

Safety Data Sheet SIC2464.2

Issue date: 06/24/2015 Revision date: 01/20/2021 Version: 1.1

#### **SECTION 1: Identification**

#### 1.1. Identification

Product name : ( N-CYCLOHEXYLAMINOMETHYL)TRIETHOXYSILANE, 95%

Product code : SIC2464.2
Product form : Substance
Physical state : Liquid
Formula : C13H29NO3Si

Synonyms : [(TRIETHOXYSILYL)METHYL]AMINOCYCLOHEXANE

Chemical family : ORGANOSILANE

### 1.2. 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

#### 1.4. Emergency telephone number

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

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

#### 2.1. Classification of the substance or mixture

#### **GHS US classification**

Skin corrosion/irritation Category 2

Serious eye damage/eye irritation Category 1

Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation

Full text of H statements : see section 16

H315 Causes skin irritation

H318 Causes serious eye damage

H335 May cause respiratory irritation

# 2.2. GHS Label elements, including precautionary statements

#### **GHS US labeling**

Hazard pictograms (GHS US)





Signal word (GHS US) : Danger

Hazard statements (GHS US) : H315 - Causes skin irritation

H318 - Causes serious eye damage H335 - May cause respiratory irritation

Precautionary statements (GHS US) : P261 - Avoid breathing fume, vapors.

P264 - Wash hands thoroughly after handling. P271 - Use only outdoors or in a well-ventilated area.

P280 - Wear eye protection, face protection, face shield, protective clothing, protective gloves.

P302+P352 - If on skin: Wash with plenty of soap and water.

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a doctor.

P312 - Call a doctor if you feel unwell.

P332+P313 - If skin irritation occurs: Get medical advice/attention. P362 - Take off contaminated clothing and wash before reuse.

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P405 - Store locked up.

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

# 2.3. Hazards not otherwise classified (HNOC)

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

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

Substance type : Mono-constituent

( N-CYCLOHEXYLAMINOMETHYL)TRIETHOXYSILANE, 95%

CAS-No. : 26495-91-0

Name	Product identifier	%	GHS US classification
N-cyclohexylaminomethyltriethoxysilane	(CAS-No.) 26495-91-0	> 96	Skin Irrit. 2, H315
			Eye Dam. 1, H318
			STOT SE 3, H335

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

#### **Mixtures**

Not applicable

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

## **Description of first aid measures**

: Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek First-aid measures general

medical advice immediately (show the label where possible). If possible show this sheet; if not

available show packaging or label.

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.

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

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

Symptoms/effects after inhalation : May cause irritation to the respiratory tract. Overexposure may cause: Cough. Headache.

Nausea.

Symptoms/effects after skin contact Causes skin irritation. Symptoms/effects after eye contact Causes serious eye damage. 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.

#### Specific hazards arising from the chemical

Fire hazard : Irritating fumes and organic acid vapors may develop when material is exposed to elevated

temperatures or open flame.

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

: Exercise caution when fighting any chemical fire. Firefighting instructions

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

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

#### 6.1.1. For non-emergency personnel

**Emergency procedures** : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

# **Environmental precautions**

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

## Methods and material for containment and cleaning up

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.

# Reference to other sections

See Heading 8. Exposure controls and personal protection.

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# **SECTION 7: Handling and storage**

# 7.1. Precautions for safe handling

Precautions for safe handling : Use only in well ventilated areas. Avoid all eye and skin contact and do not breathe vapor and

mist.

Hygiene measures : Wash hands thoroughly after handling. Wash contaminated clothing before reuse.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed.

Incompatible materials : Water. Moisture. Peroxides. Oxidizing agent. Alcohols. Acids. Storage area : Store in a well-ventilated place. Store away from heat.

# SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

#### 8.2. Appropriate engineering controls

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

#### 8.3. 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**

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Clear.
Molecular mass : 275.46 g/mol
Color : Clear to straw.
Odor : Amine. Ammonia-like.
Odor threshold : No data available

Refractive index : 1.486

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

Freezing point : < 0 °C Boiling point : 236 °C Flash point : 119 °C : 119 °C

Auto-ignition temperature : No data available Decomposition temperature : No data available Flammability (solid, gas) : No data available Vapor pressure : < 0.5 mm Hg @ 20° Relative vapor density at 20 °C : No data available Relative density : No data available Specific gravity / density : > 1 (air=1) % Volatiles : < 3 %

Solubility : Reacts. Insoluble in water.

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Partition coefficient n-octanol/water (Log Pow) : No data available Partition coefficient n-octanol/water (Log Kow) : No data available Viscosity, kinematic : No data available Viscosity, dynamic : No data available Explosive properties : No data available 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 in air, liberating ethanol.

#### 10.4. Conditions to avoid

Heat. Sparks. Open flame.

#### 10.5. Incompatible materials

Water. Moisture. Peroxides. Oxidizing agent. Alcohols. Acids.

### 10.6. Hazardous decomposition products

Organic amine vapors. Ethanol.

# **SECTION 11: Toxicological information**

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

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

Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified

STOT-single exposure : May cause respiratory irritation.

STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

Symptoms/effects after inhalation : May cause irritation to the respiratory tract. Overexposure may cause: Cough. Headache.

Nausea.

Symptoms/effects after skin contact : Causes skin irritation.

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

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

### 12.4. Mobility in soil

No additional information available

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### 12.5. 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

#### 13.1. Disposal methods

Product/Packaging disposal recommendations : May be incinerated. 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

Not regulated for transport.

#### 14.2. UN proper shipping name

Not applicable

#### 14.3. Additional information

Other information : No supplementary information available.

#### Transport by sea

No additional information available

#### Air transport

No additional information available

# **SECTION 15: Regulatory information**

#### 15.1. US Federal regulations

# N-cyclohexylaminomethyltriethoxysilane (26495-91-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

### 15.2. International regulations

#### **CANADA**

# N-cyclohexylaminomethyltriethoxysilane (26495-91-0)

Listed on the Canadian NDSL (Non-Domestic Substances List)

# **EU-Regulations**

### N-cyclohexylaminomethyltriethoxysilane (26495-91-0)

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

#### **National regulations**

No additional information available

#### 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::

H315	Causes skin irritation	
H318	Causes serious eye damage	
H335	May cause respiratory 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.

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#### **Hazard Rating**

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids,

solids and semi solids having a flash point above 200 F. (Class IIIB)

Physical : 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.

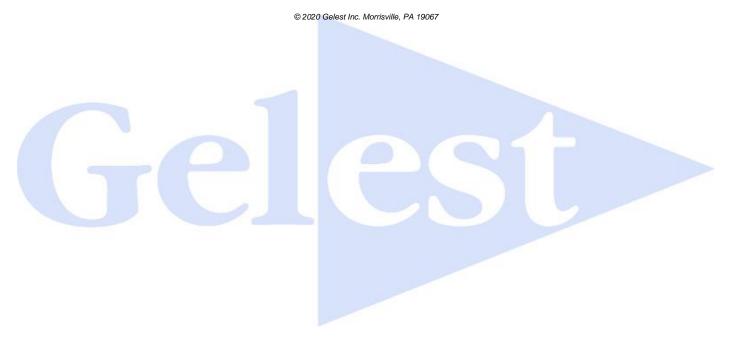
Prepared by safety and environmental affairs.

Issue date: 06/24/2015 Revision date: 01/20/2021 Version: 1.1

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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