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

Methods and materials for

containment and cleaning Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

Advice on protection against fire and explosion Keep away from sources of ignition - No smoking. Take measures to prevent the build up Keep away from alkalis, strong oxidizing agents and metals. Provide containment walls of of electrostatic charge. Incompatible materials adequate capacity to hold any accidental spills. Hygiene measures 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. Precautions for safe handling Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Storage conditions Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in cool place. Storage class Storage class (TRGS 510): 3: Flammable liquids 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.

Appropriate engineering controls Handle in accordance with good industrial hygiene and safety practice. Wash Exposure controls 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 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). **Body Protection** Impervious clothing, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Skin protection 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. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it. Full contact Material: Fluorinated rubber Minimum layer thickness: 0,7 mm Break through time: 480 min Material tested: Vitoject® (KCL 890 / Aldrich Z677698, Size M) Splash contact Material: Fluorinated rubber Minimum layer thickness: 0,7 mm Break through time: 480 min Material tested: Vitoject® (KCL 890 / Aldrich Z677698, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario. Respiratory protection Where risk assessment shows air-purifying respirators are appropriate use a full face respirator with multi-purpose combination (US) or type ABEK (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). Other Protection accordance with good industrial hygiene and safety practice. Control of environmental exposure Prevent further leakage or spillage if

Gloves Suit

Odor Threshold Physical state Liquid, clear Colour Light yellow Odour No data available No data available No data available Melting Point -99 °C - lit. **Boiling Point** 120 - 122 °C - lit. рΗ Flash Point 36 °C - closed cup **Evaporation Rate** Not Applicable Flammability (solid, gas) No data available **Explosive limits** No Data Available Upper/lower flammability or explosive limits Not Applicable Autoignition temperature Not Applicable Decomposition temperature No data available Vapour pressure Not Applicable Density 1,19 g/mL at 25 °C - lit. Relative Density No data available Relative vapor density No data available Freezing point No data available Not Applicable Partition coefficient Viscosity loa Pow: 2.00 No data available Explosive properties Solubility Ignition temperature No information Not Applicable available. Particle characteristics No data available

Reactivity No data available Stability Stable under recommended storage conditions. Possibility of hazardous reactions No data available Conditions to avoid Heat, flames and sparks. Incompatible materials Oxidizing agents, acids, Bases, Aluminum, and its alloys, Plastics, Rubber Hazardous decomposition products In the event of fire: see section 5

Acute toxicity Oral: No data available Inhalation: No data available Dermal: No data available Skin corrosion/irritation Remarks: No data available Serious eve damage/eye irritation Remarks: No data available Respiratory or skin sensitization In vivo assay - Mouse Result: Does not cause skin sensitization. (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 Remarks: No data available mutagenicity Remarks: No data available No data available Specific target organ toxicity - single Reproductive toxicity Special Remarks on other Toxi Effects on Humans Acute Potential Health Effects: Skin: Causes skin exposure No data available 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 RTECS: TX9660000 Central nervous system depression, Lung inhalation may affect respiration and metabolism. Additional Information irritation, Headache, Coma., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Heart - .

Bioaccumulative potential No data available Persistence and degradability No data available Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 131,00 mg/l - 96 h NOEC - Cyprinodon variegatus (sheepshead minnow) - 38 mg/l - 96 h Toxicity to daphnia and other aquatic invertebrates LC50 - Daphnia magna (Water flea) - 280 mg/l - 48 h Toxicity to algae Static test NOEC - Pseudokirchneriella subcapitata - 7,95 mg/l (OECD Test Guideline 201) 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 No data available

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 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 uncleaned containers like the product itself.

UN number ADR/RID: 1993 IMDG: 1993 IATA: 1993 UN proper shipping name

ADR/RID: Flammable liquid, n.o.s. (1,3-Dichloropropane)

IMDG: Flammable liquid, n.o.s. (1,3-Dichloropropane)

IATA:Flammable liquid, n.o.s. (1,3-Dichloropropane)

Transport hazard class(es) ADR/RID: 3 IMDG: 3 IATA: 3 Packaging group ADR/RID: II IMDG: I IATA: II Environmental hazards ADR/RID: NO IMDG: NO IATA: NO Further information No data available

Components are on the following inventories: Polymaleic acid: - US TSCA, Canadian DSL, EU EINECS, Australian Inventory status 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 Safety, health and environmental regulations/legislation specific for the substance or mixture California proposition 65. This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006. 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.: FLAMMABLE **LIQUIDS** Take note of Dir 94/33/EC on the protection of young people at work. Chemical Safety Assessment Other regulations For this product a chemical safety assessment was not carried out

Other Information

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