

Material Safety Data Sheet
2,2,2-Trifluoroethanol, 99.8%

Section 1 - Chemical Product and Company Identification

MSDS Name: 2,2,2-Trifluoroethanol, 99.8%
Catalog Numbers: 13975-0000, 13975-0025, 13975-0250, 13975-1000, 13975-5000
Synonyms: TFE

Company Identification: Acros Organics BVBA
Janssen Pharmaceuticaaan 3a
2440 Geel, Belgium

Company Identification: (USA) Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

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

| CAS# | Chemical Name: | % | EINECS# |
|---------|------------------------|-------|-----------|
| 75-89-8 | 2,2,2-Trifluoroethanol | 99.8% | 200-913-6 |

Hazard Symbols: XN



Risk Phrases: 10 20/21/22 38 41 62

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Flammable. Harmful by inhalation, in contact with skin and if swallowed. Irritating to skin. Risk of serious damage to eyes. Possible risk of impaired fertility.

Potential Health Effects

Eye: Causes eye irritation. Risk of serious damage to eyes.
Skin: Causes skin irritation. Harmful if absorbed through the skin.
Ingestion: Harmful if swallowed. May cause irritation of the digestive tract.
Inhalation: Harmful if inhaled. May cause respiratory tract irritation.
Chronic:

Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: Get medical aid. If conscious drink water, then induce vomiting. If unconscious, immediately take victim to a physician and do NOT attempt to induce vomiting.

Inhalation: 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:

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. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Flammable liquid and vapor.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.

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. Remove all sources of ignition. Use a spark-proof tool.

Section 7 - Handling and Storage

Handling: Use spark-proof tools and explosion proof equipment. Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes. Use only in a chemical fume hood.

Storage: Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container. Flammables-area.

Section 8 - Exposure Controls, Personal Protection

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
CAS# 75-89-8:

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.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a 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: Clear liquid
Color: colorless
Odor: characteristic odor
pH: 5.0-7.5 (10% aq. sol.)
Vapor Pressure: 3.5hPa @20 deg C
Viscosity: 1.75 mPa.s @25 deg C
Boiling Point: 77 - 80 deg C @760mmHg
Freezing/Melting Point: -45 deg C (-49.00°F)
Autoignition Temperature: 480 deg C (896.00 deg F)
Flash Point: 29 deg C (84.20 deg F)
Explosion Limits: Lower: 5.5
Explosion Limits: Upper: 42
Decomposition Temperature:

Solubility in water: Miscible

Specific Gravity/Density: 1.390

Molecular Formula: C₂H₃F₃O

Molecular Weight: 100.04

Section 10 - Stability and Reactivity

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|--|---|
| Chemical Stability: | Stable under normal temperatures and pressures. |
| Conditions to Avoid: | Incompatible materials, ignition sources. |
| Incompatibilities with Other Materials | Oxidizing agents, bases, alkali metals, alkaline earth metals, potassium, sodium. |
| Hazardous Decomposition Products | Carbon monoxide, irritating and toxic gases, carbon dioxide, hydrogen fluoride gas. |
| Hazardous Polymerization | Has not been reported. |

Section 11 - Toxicological Information

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|------------|---|
| RTECS#: | CAS# 75-89-8: KM5250000 |
| RTECS: | CAS# 75-89-8: Draize test, rabbit, eye: 20 mg/24H Moderate; Draize test, rabbit, skin: 750 ug/24H Severe; Inhalation, mouse: LC50 = 2900 mg/m ³ /2H; Inhalation, mouse: LC50 = 2900 mg/m ³ /2H; |
| LD50/LC50: | Inhalation, rat: LC50 = 470 ppm/6H; Oral, mouse: LD50 = 366 mg/kg; Oral, rat: LD50 = 240 mg/kg; Skin, rabbit: LD50 = 390 uL/kg; |