

**Material Safety Data Sheet**

Version 3.0  
Revision Date 08/27/2009  
Print Date 04/09/2010

**1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : 1,3,5-Trifluorobenzene

Product Number : 196851  
Brand : Aldrich

Company : Sigma-Aldrich Canada, Ltd  
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OAKVILLE ON L6H 6J8  
CANADA

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**2. COMPOSITION/INFORMATION ON INGREDIENTS**

Formula :  $C_6H_3F_3$   
Molecular Weight : 132.08 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
<b>1,3,5-Trifluorobenzene</b>			
372-38-3	206-751-2	-	-

**3. HAZARDS IDENTIFICATION****WHMIS Classification**

B2 Flammable Liquid

Flammable Liquid

**HMIS Classification**

Health Hazard: 0

Flammability: 3

Physical hazards: 0

**Potential Health Effects**

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

**Skin** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation.

**Ingestion** May be harmful if swallowed.

**4. FIRST AID MEASURES****General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**If inhaled**

If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician.

**In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**5. FIRE-FIGHTING MEASURES****Flammable properties**

Flash point                      -7 °C (19 °F) - closed cup

Ignition temperature      no data available

**Suitable extinguishing media**

For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

**Special protective equipment for fire-fighters**

Wear self contained breathing apparatus for fire fighting if necessary.

**Further information**

Use water spray to cool unopened containers.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions**

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 vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

**Environmental precautions**

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

**Methods for cleaning up**

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).

**7. HANDLING AND STORAGE****Handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

**Storage**

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.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

### Personal protective equipment

#### 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).

#### Hand protection

For prolonged or repeated contact use protective gloves.

#### Eye protection

Face shield and safety glasses

#### Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form	clear, liquid
Colour	colourless

### Safety data

pH	no data available
Melting point	-5.5 °C (22.1 °F) - lit.
Boiling point	75 - 76 °C (167 - 169 °F) - lit.
Flash point	-7 °C (19 °F) - closed cup
Ignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Density	1.277 g/mL at 25 °C (77 °F)
Water solubility	no data available

## 10. STABILITY AND REACTIVITY

### Storage stability

Stable under recommended storage conditions.

### Conditions to avoid

Heat, flames and sparks.

### Materials to avoid

Strong oxidizing agents

**Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen fluoride

**Hazardous reactions**

Vapours may form explosive mixture with air.

**11. TOXICOLOGICAL INFORMATION****Acute toxicity**

no data available

**Irritation and corrosion**

no data available

**Sensitisation**

no data available

**Chronic exposure**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**Signs and Symptoms of Exposure**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Potential Health Effects**

<b>Inhalation</b>	May be harmful if inhaled. May cause respiratory tract irritation.
<b>Skin</b>	May be harmful if absorbed through skin. May cause skin irritation.
<b>Eyes</b>	May cause eye irritation.
<b>Ingestion</b>	May be harmful if swallowed.

**12. ECOLOGICAL INFORMATION****Elimination information (persistence and degradability)**

no data available

**Ecotoxicity effects**

no data available

**Further information on ecology**

no data available

**13. DISPOSAL CONSIDERATIONS****Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**

Dispose of as unused product.

**14. TRANSPORT INFORMATION**

**DOT (US)**

UN-Number: 1993 Class: 3 Packing group: II  
Proper shipping name: Flammable liquids, n.o.s. (1,3,5-Trifluorobenzene)  
Marine pollutant: No  
Poison Inhalation Hazard: No

**IMDG**

UN-Number: 1993 Class: 3 Packing group: II EMS-No: F-E, S-E  
Proper shipping name: FLAMMABLE LIQUID, N.O.S. (1,3,5-Trifluorobenzene)  
Marine pollutant: No

**IATA**

UN-Number: 1993 Class: 3 Packing group: II  
Proper shipping name: Flammable liquid n.o.s. (1,3,5-Trifluorobenzene)

**15. REGULATORY INFORMATION****DSL Status**

This product contains the following components that are not on the Canadian DSL nor NDSL lists.

1,3,5-Trifluorobenzene	CAS-No.
	372-38-3

**WHMIS Classification**

B2	Flammable Liquid	Flammable Liquid
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**16. OTHER INFORMATION****Further information**

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