

# **SAFETY DATA SHEET**

Creation Date 06-May-2010 Revision Date 25-May-2021 Revision Number 3

1. Identification

Product Name N,O-Bis(trimethylsilyI)trifluoroacetamide

Cat No. : A12033

CAS-No 25561-30-2 Synonyms BSTFA

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use.

### Details of the supplier of the safety data sheet

### Company

Alfa Aesar

Thermo Fisher Scientific Chemicals, Inc.

30 Bond Street

Ward Hill, MA 01835-8099

Tel: 800-343-0660 Fax: 800-322-4757 **Email:** tech@alfa.com

www.alfa.com

#### **Emergency Telephone Number**

During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660.

After normal business hours, call Carechem 24 at (866) 928-0789.

# 2. Hazard(s) identification

### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids Category 3
Skin Corrosion/Irritation Category 2
Serious Eye Damage/Eye Irritation Category 2

### Label Elements

#### Signal Word

Warning

#### **Hazard Statements**

Flammable liquid and vapor Causes skin irritation

#### Causes serious eye irritation



### **Precautionary Statements**

#### Prevention

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/equipment

Use only non-sparking tools

Take precautionary measures against static discharge

#### Skin

If skin irritation occurs: Get medical advice/attention

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

#### Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

#### Fire

In case of fire: Use CO2, dry chemical, or foam for extinction

#### Storage

Store in a well-ventilated place. Keep cool

### **Disposal**

Dispose of contents/container to an approved waste disposal plant

### Hazards not otherwise classified (HNOC)

None identified

# 3. Composition/Information on Ingredients

Component	CAS-No	Weight %		
Trimethylsilyl	25561-30-2	<=100		
2,2,2-trifluoro-N-(trimethylsilyl)acetimidate				

### 4. First-aid measures

**General Advice** If symptoms persist, call a physician.

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists,

call a physician.

**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if

symptoms occur.

**Ingestion** Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and

effects

Notes to Physician

. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

Treat symptomatically

## 5. Fire-fighting measures

Suitable Extinguishing Media Carbon dioxide (CO<sub>2</sub>). Dry chemical. Chemical foam. Water mist may be used to cool

closed containers.

Unsuitable Extinguishing Media No information available

Flash Point 23 °C / 73.4 °F

Method - No information available

Autoignition Temperature 300 °C / 572 °F

**Explosion Limits** 

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

### **Specific Hazards Arising from the Chemical**

Flammable. Vapors may form explosive mixtures with air. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

#### **Hazardous Combustion Products**

Nitrogen oxides (NOx). Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Silicon dioxide. Gaseous hydrogen fluoride (HF).

# **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA** 

Health	Flammability	Instability	Physical hazards
3	3	1	N/A

### 6. Accidental release measures

Personal Precautions Ensure adequate ventilation. Use personal protective equipment as required. Remove all

sources of ignition. Take precautionary measures against static discharges.

**Environmental Precautions** Should not be released into the environment.

**Methods for Containment and Clean** Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. **Up** Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

## 7. Handling and storage

Handling Do not get in eyes, on skin, or on clothing. Wear personal protective equipment/face

protection. Ensure adequate ventilation. Avoid ingestion and inhalation. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Take

precautionary measures against static discharges.

**Storage** Keep away from heat, sparks and flame. Keep away from heat/sparks/open flames/hot

surfaces. - No smoking. Refrigerator/flammables. Keep under nitrogen. Keep containers

tightly closed in a dry, cool and well-ventilated place. Corrosives area.

# 8. Exposure controls / personal protection

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure

limitsestablished by the region specific regulatory bodies.

Engineering Measures Use explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations

and safety showers are close to the workstation location. Ensure adequate ventilation,

especially in confined areas.

**Personal Protective Equipment** 

**Eye/face Protection**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 and body protection**Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection 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.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

Physical StateLiquidAppearanceLight yellowOdorSlight

Odor Threshold No information available pH No information available

Melting Point/Range -10 °C / 14 °F

**Boiling Point/Range** 45 - 50 °C / 113 - 122 °F @ 14 mmHg

Flash Point 23 °C / 73.4 °F
Evaporation Rate No information available

Flammability (solid,gas) Not applicable

Flammability or explosive limits

Upper No data available
Lower No data available
Vapor Pressure No information available

Vapor Density
No information available
Specific Gravity
0,960

Solubility

Partition coefficient; n-octanol/water
Autoignition Temperature

Pecomposition Temperature

Viscosity

No data available
300 °C / 572 °F
No information available
No information available

ViscosityNo information availableMolecular FormulaC8 H18 F3 N O Si2

Molecular Weight 257.39

# 10. Stability and reactivity

Reactive Hazard None known, based on information available

**Stability** Moisture sensitive.

Conditions to Avoid To avoid thermal decomposition, do not overheat. Keep away from open flames, hot

surfaces and sources of ignition. Incompatible products. Exposure to moist air or water.

Incompatible Materials Water, Strong acids, Oxidizing agent

N,O-Bis(trimethylsilyl)trifluoroacetamide

Hazardous Decomposition Products Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2), Silicon dioxide, Gaseous hydrogen fluoride (HF)

**Hazardous Polymerization** No information available.

None under normal processing. **Hazardous Reactions** 

# Toxicological information

**Acute Toxicity** 

**Product Information** 

No acute toxicity information is available for this product

**Component Information Toxicologically Synergistic** 

No information available

**Products** 

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation Irritating to eyes and skin

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Trimethylsilyl	25561-30-2	Not listed				
2,2,2-trifluoro-N-(trimet						
hylsilyl)acetimidate						

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

STOT - single exposure None known STOT - repeated exposure None known

**Aspiration hazard** No information available

delayed

Symptoms / effects, both acute and Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

No information available **Endocrine Disruptor Information** 

**Other Adverse Effects** The toxicological properties have not been fully investigated.

### 12. Ecological information

**Ecotoxicity** 

Do not empty into drains. Reacts with water so no ecotoxicity data for the substance is available.

Persistence and Degradability Persistence is unlikely based on information available.

No information available. **Bioaccumulation/ Accumulation** 

**Mobility** Will likely be mobile in the environment due to its volatility.

### 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a

hazardous waste. Chemical waste generators must also consult local, regional, and

national hazardous waste regulations to ensure complete and accurate classification.

### 14. Transport information

DOT

**UN-No** UN1993

Proper Shipping Name FLAMMABLE LIQUIDS, N.O.S.

Technical Name Trimethylsilyl 2,2,2-trifluoro-N-(trimethylsilyl)acetimidate

Hazard Class 3 Packing Group III

\_ TDG

UN-No UN1993

Proper Shipping Name FLAMMABLE LIQUID, N.O.S.

Hazard Class 3
Packing Group III

<u>IATA</u>

**UN-No** UN1993

Proper Shipping Name FLAMMABLE LIQUID, N.O.S.

Hazard Class 3
Packing Group III

IMDG/IMO

UN-No UN1993

Proper Shipping Name FLAMMABLE LIQUID, N.O.S.

Hazard Class 3
Packing Group III

# 15. Regulatory information

#### **United States of America Inventory**

Component	CAS-No	TSCA	TSCA Inventory notification - Active/Inactive	TSCA - EPA Regulatory Flags		
Trimethylsilyl	25561-30-2	=	-	-		
2,2,2-trifluoro-N-(trimethylsilyl)acet						
imidate						

#### Legend:

TSCA - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed '-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

#### **International Inventories**

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

Component	CAS-No	DSL	NDSL	EINECS	PICCS	ENCS	AICS	IECSC	KECL
Trimethylsilyl	25561-30-2	-	-	247-103-9	-	Х	-	Х	-
2,2,2-trifluoro-N-(trimethylsilyl)acet									
imidate									

### U.S. Federal Regulations

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act)

Not applicable

Clean Air Act

Not applicable

Revision Date 25-May-2021

**OSHA** - Occupational Safety and

Health Administration

Not applicable

CERCLA Not applicable

**California Proposition 65** This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know

Regulations

Not applicable

**U.S. Department of Transportation** 

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland

Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

### 16. Other information

Prepared By Health, Safety and Environmental Department

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www.alfa.com

 Creation Date
 06-May-2010

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 25-May-2021

 Print Date
 25-May-2021

**Revision Summary** SDS authoring systems update, replaces ChemGes SDS No. 25561-30-2/6.

#### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**