

# SAFETY DATA SHEET

Creation Date 16-Sep-2014

Revision Date 19-Dec-2025

Revision Number 8

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard 2024 (29 CFR 1910.1200)

## 1. Identification

**Product Name** N,O-Bis(trimethylsilyl)trifluoroacetamide, with 1% trimethylsilyl chloride

**Cat No. :** AC389320000; AC389320050; AC389320250; AC389321000; AC389325000

**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

Fisher Scientific Company  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

#### **Emergency Telephone Number**

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11  
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99  
**CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

## 2. Hazard(s) identification

### Classification

This chemical is considered hazardous according to [US] OSHA (29 CFR 1910.1200, 2024)

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, hot surfaces, sparks, open flames and other ignition sources. No smoking  
Keep container tightly closed  
Ground and bond container and receiving equipment  
Use explosion-proof electrical/ventilating/lighting equipment  
Take action to prevent static discharges  
Use non-sparking tools

#### **Skin**

If skin irritation occurs: Get medical advice/attention  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower  
Take off contaminated clothing and wash 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 CO<sub>2</sub>, dry chemical, or foam to extinguish

#### **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

#### **Hazards classified under paragraph (d)(1)(ii) of 1910.1200**

#### **Hazards resulting from a reaction with other chemicals under normal conditions of use**

Reacts violently with water.

### **3. Composition/information on Ingredients**

<b>Component</b>	<b>CAS No</b>	<b>Weight %</b>
Trimethylsilyl 2,2,2-trifluoro-N-(trimethylsilyl)acetimidate	25561-30-2	> 98
Trimethylchlorosilane	75-77-4	1

### **4. First-aid measures**

#### **General Advice**

If symptoms persist, call a physician.

<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.
<b>Inhalation</b>	Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water.
<b>Most important symptoms and effects</b>	. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation
<b>Notes to Physician</b>	Treat symptomatically

## 5. Fire-fighting measures

<b>Suitable Extinguishing Media</b>	CO <sub>2</sub> , dry chemical, dry sand, alcohol-resistant foam. Water mist may be used to cool closed containers.
<b>Unsuitable Extinguishing Media</b>	No information available
<b>Flash Point</b>	34 °C / 93.2 °F
<b>Method -</b>	No information available
<b>Autoignition Temperature</b>	No information available
<b>Explosion Limits</b>	
<b>Upper</b>	No data available
<b>Lower</b>	No data available
<b>Sensitivity to Mechanical Impact</b>	No information available
<b>Sensitivity to Static Discharge</b>	No information available

### Specific Hazards Arising from the Chemical

Flammable. Corrosive material. Risk of ignition. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated. Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition. Vapors may form explosive mixtures with air. Reacts violently with water.

### Hazardous Combustion Products

Nitrogen oxides (NO<sub>x</sub>). 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

<b>Health</b>	<b>Flammability</b>	<b>Instability</b>	<b>Physical hazards</b>
3	2	1	W

## 6. Accidental release measures

<b>Personal Precautions</b>	Use personal protective equipment as required. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.
<b>Environmental Precautions</b>	Should not be released into the environment.
<b>Methods for Containment and Clean Up</b>	Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Do not expose spill to water. Remove all sources of ignition. Use spark-proof tools and

explosion-proof equipment.

## 7. Handling and Storage

<b>Handling</b>	Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Ensure adequate ventilation. Avoid ingestion and inhalation. Do not allow contact with water. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Take precautionary measures against static discharges.
<b>Storage.</b>	Keep away from heat, sparks and flame. Flammables area. Keep under nitrogen. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from water or moist air. To maintain product quality: Keep refrigerated. Incompatible Materials. Acids. Bases. Strong oxidizing agents.

## 8. Exposure controls / personal protection

<b>Exposure Guidelines</b>	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
<b>Engineering Measures</b>	Use only under a chemical fume hood. 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.
<b>Personal Protective Equipment</b>	
<b>Eye/face Protection</b>	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.
<b>Skin and body protection</b>	Wear appropriate protective gloves and clothing to prevent skin exposure.
<b>Respiratory Protection</b>	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.
<b>Recommended Filter type:</b>	Organic gases and vapours filter. Type A. Brown. conforming to EN14387.
<b>Hygiene Measures</b>	Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

<b>Appearance</b>			
<b>Physical State</b>	Liquid		
<b>Color</b>	Colorless		
<b>Odor</b>	No information available		
<b>Odor Threshold</b>	No information available		
<b>Property</b>	<b>Values</b>	<b>Remarks</b>	<b>• Method</b>
<b>Melting Point/Range</b>	No data available		
<b>Softening Point</b>	No data available		
<b>Boiling Point/Range</b>	145 - 147 °C / 293 - 296.6 °F	@ 760 mmHg	
<b>Flash Point</b>	34 °C / 93.2 °F	<b>Method -</b> No information available	
<b>Flammability (liquid)</b>	Flammable	On basis of test data	
<b>Flammability (solid,gas)</b>	Not applicable	Liquid	
<b>Explosion Limits</b>	No data available		
<b>Autoignition Temperature</b>	No data available		

<b>Decomposition Temperature</b>	No data available	
<b>pH</b>	No information available	
<b>Viscosity</b>	No data available	
<b>Water Solubility</b>	hydrolysis	
<b>Solubility in other solvents</b>	No information available	
<b>Partition Coefficient (n-octanol/water)</b>		
<b>Component</b>	<b>log Pow</b>	
Trimethylchlorosilane	3	
<b>Vapor Pressure</b>	No data available	
<b>Density / Specific Gravity</b>	0.974	
<b>Bulk Density</b>	Not applicable	Liquid
<b>Vapor Density</b>	No information available	(Air = 1.0)
<b>Particle characteristics</b>	(liquid) Not applicable	
<b>Other Information</b>		
<b>Molecular Formula</b>	C8 H18 F3 N O Si2	
<b>Molecular Weight</b>	257.4	
<b>Explosive Properties</b>	explosive air/vapour mixtures possible	

## 10. Stability and reactivity

<b>Reactive Hazard</b>	Yes
<b>Stability</b>	Moisture sensitive.
<b>Conditions to Avoid</b>	Keep away from open flames, hot surfaces and sources of ignition. Incompatible products. Exposure to moist air or water. Exposure to moisture.
<b>Incompatible Materials</b>	Acids, Bases, Strong oxidizing agents
<b>Hazardous Decomposition Products</b>	Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> ), Silicon dioxide, Gaseous hydrogen fluoride (HF)
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.
<b>Hazardous Reactions</b>	None under normal processing. Reacts violently with water.

## 11. Toxicological information

### Information on expected route of exposure

<b>Inhalation</b>	Not an expected route of exposure.
<b>Ingestion</b>	May be harmful if swallowed.
<b>Eyes</b>	Avoid contact with eyes. Irritating to eyes. Risk of serious damage to eyes.
<b>Skin</b>	Avoid contact with skin. May cause irritation. Contact with moist skin may cause skin burns.

### Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Trimethylchlorosilane	100-300 mg/kg ( Rat )	LD50 = 1500 mg/kg ( Rabbit )	LC50 = 12.9 mg/L ( Rat ) 1 h

<b>Toxicologically Synergistic Products</b>	No information available
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<b>(b) skin corrosion/irritation;</b>	Category 2
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**(c) serious eye damage/irritation;** Category 2

**(d) respiratory or skin sensitization;**

**Respiratory** No data available  
**Skin** No data available

**(e) germ cell mutagenicity;** No data available

**(f) carcinogenicity;**

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

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Trimethylsilyl 2,2,2-trifluoro-N-(trimethylsilyl)acetimidate	25561-30-2	Not listed	Not listed	Not listed	Not listed	Not listed
Trimethylchlorosilane	75-77-4	Not listed	Not listed	Not listed	Not listed	Not listed

**(g) reproductive toxicity;** No data available

**(h) STOT-single exposure;** No data available

**(i) STOT-repeated exposure;** No data available

**Target Organs** None known.

**(j) aspiration hazard;** No data available

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

**Symptoms / effects,both acute and delayed** Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

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

**Endocrine Disrupting Properties** This product does not contain any known or suspected endocrine disruptors.

## 12. Ecological information

### Ecotoxicity

Do not empty into drains.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Trimethylchlorosilane	Not listed	LC0 >=1000 mg/L Danio rerio 96h	Not listed	Not listed

**Persistence and Degradability** Soluble in water Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

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

Component	log Pow
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Trimethylchlorosilane	3
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### 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 Shipping Name** N,O-Bis(trimethylsilyl)trifluoroacetamide  
**Hazard Class** 3  
**Packing Group** III

#### TDG

**UN-No** UN1993  
**Proper Shipping Name** FLAMMABLE LIQUID, N.O.S.  
**Technical Shipping Name** N,O-Bis(trimethylsilyl)trifluoroacetamide  
**Hazard Class** 3  
**Packing Group** III

#### IATA

**UN-No** UN1993  
**Proper Shipping Name** FLAMMABLE LIQUID, N.O.S.  
**Technical Shipping Name** N,O-Bis(trimethylsilyl)trifluoroacetamide  
**Hazard Class** 3  
**Packing Group** III

#### IMDG/IMO

**UN-No** UN1993  
**Proper Shipping Name** FLAMMABLE LIQUID, N.O.S.  
**Technical Shipping Name** N,O-Bis(trimethylsilyl)trifluoroacetamide  
**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 2,2,2-trifluoro-N-(trimethylsilyl)acet imide	25561-30-2	-	-	-
Trimethylchlorosilane	75-77-4	X	ACTIVE	-

#### **Legend:**

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

X - Listed

'-' - Not Listed

**TSCA - Per 40 CFR 751, Regulation of Certain Chemical  
Substances & Mixtures, Under TSCA Section 6(h) (PBT)**

Not applicable

**TSCA 12(b)** - Notices of Export

Not applicable

#### International Inventories

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

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Trimethylsilyl 2,2,2-trifluoro-N-(trimethylsilyl)acetimidate	25561-30-2	-	-	247-103-9	-	X		-	X	-
Trimethylchlorosilane	75-77-4	X	-	200-900-5	X	X	X	X	X	KE-05939

**KECL** - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

### U.S. Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

#### **SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

**CWA (Clean Water Act)** Not applicable

**Clean Air Act** Not applicable

**OSHA** - Occupational Safety and Health Administration Not applicable

#### **CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

Component	Hazardous Substances RQs	CERCLA Extremely Hazardous Substances RQs	SARA Reportable Quantity (RQ)
Trimethylchlorosilane	-	1000 lb	-

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

### **U.S. State Right-to-Know Regulations**

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Trimethylchlorosilane	X	X	X	-	-

#### **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 contains the following DHS chemicals:  
**Legend** - STQs = Screening Threshold Quantities, APA = A placarded amount

Component	DHS Chemical Facility Anti-Terrorism Standard
Trimethylchlorosilane	Release STQs - 10000lb APA

### Other International Regulations

**Mexico - Grade** No information available



**Authorisation/Restrictions according to EU REACH**

Not applicable

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Trimethylsilyl 2,2,2-trifluoro-N-(trimethylsilyl)acetimidate	25561-30-2	-	-	-
Trimethylchlorosilane	75-77-4	-	-	-

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Trimethylsilyl 2,2,2-trifluoro-N-(trimethylsilyl)acetimidate	25561-30-2	Not applicable	Not applicable	Not applicable	Not applicable
Trimethylchlorosilane	75-77-4	Listed	Not applicable	Not applicable	Not applicable

**Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?**

See table for values

Component	OECD PFAS	US (EPA) PFAS	EU (ECHA) PFAS	UK (HSE) PFAS	Chemsec PFAS (Sin List)
Trimethylsilyl 2,2,2-trifluoro-N-(trimethylsilyl)acetimidate (CAS #: 25561-30-2)	-	-	Listed	Listed	-

**PFAS Legend**

Listed = Meets the PFAS definition of the named authority

**Other International Regulations**

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Trimethylsilyl 2,2,2-trifluoro-N-(trimethylsilyl)acetimidate	25561-30-2	Not applicable	Not applicable	Not applicable	Not applicable
Trimethylchlorosilane	75-77-4	Not applicable	Not applicable	Not applicable	Not applicable

## 16. Other Information

**Prepared By**

Product stewardship (Regulatory Affairs)  
Thermo Fisher Scientific  
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**Creation Date**

16-Sep-2014

**Revision Date**

19-Dec-2025

**Print Date**

19-Dec-2025

**Revision Summary**

Updated to the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) which published its Final Rule in the Federal Register revising the Hazard Communication Standard (HCS/HazCom), 29 CFR 1910.1200 (2024) (HCS §1910.1200,

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2024), May 20, 2024, effective July 19, 2024.

**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**