

Safety Data Sheet SIB1835.0 Date of issue: 06/23/2015 Version: 1.0

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### **Product identifier**

Product form : Substance Physical state : Liquid

Substance name : BIS(3-TRIMETHOXYSILYLPROPYL)-N-METHYLAMINE

Product code · SIB1835.0 Formula : C13H33NO6Si2

: N-METHYLAMINOBIS(PROPYLTRIMETHOXYSILANE) Synonyms

: ORGANOSILANE, ORGANOAMINOSILANE Chemical family

## Relevant identified uses of the substance or mixture and uses advised against

: Chemical intermediate Use of the substance/mixture

For research use only

#### Details of the supplier of the safety data sheet

#### **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)

## **SECTION 2: Hazards identification**

#### Classification of the substance or mixture

#### Classification (GHS-US)

Skin Irrit. 2 H315 Eye Dam. 1 H318 STOT SE 3 H335

Full text of H-phrases: see section 16

#### 2.2. Label elements

## **GHS-US** labeling

Hazard pictograms (GHS-US)





GHS05

GHS07

Signal word (GHS-US) : Danger

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

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

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

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 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.

#### Other hazards

No additional information available

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

No data available

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

#### 3.1. Substance

Substance type : Multi-constituent

Name : BIS(3-TRIMETHOXYSILYLPROPYL)-N-METHYLAMINE

CAS No : 31024-70-1

Name	Product identifier	%	Classification (GHS-US)
Bis(3-trimethoxysilylpropyl)-n-methylamine	(CAS No) 31024-70-1	> 95	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335
N-Methylaminopropyltrimethoxysilane	(CAS No) 3069-25-8	< 5	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2A, H319

#### 3.2. Mixture

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.

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, both acute and delayed

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

Symptoms/injuries after skin contact : Causes skin irritation.

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

Symptoms/injuries after ingestion : Oral toxicity is associated with methanol, the solvent and a hydrolysis product which causes

nausea, vomiting, headache, visual effects including blindness.

#### 4.3. Indication of any immediate medical attention and special treatment needed

NOTE TO PHYSICIAN: This product reacts with water in the acid contents of the stomach to form methanol. The combination of visual disturbances, metabolic acidosis and formic acid in urine is evidence of methanol poisoning. The therapeutic intravenous administration of ethanol (10 mls/hour) allows methanol to be preferentially oxidized and reduces production of methanol metabolites. Acidosis must be treated with intravenous administration of sodium bicarbonate and methanol elimination may be increased by hemodialysis, as indicated. Treatment should be based on blood methanol levels and acid-base balance.

## SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

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

## 5.2. Special hazards arising from the substance or mixture

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

temperatures or open flame.

#### 5.3. Advice for firefighters

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

## 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.

#### 6.2. Environmental precautions

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

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#### 6.3. 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.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

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

#### 7.3. Specific end use(s)

No additional information available

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

#### 8.1. Control parameters

No additional information available

#### 8.2. Exposure controls

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

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 : 355.58 g/mol
Color : Straw.
Odor : Amine. fishy.
Odor threshold : No data available

Refractive index : 1.43

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

Freezing point : < 0 °C

Boiling point : 175 °C @ 10 mm

Flash point : 106 °C

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapor pressure : < 0.1 mm Hg @ 25°C

Relative vapor density at 20 °C : No data available

Relative density : 1.02 Solubility : Reacts.

Log Pow : No data available
Log Kow : No data available
Viscosity, kinematic : No data available

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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 in sealed containers.

#### 10.3. Possibility of hazardous reactions

Reacts with water and moisture in air, liberating methanol.

#### 10.4. Conditions to avoid

Heat. Open flame. Sparks.

#### 10.5. Incompatible materials

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

#### 10.6. Hazardous decomposition products

Organic acid vapors. Methanol.

## **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 damage.

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

Specific target organ toxicity (single exposure) : May cause respiratory irritation.

Specific target organ toxicity (repeated

exposure)

: Not classified

Aspiration hazard : Not classified

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

Symptoms/injuries after skin contact : Causes skin irritation.

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

Symptoms/injuries after ingestion : Oral toxicity is associated with methanol, the solvent and a hydrolysis product which causes

nausea, vomiting, headache, visual effects including blindness.

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

## 12.5. Other adverse effects

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

Effect on ozone layer : No additional information available

Effect on the global warming : No known ecological damage caused by this product.

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

#### 13.1. Waste treatment methods

Waste 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

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

## BIS(3-TRIMETHOXYSILYLPROPYL)-N-METHYLAMINE (31024-70-1)

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.	

## Bis(3-trimethoxysilylpropyl)-n-methylamine (31024-70-1)

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

## N-Methylaminopropyltrimethoxysilane (3069-25-8)

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

#### 15.2. International regulations

### N-Methylaminopropyltrimethoxysilane (3069-25-8)

Listed on the AICS (Australian Inventory of Chemical Substances)

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

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

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

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

## 15.3. US State regulations

BIS(3-TRIMETHOXYSILYLPROPYL)-N-METHYLAMINE(31024-70-1)		
U.S California - Proposition 65 - Carcinogens List	No	
U.S California - Proposition 65 - Developmental Toxicity	No	
U.S California - Proposition 65 - Reproductive Toxicity - Female	No	
U.S California - Proposition 65 - Reproductive Toxicity - Male	No	

## Bis(3-trimethoxysilylpropyl)-n-methylamine (31024-70-1)

U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
No	No	No	No	

#### N-Methylaminopropyltrimethoxysilane (3069-25-8)

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U.S California -	U.S California -	U.S California -	U.S California -	No significance risk level
Proposition 65 -	Proposition 65 -	Proposition 65 -	Proposition 65 -	(NSRL)
Carcinogens List	Developmental Toxicity	Reproductive Toxicity -	Reproductive Toxicity -	
		Female	Male	
No	No	No	No	
1	1	1	1	1

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

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.

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

at of Figure 5	
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 4	Flammable liquids Category 4
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H227	Combustible liquid
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H335	May cause respiratory irritation

#### **HMIS III Rating**

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is

given

Flammability : 1 Slight Hazard
Physical : 1 Slight Hazard

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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