



Material Safety Data Sheet

N-(tert-Butyldimethylsilyl)-N-methyl-trifluoroacetamide, 98%

MSDS# 91397

Section 1 - Chemical Product and Company Identification

MSDS Name: N-(tert-Butyldimethylsilyl)-N-methyl-trifluoroacetamide, 98%  
Catalog Numbers: AC221540000, AC221540010, AC221540050, AC221540250  
Synonyms: MTBSTFA

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

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CAS#: 77377-52-7  
Chemical Name: N-(tert-Butyldimethylsilyl)-N-methyl-trifluoroacetamide  
%: 98  
EINECS#: unlisted  
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Hazard Symbols: XI



Risk Phrases: 10 36/37/38

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Warning! Flammable liquid and vapor. Moisture sensitive. Causes eye, skin, and respiratory tract irritation. Target Organs:  
Respiratory system, eyes, skin.

Potential Health Effects

Eye: Causes eye irritation.

Skin: Causes skin irritation. May be harmful if absorbed through the skin.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May be harmful if swallowed.

Inhalation: Causes respiratory tract irritation. May be harmful if inhaled. Vapors may cause dizziness or suffocation.

Chronic: Effects may be delayed.

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 immediately.

**Skin:** Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

**Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

**Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

**Notes to Physician:** Treat symptomatically and supportively.

### 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 may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. 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. Containers may explode in the heat of a fire. Flammable liquid and vapor. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Water hydrolyzes material liberating acidic gas which in contact with metal surfaces can generate flammable and/or explosive hydrogen gas.

**Extinguishing Media:** In case of fire, use carbon dioxide, dry chemical powder or appropriate foam.

**Autoignition Temperature:** Not applicable.

**Flash Point:** 52 deg C ( 125.60 deg F)

**Explosion Limits: Lower:** Not available

**Explosion Limits: Upper:** Not available

**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.

**Spills/Leaks:** Remove all sources of ignition. Absorb spill using an absorbent, non-combustible material such as earth, sand, or vermiculite. Do not use combustible materials such as sawdust. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors.

### Section 7 - Handling and Storage

**Handling:** Use only in a well-ventilated area. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep away from heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Keep from contact with moist air and steam.

**Storage:** Keep away from heat, sparks, and flame. Keep away from sources of ignition. Keep refrigerated. (Store below 4°C/39°F.) Store protected from moisture.

### Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
N-(tert-Butyldimethylsilyl)-N-methyl-trifluoroacetamide	none listed	none listed	none listed

OSHA Vacated PELs: N-(tert-Butyldimethylsilyl)-N-methyl-trifluoroacetamide: None listed

**Engineering Controls:**

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.

**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 prevent skin exposure.
- Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

#### Section 9 - Physical and Chemical Properties

Physical State: Clear liquid

Color: clear, colorless

Odor: None reported.

pH: Not available

Vapor Pressure: Not available

Vapor Density: 8.32

Evaporation Rate: Not available

Viscosity: Not available

Boiling Point: 170 deg C @ 760.00mmHg ( 338.00°F)

Freezing/Melting Point: Not available

Decomposition Temperature: Not available

Solubility in water: decomposes

Specific Gravity/Density: 1.0230g/cm3

Molecular Formula: C9H18F3NOSi

Molecular Weight: 241.33

#### Section 10 - Stability and Reactivity

- Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions. Moisture sensitive.
- Conditions to Avoid: Incompatible materials, ignition sources, moisture, excess heat.
- Incompatibilities with Other Materials: Strong oxidizing agents.
- Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide, carbon dioxide, hydrogen fluoride gas, silicon dioxide.
- Hazardous Polymerization: Has not been reported.

#### Section 11 - Toxicological Information

- RTECS#: CAS# 77377-52-7: None listed
- LD50/LC50: RTECS: Not available.
- Carcinogenicity: N-(tert-Butyldimethylsilyl)-N-methyl-trifluoroacetamide - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
- Other: The toxicological properties have not been fully investigated.

#### 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: FLAMMABLE LIQUID, N.O.S.

Hazard Class: 3

UN Number: UN1993

Packing Group: III

Canada TDG

Shipping Name: Not available

Hazard Class:

UN Number:

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XI

Risk Phrases:

R 10 Flammable.

R 36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases:

S 16 Keep away from sources of ignition - No smoking.

WGK (Water Danger/Protection)

CAS# 77377-52-7: Not available

Canada

Canadian WHMIS Classifications: D2B, B3

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# 77377-52-7 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 77377-52-7 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 #10 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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