

# **SAFETY DATA SHEET**

Creation Date 21-May-2010 Revision Date 01-Jun-2022 Revision Number 5

1. Identification

Product Name N-[3-(TrimethoxysilyI)propyl]ethylenediamine

Cat No.: AC216530000; AC216530050; AC216531000; AC216535000

CAS No 1760-24-3

Synonyms DAMO; ó3-(2-Aminoethyl)aminopropyl!trimethoxysilane

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
Fair Lawn, NJ 07410

#### **Emergency Telephone Number**

For information **US** call: 001-800-ACROS-01 / **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 by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious Eye Damage/Eye Irritation Category 1
Skin Sensitization Category 1
Specific target organ toxicity (single exposure) Category 3

Target Organs - Respiratory system.

### Label Elements

# **Signal Word**

Danger

### **Hazard Statements**

May cause an allergic skin reaction Causes serious eye damage

May cause respiratory irritation



#### **Precautionary Statements**

#### Prevention

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

Avoid breathing dust/fume/gas/mist/vapors/spray

Contaminated work clothing should not be allowed out of the workplace

Use only outdoors or in a well-ventilated area

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

#### Skin

IF ON SKIN: Wash with plenty of soap and water

If skin irritation or rash occurs: Get medical advice/attention

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 Immediately call a POISON CENTER or doctor/physician

#### Storage

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

Store locked up

### Disposal

Dispose of contents/container to an approved waste disposal plant

## Hazards not otherwise classified (HNOC)

None identified

### Other hazards

Water reactive.

# 3. Composition/Information on Ingredients

Component	CAS No	Weight %
N-[3-(Trimethyoxysilyl)propyl]-1,2-ethanediamine	1760-24-3	<=100

# 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 None reasonably foreseeable. Causes severe eye damage. May cause allergic skin

effects reaction. Symptoms of allergic reaction may include rash, itching, swelling, trouble

breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle

pain or flushing

Notes to Physician Treat symptomatically

# 5. Fire-fighting measures

Suitable Extinguishing Media Carbon dioxide (CO<sub>2</sub>). Dry chemical. Chemical foam.

Unsuitable Extinguishing Media No information available

**Flash Point** 136 °C / 276.8 °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**

Keep product and empty container away from heat and sources of ignition.

#### **Hazardous Combustion Products**

Nitrogen oxides (NOx). Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). 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
2	0	1	W

## 6. Accidental release measures

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

**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** 

	7. Handling and storage
Handling	Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not
	get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.

Storage. Keep containers tightly closed in a dry, cool and well-ventilated place. Store under an

Keep containers tightly closed in a dry, cool and well-ventilated place. Store under an inert atmosphere. Incompatible Materials. Acids. Oxidizing agent.

atmosphere. Incompatible Materials. Acids. Oxidizing agent.

# 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 Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations

and safety showers are close to the workstation location.

## 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 State Liquid Appearance Clear

Odor No information available
Odor Threshold No information available

**pH** Not applicable

Melting Point/Range No data available

Boiling Point/Range 261 - 261 °C / 501.8 - 501.8 °F @ 15 mmHg

Flash Point 136 °C / 276.8 °F
Evaporation Rate No information available

Flammability (solid,gas) Not applicable

Flammability or explosive limits

Upper<br/>LowerNo data available<br/>No data availableVapor Pressure>0.5 mmHg @ 25 °CVapor DensityNo information available

Specific Gravity 1.030

**Solubility** Decomposes in contact with water

Partition coefficient; n-octanol/water No data available

Autoignition TemperatureNo information availableDecomposition TemperatureNo information availableViscosityNo information available

Molecular Formula C8 H22 N2 O3 Si

Molecular Weight 222.36

# 10. Stability and reactivity

Reactive Hazard Yes.

Stability Stable under normal conditions. Moisture sensitive. Air sensitive.

Conditions to Avoid Exposure to air. Incompatible products. Exposure to moist air or water.

Incompatible Materials Acids, Oxidizing agent

Hazardous Decomposition Products Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2), Silicon dioxide

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions**None under normal processing.

# 11. Toxicological information

**Acute Toxicity** 

**Product Information** 

No acute toxicity information is available for this product

**Component Information** 

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
N-[3-(Trimethyoxysilyl)propyl]-1,2-et hanediamine	LD50 = 2413 mg/kg (Rat)	LD50 > 2009 mg/kg (Rabbit)	LC50 1.49 - 2.44 mg/L (Rat) 4 h

**Toxicologically Synergistic** 

**Products** 

No information available

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

Irritation No information available Sensitization No information available

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

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
N-[3-(Trimethyoxysilyl)	1760-24-3	Not listed				
propyl]-1,2-ethanedia						
mine						

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

No information available. **Teratogenicity** 

STOT - single exposure Respiratory system STOT - repeated exposure None known

No information available **Aspiration hazard** 

delayed

Symptoms / effects, both acute and Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

**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. Reacts with water so no ecotoxicity data for the substance is available.

Persistence and Degradability Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Is not likely mobile in the environment.

# 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.

DOT Not regulated Not regulated TDG Not regulated IATA Not regulated IMDG/IMO

# 15. Regulatory information

### United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
N-[3-(Trimethyoxysilyl)propyl]-1,2- ethanediamine	1760-24-3	Х	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

Not applicable

Substances & Mixtures, Under TSCA Section 6(h) (PBT)

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
N-[3-(Trimethyoxysilyl)propyl]-1,2-	1760-24-3	Х	-	217-164-6	Х	Х	Х	Х	Х	KE-34385
ethanediamine										

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

# 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

**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

### Authorisation/Restrictions according to EU REACH Not applicable

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization		REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
N-[3-(Trimethyoxysilyl)propyl]-1,2-et hanediamine	1760-24-3	-	-	-

### 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)
N-[3-(Trimethyoxysilyl)propyl]- 1,2-ethanediamine	1760-24-3	Listed	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)
N-[3-(Trimethyoxysilyl)propyl]- 1,2-ethanediamine	1760-24-3	Not applicable	Not applicable	Not applicable	Not applicable

16. Other information
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Prepared By Regulatory Affairs

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 Creation Date
 21-May-2010

 Revision Date
 01-Jun-2022

 Print Date
 01-Jun-2022

**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Harmonized System of Classification and Labeling of Chemicals (GHS).

## 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**