



Material Safety Data Sheet

1,1,1-Trichlorotrifluoroethane, 99%

MSDS# 04880

Section 1 - Chemical Product and Company Identification

MSDS Name: 1,1,1-Trichlorotrifluoroethane, 99%  
Catalog Numbers: AC157130000, AC157130100, AC157130500  
Synonyms:

Company Identification: Acros Organics BVBA  
Janssen Pharmaceuticaaan 3a  
2440 Geel, Belgium  
Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410  
Company Identification: (USA)  
For information in the US, call: 800-ACROS-01  
For information in Europe, call: +32 14 57 52 11  
Emergency Number, Europe: +32 14 57 52 99  
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

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CAS#: 354-58-5  
Chemical Name: 1,1,1-Trichlorotrifluoroethane  
%: 99  
EINECS#: 206-564-6  
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Hazard Symbols: None listed  
Risk Phrases: None listed

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: clear colourless Target Organs: None.

Potential Health Effects

The toxicological properties of this substance have not been fully investigated.

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.  
Skin: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.  
Ingestion: Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.  
Inhalation: Remove from exposure and move to fresh air immediately.  
Notes to Physician:

Section 5 - Fire Fighting Measures

General Information: 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.

Extinguishing Media: In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam.

Autoignition Temperature: Not available

Flash Point: Not available

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

NFPA Rating: NFPA Rating:

### Section 6 - Accidental Release Measures

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

Spills/Leaks: 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.

### Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

Storage: Store in a cool, dry place. Keep container closed when not in use.

### Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
1,1,1-Trichlorotrifluoroethane	none listed	none listed	none listed

OSHA Vacated PELs: 1,1,1-Trichlorotrifluoroethane: None listed

Engineering Controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels.

Exposure Limits

Personal Protective Equipment

Eyes: Wear safety glasses and chemical goggles if splashing is possible.

Skin: Wear appropriate protective gloves and clothing to prevent skin exposure.

Clothing: Wear appropriate protective clothing to minimize contact with skin.

Respirators: Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

### Section 9 - Physical and Chemical Properties

Physical State: Liquid

Color: clear, colorless

Odor: None reported.

pH: Not available

Vapor Pressure: 360 mm Hg @ 25 C

Vapor Density: Not available

Evaporation Rate: Not available

Viscosity: 0.7 cP 25.00 deg C

Boiling Point: 46 deg C @ 760.00mmHg ( 114.80°F)

Freezing/Melting Point: 14 deg C ( 57.20°F)

Decomposition Temperature: Not available

Solubility in water: insoluble

Specific Gravity/Density: 1.5790g/cm3

Molecular Formula: C2Cl3F3

Molecular Weight: 187.38

#### Section 10 - Stability and Reactivity

Chemical Stability:	Stable under normal temperatures and pressures.
Conditions to Avoid:	Incompatible materials, strong oxidants.
Incompatibilities with Other Materials	Not available
Hazardous Decomposition Products	Hydrogen chloride, phosgene, carbon monoxide, carbon monoxide, carbon dioxide, hydrogen fluoride gas.
Hazardous Polymerization	Has not been reported.

#### Section 11 - Toxicological Information

RTECS#:	CAS# 354-58-5: KJ3975000
	RTECS:
LD50/LC50:	CAS# 354-58-5: Inhalation, rat: LC50 = 13 pph/15M;
	.
Carcinogenicity:	1,1,1-Trichlorotrifluoroethane - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other:	See actual entry in RTECS for complete information.

#### Section 12 - Ecological Information

Other: No information available.

#### 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 as a hazardous material

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: Not available

Risk Phrases:

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

###### WGK (Water Danger/Protection)

CAS# 354-58-5: 2

###### Canada

CAS# 354-58-5 is listed on Canada's DSL List

Canadian WHMIS Classifications: 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# 354-58-5 is not listed on Canada's Ingredient Disclosure List.

##### US Federal

TSCA

CAS# 354-58-5 is listed on the TSCA  
Inventory.

Section 16 - Other Information

MSDS Creation Date: 9/02/1997

Revision #6 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 merchantability 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.

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