Material Safety Data Sheet
1,2,3-Trichloropropane, 99+ \%

MSDS\# 86289
Section 1 - Chemical Product and Company Identification
MSDS Name: 1,2,3-Trichloropropane, 99+ \%
Catalog AC149550000, AC149550010, AC149550050, AC149551000, AC149552500, AC149555000
Numbers: AC149555000
Synonyms: Glycerol trichlorohydrin; Trichlorohydrin; Allyl trichloride; TCP.
Acros Organics BVBA
Company Identification:

Company Identification: (USA)
Janssen Pharmaceuticalaan 3a
2440 Geel, Belgium
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410
For information in the US, call:
800-ACROS-01
For information in Europe, call:
+32 14575211
Emergency Number, Europe:
+32 14575299
Emergency Number US:
201-796-7100
CHEMTREC Phone Number, US:
800-424-9300
CHEMTREC Phone Number, Europe:
703-527-3887
Section 2 - Composition, Information on Ingredients


Section 3 - Hazards Identification
EMERGENCY OVERVIEW
Warning! Combustible liquid and vapor. May cause skin irritation. May cause liver and kidney damage. Harmful if swallowed, inhaled, or absorbed through the skin. May cause cancer in humans. Breathing vapors may cause drowsiness and dizziness. Causes eye and respiratory tract irritation. Target Organs: Kidneys, central nervous system, liver, lungs, eyes. Potential Health Effects
Eye: Causes eye irritation.
Skin: May cause skin irritation. Harmful if absorbed through the skin. No data found on whether or not this chemical would be likely to cause an allergic skin reaction.
Ingestion: Harmful if swallowed. May cause gastrointestinal irritation with nausea, vomiting and diarrhea.
Inhalation: Harmful if inhaled. Causes respiratory tract irritation. Inhalation of vapors may cause drowsiness and dizziness.
Chronic: Possible cancer hazard based on tests with laboratory animals. May cause liver and kidney damage.

Skin:

Ingestion:

Inhalation: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid immediately. Wash clothing before reuse.

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to
Physician: Information:

Extinguishing
Media:

## Section 5 - Fire Fighting Measures

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Combustible liquid and vapor. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas.

Use water spray, dry chemical, carbon dioxide, or appropriate foam.

## Autoignition

Temperature:
$304 \mathrm{deg} \mathrm{C}(579.20 \mathrm{deg} \mathrm{F})$
Flash Point: 71 deg C ( 159.80 deg F)
Explosion
Limits: Lower:
Explosion
Limits: Upper:
NFPA Rating: health: 2 ; flammability: 2; instability: 1 ;

## Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.
Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation.

## Section 7 - Handling and Storage

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep
Handling: container tightly closed. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Use only with adequate ventilation. Keep away from heat and flame.
Keep away from heat and flame. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Do not store in aluminum containers. Separate from oxidizing materials.

Section 8 - Exposure Controls, Personal Protection


OSHA Vacated PELs: 1,2,3-Trichloropropane: 10 ppm TWA; $60 \mathrm{mg} / \mathrm{m} 3$ TWA
Engineering Controls:
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure
limits.
Exposure Limits
Personal Protective Equipment
Eyes: Wear chemical splash goggles.
Skin: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a
Respirators: NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties<br>Physical State: Liquid<br>Color: colorless to straw colored<br>Odor: chloroform-like - acrid odor<br>pH: Not applicable

Vapor Pressure: 3.69 mm Hg @ 25 deg C
Vapor Density: 5.1 (air=1)
Evaporation Rate: Not available
Viscosity: Not available
Boiling Point: 156 deg C @ $760 \mathrm{~mm} \mathrm{Hg}\left(312.80^{\circ} \mathrm{F}\right)$
Freezing/Melting Point: - $14.7 \mathrm{deg} \mathrm{C}\left(5.54^{\circ} \mathrm{F}\right)$
Decomposition Temperature: Not available
Solubility in water: Negligible
Specific Gravity/Density: 1.3889
Molecular Formula: C3H5Cl3
Molecular Weight: 147.43
Section 10 - Stability and Reactivity

Chemical Stability:
Conditions to Avoid:
Incompatibilities with Other Materials
Hazardous Decomposition Products
Hazardous Polymerization

Stable under normal temperatures and pressures.
Light, ignition sources, excess heat.
Strong oxidizing agents, strong bases, aluminum, magnesium.
Hydrogen chloride, carbon monoxide, carbon dioxide.
Has not been reported.

Section 11-Toxicological Information
RTECS\#: CAS\# 96-18-4: TZ9275000
RTECS:
CAS\# 96-18-4: Draize test, rabbit, eye: 100 uL Moderate;
Draize test, rabbit, skin: 500 uL/24H Mild;
Inhalation, mouse: LC50 $=3400 \mathrm{mg} / \mathrm{m} 3 / 2 \mathrm{H}$;
LD50/LC50: Oral, mouse: LD50 $=369 \mathrm{mg} / \mathrm{kg}$;
Oral, rabbit: LD50 $=380 \mathrm{mg} / \mathrm{kg}$;
Oral, rat: LD50 $=108 \mathrm{uL} / \mathrm{kg}$;
Skin, rabbit: LD50 $=372 \mathrm{uL} / \mathrm{kg}$;
Other: $108 \mathrm{uL} / \mathrm{kg}$ is approximately $=149 \mathrm{mg} / \mathrm{kg} .372 \mathrm{uL} / \mathrm{kg}$ is approximately $=513 \mathrm{mg} / \mathrm{kg}$.
1,2,3-Trichloropropane - ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Carcinogenicity: Humans California: carcinogen, initial date 10/1/92 NTP: Suspect carcinogen IARC: Group 2A carcinogen

Other: $\quad$ See actual entry in RTECS for complete information.
Section 12 - Ecological Information
Ecotoxicity: Daphnia: Daphnia: $45 \mathrm{mg} / \mathrm{l} ; 24 \mathrm{H}$; EC50

Dispose of in a manner consistent with federal, state, and local regulations.

# Section 14 - Transport Information 

US DOT<br>Shipping Name: TOXIC LIQUIDS, ORGANIC, N.O.S.<br>Hazard Class: 6.1<br>UN Number: UN2810<br>Packing Group: III<br>Canada TDG<br>Shipping Name: Not available<br>Hazard Class:<br>UN Number:<br>Packing Group:

## Section 15 - Regulatory Information

European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: XN
Risk Phrases:
R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
Safety Phrases:
S 37/39 Wear suitable gloves and eye/face protection.
WGK (Water Danger/Protection)
CAS\# 96-18-4: 2
Canada
CAS\# 96-18-4 is listed on Canada's DSL List
Canadian WHMIS Classifications: B3, D1B, D2A
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.
CAS\# 96-18-4 is listed on Canada's Ingredient Disclosure List
US Federal
TSCA
CAS\# 96-18-4 is listed on the TSCA Inventory.

Section 16-Other Information
MSDS Creation Date: 8/25/1998
Revision \#7 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume 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 the company 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 the company has been advised of the possibility of such damages.

