

# SAFETY DATA SHEET

Revision Date 29-March-2024 Revision Number 3

1. Identification

Product Name N-(TrimethylsilyI)diethylamine

Cat No. : A18149

**CAS-No** 996-50-9

Synonyms TMSDEA; Trimethylsilyldiethylamine

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

Fisher Scientific 112 Colonnade Road, Ottawa, ON K2E 7L6, Canada

Tel: 1-800-234-7437

#### **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

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

Flammable liquids Category 2
Skin Corrosion/Irritation Category 1 B
Serious Eye Damage/Eye Irritation Category 1

**Label Elements** 

#### Signal Word

Danger

#### **Hazard Statements**

Highly flammable liquid and vapor Causes severe skin burns and eye damage



## **Precautionary Statements**

#### Prevention

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

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/equipment

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

Wash face, hands and any exposed skin thoroughly after handling

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

Use non-sparking tools

Take action to prevent static discharges

#### 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 cool

## Disposal

Dispose of contents/container to an approved waste disposal plant

# 3. Composition/Information on Ingredients

Component	CAS-No	Weight %		
Silanamine, N,N-diethyl-1,1,1-trimethyl-	996-50-9	> 98		

# 4. First-aid measures

Eye Contact Immediate medical attention is required. Rinse immediately with plenty of water, also under

the eyelids, for at least 15 minutes.

**Skin Contact** Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Immediate medical attention is required.

**Inhalation** Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial

respiration. Immediate medical attention is required.

**Ingestion** Do NOT induce vomiting. Call a physician immediately.

Most important symptoms/effects Difficulty in breathing. Causes burns by all exposure routes. Inhalation of high vapor

concentrations may cause symptoms like 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

**Notes to Physician** 

# Fire-fighting measures

**Suitable Extinguishing Media** Carbon dioxide (CO<sub>2</sub>). Dry chemical. Use extinguishing measures that are appropriate to

local circumstances and the surrounding environment. Chemical foam. Water mist may be

used to cool closed containers.

Treat symptomatically

**Unsuitable Extinguishing Media** No information available

**Flash Point** 10 °C / 50 °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

Flammable. 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**

Carbon monoxide (CO). Carbon dioxide (CO2). Silicon dioxide.

#### **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	0	N/A

## 6. Accidental release measures

**Personal Precautions Environmental Precautions**  Remove all sources of ignition. Take precautionary measures against static discharges. See Section 12 for additional Ecological Information.

Up

Methods for Containment and Clean Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Sweep up and shovel into suitable containers for disposal. Do not let this chemical enter the environment.

# Handling and storage

Handling

Do not breathe mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not ingest. If swallowed then seek immediate medical assistance. Handle product only in closed system or provide appropriate exhaust ventilation. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use spark-proof tools and explosion-proof equipment. Use only non-sparking tools. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep away from open flames, hot surfaces and sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Take precautionary measures against static discharges.

Storage.

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away from heat, sparks and flame. Corrosives area. Flammables area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible Materials. Strong oxidizing agents. Strong

acids.

## 8. Exposure controls / personal protection

#### **Exposure Guidelines**

This product does not contain any hazardous materials with occupational exposure limits established 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.

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 Protective gloves

ſ	Glove material	Breakthrough time	Glove thickness	Glove comments
	Nitrile rubber	See manufacturers	-	Splash protection only
	Viton (R)	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:** 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**

No information available.

#### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

## 9. Physical and chemical properties

Physical State Liquid
Appearance Yellow
Odor Odorless

Odor ThresholdNo information availablepHNo information availableMelting Point/RangeNo data available

Boiling Point/Range 125 - 126 °C / 257 - 258.8 °F @ 760 mmHg

Flash Point

10 °C / 50 °F

Evaporation Rate

No information available
Flammability (solid.gas)

Not applicable

Flammability (solid,gas)
Flammability or explosive limits

## N-(Trimethylsilyl)diethylamine

UpperNo data availableLowerNo data availableVapor PressureNo information available

Vapor Density5.01Specific Gravity0.760

Solubility

No information available

Partition coefficient; n-octanol/water

No data available

Autoignition TemperatureNo information availableDecomposition TemperatureNo information availableViscosityNo information available

Molecular Formula C7 H19 N Si Molecular Weight 145.32

# 10. Stability and reactivity

Reactive Hazard None known, based on information available

**Stability** Moisture sensitive.

**Conditions to Avoid** Keep away from open flames, hot surfaces and sources of ignition. Incompatible products.

Exposure to moist air or water.

Incompatible Materials Strong oxidizing agents, Strong acids

Hazardous Decomposition Products Carbon monoxide (CO<sub>2</sub>), Carbon dioxide (CO<sub>2</sub>), Silicon dioxide

**Hazardous Polymerization** No information available.

Hazardous Reactions None under normal processing.

# 11. 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

IrritationNo information availableSensitizationNo 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
Silanamine,	996-50-9	Not listed				
N,N-diethyl-1,1,1-trime						
thyl-						

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 Inhalation of high vapor concentrations may cause symptoms like 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

**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.

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

**Bioaccumulation/ Accumulation** No information available.

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

# 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

UN2733 **UN-No** 

**Proper Shipping Name** AMINES, FLAMMABLE, CORROSIVE, N.O.S.

**Hazard Class Subsidiary Hazard Class** 8 **Packing Group** Ш

TDG

**UN-No** UN2733

**Proper Shipping Name** AMINES, FLAMMABLE, CORROSIVE, N.O.S.

**Hazard Class Subsidiary Hazard Class** 8 **Packing Group** Ш

**IATA** 

**UN-No** UN2733

**Proper Shipping Name** AMINES, FLAMMABLE, CORROSIVE, N.O.S.\*

**Hazard Class Subsidiary Hazard Class** 8 Ш **Packing Group** 

IMDG/IMO

**UN-No** UN2733

**Proper Shipping Name** AMINES, FLAMMABLE, CORROSIVE, N.O.S.

**Hazard Class** 3 **Subsidiary Hazard Class** 8 **Packing Group** Ш

# 15. Regulatory information

#### International Inventories

Component	CAS-No	DSL	NDSL	TSCA	TSCA Inventory	EINECS	ELINCS	NLP
					notification -			

## N-(Trimethylsilyl)diethylamine

					Active-Inactive			
Silanamine,	996-50-9	-	Х	Х	ACTIVE	213-637-6	-	-
N,N-diethyl-1,1,1-trimethyl-								

Component	CAS-No	IECSC	KECL	ENCS	ISHL	TCSI	AICS	NZIoC	PICCS
Silanamine,	996-50-9	Х	-	-	-	Х	X	Х	X
N,N-diethyl-1,1,1-trimethyl-									

#### 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)).

### **Other International Regulations**

Authorisation/Restrictions according to EU REACH

Not applicable

### 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)
Silanamine, N,N-diethyl-1,1,1-trimethyl-	996-50-9	Not applicable	Not applicable	Not applicable	Not applicable

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)
Silanamine, N,N-diethyl-1,1,1-trimethyl-	996-50-9	Not applicable	Not applicable	Not applicable	Not applicable

# 16. Other information

Prepared By Product Safety Department

Email: chem.techinfo@thermofisher.com

www.thermofisher.com

Revision Date 29-March-2024 Print Date 29-March-2024

**Revision Summary** New emergency telephone response service provider.

#### **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

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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**