

# Material Safety Data Sheet Trimethylsilyl cyanide, 98%

MSDS# 61868		
	Section 1 - Chemical Produc	et and Company Identification
MSDS Name:	Trimethylsilyl cyanide, 98%	
Catalog Numbers:	AC199560000, AC199560050, AC199560250, AC199561000	
Synonyms:	Cyanotrimethylsilane; TMSCN; Silanecarbonitrile, trimethyl-; Trimethylsilylcarbonitrile.	
Company Identification:		Acros Organics BVBA Janssen Pharmaceuticalaan 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#:	7677-24-9
Chemical Name:	Trimethylsilyl cyanide
<b>⁰∕₀</b> :	98
EINECS#:	231-657-3

Hazard Symbols:



**Risk Phrases:** 

## T+ F



11 26/27/28 29

Section 3 - Hazards Identification

# EMERGENCY OVERVIEW

Danger! Flammable liquid and vapor. Moisture sensitive. May be fatal if inhaled, absorbed through the skin or swallowed. Causes eye, skin, and respiratory tract irritation. Target Organs: Blood, lungs, eyes.

### Potential Health Effects

- Eye: Causes eye irritation.
- Skin: Causes skin irritation. Harmful if absorbed through the skin. May be metabolized to cyanide which in turn acts by inhibiting cytochrome oxidase impairing cellular respiration.

May be fatal if swallowed. May cause tissue anoxia, characterized by weakness, headache, dizziness, confusion, cyanosis (bluish skin due to deficient oxygenation of the blood), weak and irregular heart beat, collapse,

Ingestion: unconsciousness, convulsions, coma and death. Metabolism may release cyanide, which may result in headache, dizziness, weakness, collapse, unconsciousness and possible death. Ingestion may result in symptoms similar to cyanide poisoning which is characterized by asphyxiation.

May be fatal if inhaled. May cause cyanosis (bluish discoloration of skin due to deficient oxygenation of the

Inhalation: blood). Causes respiratory tract irritation. May be metabolized to cyanide which in turns act by inhibiting cytochrome oxidase impairing cellular respiration.

May be metabolized to cyanide which in turn acts by inhibiting cytochrome oxidase impairing cellular respiration. Chronic exposure to cyanide solutions may lead to the development of a "cyanide" rash, characterized by itching,

Chronic: and by macular, papular, and vesicular eruptions, and may be accompanied by secondary infections. Exposure to small amounts of cyanide compounds over long periods of time is reported to cause loss of appetite, headache, weakness, nausea, dizziness, and symptoms of irritation of the upper respiratory tract and eyes.

### Section 4 - First Aid Measures

- Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid. In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing Skin: contaminated clothing and shoes. Get medical aid immediately. Wash clothing before reuse.
- POISON material. If swallowed, get medical aid immediately. Only induce vomiting if directed to do so by Ingestion: medical personnel. Never give anything by mouth to an unconscious person.
- POISON material. If inhaled, get medical aid immediately. Remove victim to fresh air. If not breathing, give Inhalation: artificial respiration. If breathing is difficult, give oxygen.
- Notes to May be partially metabolized to cyanide in the body. Physician:
- Always have a cyanide antidote kit on hand when working with cyanide compounds. Get medical advice to Antidote: use.

### Section 5 - Fire Fighting Measures

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved General or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Flammable liquid and vapor. Containers may explode when heated. Reacts with water, steam or acid to produce toxic and Information: flammable vapors of hydrogen cyanide.

Extinguishing Use dry sand or earth to smother fire. Use dry chemical. DO NOT use water directly on this material or Media: violent reaction may result.

Autoignition Not available. Temperature:

Flash Point: 1 deg C (33.80 deg F)

Explosion Limits: Lower: 1.36%

Explosion Limits: Upper: Not available

NFPA Rating: health: 4; flammability: 3; instability: 1;

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. Provide ventilation. Do not expose spill to water. A vapor suppressing foam may be used to reduce vapors. Approach spill from upwind. Keep unnecessary and unprotected personnel away.
	Section 7 - Handling and Storage
Was	the thoroughly after handling. Ground and hand containers when transferring material. Do not get in away on

Wash thoroughly after handling. Ground and bond containers when transferring material. Do not get in eyes, on skin, or on clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep Handling: container tightly closed. Do not ingest or inhale. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Use only with adequate ventilation. Keep away from heat,

sparks and flame.

Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Storage: Keep under a nitrogen blanket. Store in a cool, dry, well-ventilated area away from incompatible substances. Refrigerator/flammables. Store protected from moisture.

### Section 8 - Exposure Controls, Personal Protection

+	+	+	++
Chemical Name	ACGIH	NIOSH	OSHA - Final PELs

Trimethylsily	/l cyan none listed	none listed	5 mg/m3 TWA
ide			(listed under
	I	1	Cyanide anion).
+		+	+ +

OSHA Vacated PELs: Trimethylsilyl cyanide: 5 mg/m3 TWA (as CN) (listed under Cyanide anion)

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood.

Exposure Limits

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.

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a Respirators: 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: Liquid

Color: clear, colorless

Odor: bitter-almond

pH: Not available

Vapor Pressure: 37.3 mm Hg @ 37 deg C

Vapor Density: Not available

Evaporation Rate: Not available

Viscosity: Not available

Boiling Point: 114 - 117 deg C @ 760 mm Hg

Freezing/Melting Point: 11 deg C ( 51.80°F)

Decomposition Temperature: Not available

Solubility in water: Reacts

Specific Gravity/Density: .7440 g/cm3

Molecular Formula: C4H9NSi

Molecular Weight: 99.21

Section 10 - Stability and Reactivity

	Chemical Stability		Stable under normal temperatures and pressures. Substance is readily hydrolyzed.
	Chemical Stability.		
	Conditions to Avoid:		Ignition sources, excess heat, exposure to moist air or water, confined spaces.
	Incompatibilities with Other Materials		Water, strong oxidizing agents, strong reducing agents, strong acids, strong bases.
	Hazardous Decomposition Products		Hydrogen cyanide, nitrogen oxides, carbon monoxide, carbon dioxide.
Hazardous Polymerization		erization	Will not occur.
			Section 11 - Toxicological Information
	RTECS#:	CAS# 7677-24-9:	None listed
	LD50/LC50:	RTECS: Not availa	ble.
	Carcinogenicity:	Trimethylsilyl cyanio	de - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
	Other:	The hazards associa	ated with cyanide may be seen in this product.
			Section 12 - Ecological Information
N	ot available		
			Section 13 - Disposal Considerations
	Dispose of in a manner consistent with federal, state, and local regulations.		
			Section 14 - Transport Information

Shipping Name: NITRILES, FLAMMABLE, TOXIC, N.O.S. Hazard Class: 3 UN Number: UN3273 Packing Group: I Canada TDG Shipping Name: Not available Hazard Class: UN Number: Packing Group:

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T+ F

**Risk Phrases:** 

R 11 Highly flammable.

R 26/27/28 Very toxic by inhalation, in contact with skin and if swallowed.

R 29 Contact with water liberates toxic gas.

#### Safety Phrases:

S 8 Keep container dry.

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

S 36/37 Wear suitable protective clothing and gloves.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 7677-24-9: 3

#### Canada

CAS# 7677-24-9 is listed on Canada's NDSL List

Canadian WHMIS Classifications: B2, D1A

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# 7677-24-9 is not listed on Canada's Ingredient Disclosure List.

## US Federal

#### TSCA

CAS# 7677-24-9 is listed on the TSCA Inventory.

Section 16 - Other Information MSDS Creation Date: 1/20/1998 Revision #6 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 merchantibility 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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