Material Safety Data Sheet
1,1,1-Trichloro-2-methyl-2-propanol hemihydrate

MSDS\# 96913

## Section 1 - Chemical Product and Company Identification

MSDS
Name:
Catalog AC150300000, AC150300025, AC150301000, AC150305000, AC421560000, AC421561000
Numbers: AC421561000, AC421565000
beta,beta,beta-Trichloro-tert-butyl alcohol hemihydrate; Trichloro-tert-butanol hemihydrate; Acetone
Synonyms: chloroform hemihydrate; Chlorobutanol; Chloretone (Parke, Davis); Coliquifilm (Allergan); Methaform; Sedaform.

Company Identification:
Acros Organics BVBA
Janssen Pharmaceuticalaan 3a 2440 Geel, Belgium
Acros Organics
Company Identification: (USA)
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

## Risk Phrases:

| CAS\#: | 6001-64-5 |
| :--- | :--- |
| Chemical Name: | $1,1,1$-Trichloro-2-methyl-2-propanol hemihydrate |
| $\%:$ | 98 |
| EINECS\#: | unlisted |

Hazard Symbols:

Text for R-phrases: see Section 16

Hazard Symbols: XN


Risk Phrases:

22 36/37/38
Section 3 - Hazards Identification
EMERGENCY OVERVIEW
Warning! Harmful if swallowed. Causes eye, skin, and respiratory tract irritation. Target Organs: Respiratory system, gastrointestinal system, eyes, skin.
Potential Health Effects
Eye: Causes eye irritation.
Skin: Causes skin irritation. May be harmful if absorbed through the skin.

Harmful if swallowed. May cause irritation of the digestive tract. Ingestion of large amounts may cause CNS depression.
Inhalation: Causes respiratory tract irritation. May be harmful if inhaled.
Chronic: No information found.

## Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin:

Ingestion:

Inhalation:
Get medical aid. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.
Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

## Notes to

Physician:
Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved General or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by Information: thermal decomposition or combustion. This material in sufficient quantity and reduced particle size is capable of creating a dust explosion. Runoff from fire control or dilution water may cause pollution.
Extinguishing
Media:
Use water spray, dry chemical, carbon dioxide, or chemical foam.
Autoignition
Temperature:
Not applicable.
Flash Point: 100 deg C ( 212.00 deg F)
Explosion
Limits: Lower:
Explosion
Limits: Upper:
Not available
NFPA Rating: health: 2; flammability: 1 ; instability: 0 ;

## Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, Spills/Leaks: observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

## Section 7 - Handling and Storage

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate Handling: ventilation. Minimize dust generation and accumulation. Avoid breathing dust, mist, or vapor. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

Storage:
Keep container closed when not in use. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection


OSHA Vacated PELs: 2-Propanol, 1,1,1-trichloro-2-methyl-: None listed 1,1,1-Trichloro-2-methyl-2-propanol
hemihydrate: None listed
Engineering Controls:
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.
Exposure Limits
Personal Protective Equipment
Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to minimize contact with skin. 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
Physical State: Crystals
Color: white
Odor: camphor
$\mathrm{pH}: 4.5-6\left(7.7 \mathrm{~g} / \mathrm{L}\left(20^{\circ} \mathrm{C}\right)\right)$
Vapor Pressure: Not available
Vapor Density: Not available
Evaporation Rate: Not available
Viscosity: Not available
Boiling Point: 173-175 deg C @760mmHg
Freezing/Melting Point: 75-79 deg C
Decomposition Temperature:
Solubility in water: $7.7 \mathrm{~g} / \mathrm{l}\left(20^{\circ} \mathrm{C}\right)$
Specific Gravity/Density:
Molecular Formula: C4H7Cl3O.0.5H2O
Molecular Weight: 186.47
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. Substance sublimes readily. Incompatible materials, dust generation, excess heat.
Strong oxidizing agents, oxidizing agents, alkaline earth metals, acid anhydrides, acid chlorides, alkaline solutions.

Hydrogen chloride, chlorine, carbon monoxide, carbon dioxide.
Has not been reported.

## Section 11 - Toxicological Information

RTECS\#: CAS\# 57-15-8: UC0175000
CAS\# 6001-64-5: None listed
RTECS:
CAS\# 57-15-8: Draize test, rabbit, eye: 9180 ug/30S Mild;
Draize test, rabbit, skin: 850 ug Mild;
Oral, mouse: LD50 $=150 \mathrm{mg} / \mathrm{kg}$;
LD50/LC50: Oral, rat: LD50 $=510 \mathrm{mg} / \mathrm{kg}$;

## RTECS:

CAS\# 6001-64-5:.
Other: Oral, rabbit, LDLo: $213 \mathrm{mg} / \mathrm{kg}$, Oral, dog, LDLo: $238 \mathrm{mg} / \mathrm{kg}$.
2-Propanol, 1,1,1-trichloro-2-methyl- - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop
Carcinogenicity:
65.

1,1,1-Trichloro-2-methyl-2-propanol hemihydrate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other: $\quad$ The toxicological properties have not been fully investigated.
Section 12 - Ecological Information
Other: Do not empty into drains.
Section 13 - Disposal Considerations
Dispose of in a manner consistent with federal, state, and local regulations.
Section 14 - Transport Information
US DOT
Shipping Name: Not Regulated
Hazard Class:
UN Number:
Packing Group:
Canada TDG
Shipping Name: Not available
Hazard Class:
UN Number:
Packing Group:

## Section 15 - Regulatory Information

European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: XN
Risk Phrases:
R 22 Harmful if swallowed.
R 36/37/38 Irritating to eyes, respiratory system and skin.
Safety Phrases:
S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
WGK (Water Danger/Protection)
CAS\# 57-15-8: 2
CAS\# 6001-64-5: Not available
Canada
CAS\# 57-15-8 is listed on Canada's DSL List
Canadian WHMIS Classifications: D1B, D2B
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\# 57-15-8 is not listed on Canada's Ingredient Disclosure List.
CAS\# 6001-64-5 is not listed on Canada's Ingredient Disclosure List.

## US Federal

TSCA
CAS\# 57-15-8 is listed on the TSCA Inventory.
CAS\# 6001-64-5 is not listed on the TSCA Inventory. It is for research and development use only.

Section 16 - Other Information
MSDS Creation Date: 9/02/1997
Revision \#9 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.

