

# SAFETY DATA SHEET

Creation Date 16-October-2009 Revision Date 26-December-2021 **Revision Number** 6

1. Identification

**Product Name** Sodium trimethylsilanolate, 1M solution in dichloromethane

AC428840000; AC428841000 Cat No.:

**Synonyms** No information available

**Recommended Use** Laboratory chemicals.

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

Details of the supplier of the safety data sheet

Company

Importer/Distributor Manufacturer Fisher Scientific Company

Acros Organics Fisher Scientific One Reagent Lane 112 Colonnade Road, Fair Lawn, NJ 07410 Ottawa, ON K2E 7L6,

Canada

Tel: 1-800-234-7437

**Emergency Telephone Number** 

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11

One Reagent Lane

Fair Lawn, NJ 07410

Tel: (201) 796-7100

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

WHMIS 2015 Classification Classified as hazardous under the Hazardous Products Regulations (SOR/2015-17)

Flammable liquids Category 4 Skin Corrosion/Irritation Category 1 B Serious Eye Damage/Eye Irritation Category 1 Category 1B Carcinogenicity Specific target organ toxicity (single exposure) Category 3

Target Organs - Respiratory system, Central nervous system (CNS).

**Label Elements** 

Signal Word

Danger

**Hazard Statements** Combustible liquid

# Sodium trimethylsilanolate, 1M solution in dichloromethane

Causes severe skin burns and eye damage May cause respiratory irritation May cause drowsiness and dizziness May cause cancer



# **Precautionary Statements**

#### Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

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

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

Do not breathe dust/fumes/gas/mist/vapours/spray

Wash face, hands and any exposed skin thoroughly after handling

Use only outdoors or in a well-ventilated area

#### Response

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

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

IF INHALED: Remove person to fresh air and keep comfortable for breathing

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER/doctor

Wash contaminated clothing before reuse

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish

#### **Storage**

Store locked up

Store in a well-ventilated place. Keep container tightly closed

#### Disposa

Dispose of contents/container to an approved waste disposal plant

#### Other Hazards

Contains a known or suspected endocrine disruptor

# 3. Composition/Information on Ingredients

Component	CAS-No	Weight %	
Dichloromethane	75-09-2	91	
Silanol, trimethyl-, sodium salt	18027-10-6	9	

#### 4. First-aid measures

**General Advice** Show this safety data sheet to the doctor in attendance. Immediate medical attention is

required.

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

Immediate medical attention is required.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Remove and wash

contaminated clothing and gloves, including the inside, before re-use. Call a physician

immediately.

# Sodium trimethylsilanolate, 1M solution in dichloromethane

**Inhalation** If not breathing, give artificial respiration. Remove from exposure, lie down. Do not use

mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory

medical device. Call a physician immediately.

**Ingestion** Do NOT induce vomiting. Clean mouth with water. Never give anything by mouth to an

unconscious person. Call a physician immediately.

Most important symptoms/effects 
Causes burns by all exposure routes. Difficulty in breathing. 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: Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure and increased heart rate: Inhalation of high vapor concentrations may cause

symptoms like headache, dizziness, tiredness, nausea and vomiting

Notes to Physician Treat symptomatically

# 5. Fire-fighting measures

Suitable Extinguishing Media CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam. Water mist may be used to cool

closed containers.

Unsuitable Extinguishing Media No information available

**Flash Point** 63 °C / 145.4 °F

Method - No information available

**Autoignition Temperature** 

**Explosion Limits** 

No information available

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**

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. Combustible material. Containers may explode when heated.

#### **Hazardous Combustion Products**

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Silicon dioxide. Hydrogen chloride gas. Sodium oxides.

#### **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. Thermal decomposition can lead to release of irritating gases and vapors.

**NFPA** 

HealthFlammabilityInstabilityPhysical hazards320N/A

#### 6. Accidental release measures

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

personnel to safe areas. Keep people away from and upwind of spill/leak. 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 Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

**Up** Remove all sources of ignition.

# 7. Handling and storage Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance. Keep away from open

flames, hot surfaces and sources of ignition.

Keep away from heat, sparks and flame. Keep in properly labeled containers. Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area.

Incompatible Materials. Strong oxidizing agents.

### 8. Exposure controls / personal protection

#### **Exposure Guidelines**

Handling

Storage.

Component	Alberta	British Columbia	Ontario TWAEV	Quebec	ACGIH TLV	OSHA PEL	NIOSH IDLH
Dichloromethane	TWA: 50 ppm TWA: 174 mg/m <sup>3</sup>	TWA: 25 ppm	TWA: 50 ppm	TWA: 50 ppm TWA: 174 mg/m³		(Vacated) TWA: 500 ppm (Vacated) STEL: 2000 ppm (Vacated) Ceiling: 1000 ppm TWA: 25 ppm STEL: 125 ppm	

#### Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH IDLH: NIOSH - National Institute for Occupational Safety and Health

#### **Engineering Measures**

Ensure that eyewash stations and safety showers are close to the workstation location. Use explosion-proof electrical/ventilating/lighting/equipment. Use only under a chemical fume hood. Ensure adequate ventilation, especially in confined areas.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

#### Personal protective equipment

**Eye Protection** Goggles

**Hand Protection** Wear appropriate protective gloves and clothing to prevent skin exposure.

Glove material	Breakthrough time	Glove thickness	Glove comments
Viton (R)	See manufacturers	-	Splash protection only
	recommendations		

Inspect gloves before use. observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. gloves with care avoiding skin contamination.

#### **Respiratory Protection**

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. 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. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly **Recommended Filter type:** low boiling organic solvent Type AX Brown conforming to EN371 or Organic gases and vapours filter Type A Brown conforming to EN14387

When RPE is used a face piece Fit Test should be conducted

#### **Environmental exposure controls**

Do not allow material to contaminate ground water system.

#### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. When using do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

# 9. Physical and chemical properties

Physical State Liquid

AppearanceNo information availableOdorNo information availableOdor ThresholdNo information availablepHNo information availableMelting Point/RangeNo data available

Boiling Point/Range
No information available
Flash Point
63 °C / 145.4 °F
Evaporation Rate
No information available

Flammability (solid,gas) Not applicable

Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor PressureNo information availableVapor DensityNo information available

Specific Gravity 1.28

Solubility
Partition coefficient; n-octanol/water
Autoignition Temperature
Decomposition Temperature
Viscosity

Slightly soluble
No data available
No information available
No information available
No information available

VOC Content(%) 91

# 10. Stability and reactivity

Reactive Hazard None known, based on information available

**Stability** Stable under normal conditions.

Conditions to Avoid Incompatible products. Excess heat. Keep away from open flames, hot surfaces and

sources of ignition.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2), Silicon dioxide, Hydrogen chloride gas,

Sodium oxides

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

## 11. Toxicological information

**Acute Toxicity** 

**Product Information** 

Oral LD50 Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.

**Dermal LD50** Vapor LC50

Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg. Based on ATE data, the classification criteria are not met. ATE > 20 mg/l.

**Component Information** 

Component		LD50 Oral	LD50 Dermal	LC50 Inhalation		
	Dichloromethane	Dichloromethane > 2000 mg/kg (Rat)		53 mg/L ( Rat ) 6 h		
				76000 mg/m³ ( Rat ) 4 h		

**Toxicologically Synergistic** 

**Products** 

No information available

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

Causes burns by all exposure routes Irritation

Sensitization No information available

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

This product contains one or more substances which are classified by IARC as

carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly

carcinogenic to humans (Group 2B).

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Dichloromethane	75-09-2	Group 2A	Reasonably Anticipated	A3	X	A3
Silanol, trimethyl-, sodium salt	18027-10-6	Not listed	Not listed	Not listed	Not listed	Not listed

IARC (International Agency for Research on Cancer)

NTP: (National Toxicity Program)

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans Group 2B - Possibly Carcinogenic to Humans

NTP: (National Toxicity Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human

Carcinogen

ACGIH: (American Conference of Governmental Industrial

Mexico - Occupational Exposure Limits - Carcinogens

Hygienists)

A1 - Known Human Carcinogen A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

ACGIH: (American Conference of Governmental Industrial Hygienists)

Mexico - Occupational Exposure Limits - Carcinogens

A1 - Confirmed Human Carcinogen A2 - Suspected Human Carcinogen A3 - Confirmed Animal Carcinogen

A4 - Not Classifiable as a Human Carcinogen

A5 - Not Suspected as a Human Carcinogen

**Mutagenic Effects** No information available

No information available. **Reproductive Effects** 

**Developmental Effects** No information available.

**Teratogenicity** No information available.

STOT - single exposure Respiratory system Central nervous system (CNS)

STOT - repeated exposure None known

**Aspiration hazard** No information available

delayed

Symptoms / effects,both acute and 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: Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure and increased heart rate: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness,

tiredness, nausea and vomiting

Endocrine Disruptor Information No information available

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

# 12. Ecological information

#### **Ecotoxicity**

. Do not empty into drains.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Dichloromethane	EC50:>660 mg/L/96h	Pimephales promelas:	EC50: 1 mg/L/24 h	EC50: 140 mg/L/48h
		LC50:193 mg/L/96h	EC50: 2.88 mg/L/15 min	_

Persistence and Degradability May persist based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** . Is not likely mobile in the environment due its low water solubility.

Component	log Pow	
Dichloromethane	1.25	

# 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.

Component	RCRA - U Series Wastes	RCRA - P Series Wastes	
Dichloromethane - 75-09-2	U080	-	

# 14. Transport information

DOT

UN-No UN2922

Proper Shipping NameCorrosive liquid, toxic, n.o.s.Technical NameSilanol, trimethyl-, sodium salt

Hazard Class 8
Subsidiary Hazard Class 6.1
Packing Group II

TDG

UN-No UN2922

**Proper Shipping Name** Corrosive liquid, toxic, n.o.s.

Hazard Class 8
Subsidiary Hazard Class 6.1
Packing Group ||

<u>IATA</u>

UN-No UN2922

**Proper Shipping Name** Corrosive liquid, toxic, n.o.s.

Hazard Class 8
Subsidiary Hazard Class 6.1
Packing Group II

IMDG/IMO

UN-No UN2922

**Proper Shipping Name** Corrosive liquid, toxic, n.o.s.

Hazard Class 8
Subsidiary Hazard Class 6.1
Packing Group ||

## 15. Regulatory information

#### **International Inventories**

Component	CAS-No	DSL	NDSL	TSCA	TSCA Inventory notification - Active-Inactive	EINECS	ELINCS	NLP
Dichloromethane	75-09-2	X	-	X	ACTIVE	200-838-9	-	-
Silanol, trimethyl-, sodium salt	18027-10-6	-	Х	X	ACTIVE	241-939-8	ı	-

Component	CAS-No	IECSC	KECL	ENCS	ISHL	TCSI	AICS	NZIoC	PICCS
Dichloromethane	75-09-2	Х	KE-23893	X	Х	X	Х	Х	Х
Silanol, trimethyl-, sodium salt	18027-10-6	-	-	-	Х	Х	-	Х	Х

#### Legend:

X - Listed '-' - Not Listed

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

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**IECSC** - Chinese Inventory of Existing Chemical Substances **KECL** - Korean Existing and Evaluated Chemical Substances

**ENCS** - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

#### Canada

SDS in compliance with provisions of information as set out in Canadian Standard - Part 4, Schedule 1 and 2 of the Hazardous Products Regulations (HPR) and meets the requirements of the HPR (Paragraph 13(1)(a) of the Hazardous Products Act (HPA)).

	Component	Canada - National Pollutant Release Inventory (NPRI)	Canadian Environmental Protection Agency (CEPA) - List of Toxic Substances	Canada's Chemicals Management Plan (CEPA)
Dichloromethane Part 1, Group A Substance Part 4		Schedule I		
		Substance		

#### Other International Regulations

#### Authorisation/Restrictions according to EU REACH

Component		REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	
Dichloromethar	ne	-	Use restricted. See item 59. (see link for restriction details) Use restricted. See item 75. (see link for restriction details)	-

https://echa.europa.eu/substances-restricted-under-reach

#### 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)
Dichloromethane	75-09-2	Listed	Not applicable	Not applicable	Not applicable
Silanol, trimethyl-, sodium salt	18027-10-6	Not applicable	Not applicable	Not applicable	Not applicable

Component	CAS-No	Seveso III Directive (2012/18/EC) -	Seveso III Directive (2012/18/EC) -	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
		<b>Qualifying Quantities</b>	<b>Qualifying Quantities</b>	, ,	, ,
		for Major Accident	for Safety Report		

# Sodium trimethylsilanolate, 1M solution in dichloromethane

		Notification	Requirements		
Dichloromethane	75-09-2	Not applicable	Not applicable	Not applicable	Annex I - Y45
Silanol, trimethyl-, sodium salt	18027-10-6	Not applicable	Not applicable	Not applicable	Not applicable

## 16. Other information

Prepared By Regulatory Affairs

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Revision Summary

This document has been updated to comply with the requirements of WHMIS 2015 to align

with the Globally Harmonised System (GHS) for the Classification and Labelling of

Chemicals.

#### **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**