

Safety Data Sheet SIA0614.0 Date of issue: 09/10/2015 Version: 1.0

### **SECTION 1: Identification**

#### Identification

Product name : 3-AMINOPROPYLTRIS(METHOXYETHOXYETHOXY)SILANE, 95%

Product code : SIA0614.0 Product form : Substance Physical state : Liquid Formula : C18H41NO9Si

3-[TRIS(METHOXYETHOXYETHOXY)SILYL]PROPYLAMINE; 9,9-BIS[2-(2-Synonyms

METHOXYETHOXY]-2,5,8-TRIOXA-9-SILADODECAN-12-AMINE; DODECAN-12-

AMINE, 2,5,8-TRIOXA-9-SILA-9,9-BIS(2-(2-METHOXYETHOXY)-ETHOXY)-

Chemical family : ORGANOSII ANF

#### Recommended use and restrictions on use

Recommended use : Chemical intermediate

#### 1.3. **Supplier**

#### GELEST, INC.

11 East Steel Road Morrisville, PA 19067

USA

T 215-547-1015 - F 215-547-2484 - (M-F): 8:00 AM - 5:30 PM EST

info@gelest.com - www.gelest.com

#### **Emergency telephone number**

**Emergency number** : CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)

H227 Combustible liquid

### **SECTION 2: Hazard(s) identification**

#### 2.1 Classification of the substance or mixture

### **GHS-US** classification

Flammable liquids Category 4 Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2A

H315 Causes skin irritation H319 Causes serious eye irritation

Full text of H statements: see section 16

### GHS Label elements, including precautionary statements

### **GHS US labeling**

Hazard pictograms (GHS US)



Signal word (GHS US) : Warning

H227 - Combustible liquid Hazard statements (GHS US) H315 - Causes skin irritation H319 - Causes serious eye irritation

Precautionary statements (GHS US) : P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P210 - Keep away from heat, open flames, sparks. - No smoking.

P264 - Wash hands thoroughly after handling. P302+P352 - If on skin: Wash with plenty of water

P332+P313 - If skin irritation occurs: Get medical advice/attention.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing P337+P313 - If eye irritation persists: Get medical advice/attention. P321 - Specific treatment (see first aid instructions on this label) P362+P364 - Take off contaminated clothing and wash it before reuse.

P370+P378 - In case of fire: Use water spray, foam, carbon dioxide, dry chemical to extinguish.

P403+P235 - Keep in a cool place

P501 - Dispose of contents/container to licensed waste disposal facility.

### Hazards not otherwise classified (HNOC)

No additional information available

#### **Unknown acute toxicity (GHS US)**

Not applicable

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### **SECTION 3: Composition/Information on ingredients**

#### 3.1. Substances

Substance type : Mono-constituent

Name : 3-AMINOPROPYLTRIS(METHOXYETHOXY)SILANE, 95%

CAS-No. : 87994-64-7

Name	Product identifier	%	GHS-US classification
3-Aminopropyltris(methoxyethoxyethoxy)silane	(CAS-No.) 87994-64-7	90 - 100	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2A, H319

Full text of hazard classes and H-statements: see section 16

#### 3.2. Mixtures

Not applicable

### **SECTION 4: First-aid measures**

### 4.1. Description of first aid measures

First-aid measures general

: Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). If possible show this sheet; if not available show packaging or label. IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel

unwell, seek medical advice.

First-aid measures after skin contact : Wash with plenty of soap and water. Get medical advice/attention.

First-aid measures after eye contact : Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical advice/attention.

First-aid measures after ingestion : Never give anything by mouth to an unconscious person. Get medical advice/attention.

#### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : May cause irritation to the respiratory tract.

Symptoms/effects after skin contact : Causes skin irritation.

Symptoms/effects after eye contact : Causes serious eye irritation.

Symptoms/effects after ingestion : May be harmful if swallowed.

### 4.3. Immediate medical attention and special treatment, if necessary

No additional information available

### **SECTION 5: Fire-fighting measures**

### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Foam. Carbon dioxide. Dry chemical.

Unsuitable extinguishing media : Do not use straight streams.

### 5.2. Specific hazards arising from the chemical

Fire hazard : Combustible liquid. Irritating fumes and organic acid vapors may develop when material is

exposed to water or open flame.

#### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray to cool exposed surfaces. Exercise caution when fighting any chemical fire.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Avoid all eye and skin contact and do not breathe vapor and mist.

### **SECTION 6: Accidental release measures**

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges.

### 6.1.1. For non-emergency personnel

Protective equipment : Wear protective equipment as described in Section 8.

Emergency procedures : Evacuate unnecessary personnel.

### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal

protection".

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or

streams.

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Methods for cleaning up

Clean up any spills as soon as possible, using an absorbent material to collect it. Sweep or shovel spills into appropriate container for disposal. Use only non-sparking tools.

#### Reference to other sections

See Heading 8. Exposure controls and personal protection.

### **SECTION 7: Handling and storage**

#### Precautions for safe handling

Additional hazards when processed

: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Precautions for safe handling

: Avoid all eye and skin contact and do not breathe vapor and mist. Provide good ventilation in process area to prevent accumulation of vapors. Ground/bond container and receiving

equipment. Use only non-sparking tools.

Hygiene measures

Storage area

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse.

### Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed. Keep in a cool place. : Acids. Alcohols. Oxidizing agent. Peroxides. Incompatible materials : Store in a well-ventilated place. Store away from heat.

### **SECTION 8: Exposure controls/personal protection**

#### **Control parameters**

No additional information available

#### **Appropriate engineering controls**

: Provide local exhaust or general room ventilation. Appropriate engineering controls

### Individual protection measures/Personal protective equipment

### Personal protective equipment:

Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

#### Hand protection:

Neoprene or nitrile rubber gloves

### Eye protection:

Chemical goggles. Contact lenses should not be worn

#### Skin and body protection:

Wear suitable protective clothing

### Respiratory protection:

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. NIOSH-certified combination organic vapor - amine gas (brown cartridge) respirator.

### **SECTION 9: Physical and chemical properties**

### Information on basic physical and chemical properties

Physical state : Liquid Appearance : Clear liquid. : 443.61 g/mol Molecular mass Color Straw.

Odor No data available Odor threshold No data available

Refractive index 1.448

: No data available : No data available Relative evaporation rate (butyl acetate=1) Melting point No data available

Freezing point < 0 °C

**Boiling point** : No data available

: 68 °C Flash point

Auto-ignition temperature : No data available Decomposition temperature : No data available

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Flammability (solid, gas) : Combustible liquid Vapor pressure : No data available Relative vapor density at 20 °C : No data available

Relative density : 1.066

Solubility Reacts with water. Log Pow : No data available Log Kow : No data available : No data available Viscosity, kinematic Viscosity, dynamic No data available : No data available Explosive properties Oxidizing properties : No data available **Explosion limits** No data available

### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No additional information available

#### 10.2. Chemical stability

Stable when stored in sealed containers.

#### 10.3. Possibility of hazardous reactions

Reacts with water and moisture.

#### 10.4. Conditions to avoid

Heat. Open flame. Sparks.

### 10.5. Incompatible materials

Acids. Alcohols. Oxidizing agent. Peroxides.

### 10.6. Hazardous decomposition products

Organic acid vapors.

### **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

Acute toxicity : Not classified

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
Specific target organ toxicity – single exposure : Not classified

Specific target organ toxicity - repeated

exposure

: Not classified

Aspiration hazard : Not classified

Symptoms/effects after inhalation : May cause irritation to the respiratory tract.

Symptoms/effects after skin contact : Causes skin irritation.

Symptoms/effects after eye contact : Causes serious eye irritation.

Symptoms/effects after ingestion : May be harmful if swallowed.

Reason for classification : Expert judgment

### **SECTION 12: Ecological information**

#### 12.1. Toxicity

No additional information available

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

### No additional information available

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#### Mobility in soil

No additional information available

#### Other adverse effects

Other adverse effects : This substance may be hazardous to the environment.

Effect on the ozone layer : No additional information available

### **SECTION 13: Disposal considerations**

#### **Disposal methods**

Sewage disposal recommendations : Do not dispose of waste into sewer.

Product/Packaging disposal recommendations Dispose in a safe manner in accordance with local/national regulations. Dispose of

contents/container to licensed waste disposal facility.

Ecology - waste materials : Avoid release to the environment.

### **SECTION 14: Transport information**

#### 14.1. **UN** number

DOT NA no. NA1993

#### 14.2. **UN** proper shipping name

: NA1993 Combustible liquid, n.o.s. (3-Transport document description

AMINOPROPYLTRIS(METHOXYETHOXYETHOXY)SILANE), 3, III

Proper Shipping Name (DOT) : Combustible liquid, n.o.s.

(3-AMINOPROPYLTRIS(METHOXYETHOXYETHOXY)SILANE)

Class (DOT) 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Packing group (DOT) : III - Minor Danger

DOT Packaging Non Bulk (49 CFR 173.xxx) : 203 DOT Packaging Bulk (49 CFR 173.xxx) : 241 DOT Packaging Exceptions (49 CFR 173.xxx) : 150

D - Proper shipping name for domestic use only, or to and from Canada, G - Identifies PSN **DOT Symbols** 

requiring a technical name

#### 14.3. Additional information

Other information : This product is Combustible as defined by the US Department of Transportation (DOT). It is regulated for transport in the US in container > 119 gallons (450 liters). The product is not regulated for transport by the IATA, ADR/RID, ADNR or the IMDG regulations.

### Transport by sea

**DOT Vessel Stowage Location** : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel.

#### Air transport

DOT Quantity Limitations Passenger aircraft/rail : 60 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 220 L

CFR 175.75)

### **SECTION 15: Regulatory information**

#### 15.1. US Federal regulations

# 3-AMINOPROPYLTRIS(METHOXYETHOXYETHOXY)SILANE, 95% (87994-64-7)

TSCA Exemption/Exclusion

CAUTION: This material is supplied for research and development purposes subject to the R&D exemption under TSCA, 40 CFR 720.36, and must meet the requirements of the exemption, including supervision by a "technically qualified individual" as defined by 40 CFR 720.3(ee). The use of this material for "commercial purposes" as defined by 40 CFR 720.3(r) is

not permitted in the United States.

### 3-Aminopropyltris(methoxyethoxyethoxy)silane (87994-64-7)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

### 15.2. International regulations

### **CANADA**

No additional information available

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### **EU-Regulations**

### 3-Aminopropyltris(methoxyethoxyethoxy)silane (87994-64-7)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

#### **National regulations**

### 3-Aminopropyltris(methoxyethoxyethoxy)silane (87994-64-7)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

#### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

### **SECTION 16: Other information**

#### Full text of H-phrases::

H227	Combustible liquid
H315	Causes skin irritation
H319	Causes serious eye irritation

Abbreviations and acronyms

: Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose; LC: Lethal Concentration; ATE: Acute Toxicity Estimates; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; TG: Test Guideline; NIOSH: National Institute for Occupational Safety and Health; IARC: International Agency for Research on Cancer; NTP: National Toxicology Program; HMIS: Hazardous Material Information System; CAS No.: Chemcial Abstract Service Registration Number; EC No.: European Commission Registration Number; EC Index No.: European Commission Index Number; OECD: The Organisation for Economic Co-operation and Development; GHS: The Globally Harmonized System of Classification and Labelling; APF: Assigned Protection Factor.

### **Hazard Rating**

Health

Flammability

Physical

- : 3 Serious Hazard Major injury likely unless prompt action is taken and medical treatment is given
- : 2 Moderate Hazard Materials which must be moderately heated or exposed to high ambient temperatures before ignition will occur. Includes liquids having a flash point at or above 100 F but below 200 F. (Classes II & IIIA)
- : 1 Slight Hazard Materials that are normally stable but can become unstable (self-react) at high temperatures and pressures. Materials may react non-violently with water or undergo hazardous polymerization in the absence of inhibitors.

### Prepared by safety and environmental affairs.

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SDS US (GHS HazCom 2012) - Custom

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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