

Safety Data Sheet SIB1070.0

Date of issue: 05/15/2003 Revision date: 06/11/2015 Version: 1.0

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

#### 1.1. Product identifier

Product form : Substance
Physical state : Liquid

Substance name : BIS(DIMETHYLAMINO)DIETHYLSILANE

Product code : SIB1070.0
Formula : C8H22N2Si

Synonyms : DIETHYLBIS(DIMETHYLAMINO)SILANE

Chemical family : ORGANOSILANE

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

Use of the substance/mixture : Chemical intermediate

For research use only

## 1.3. 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

### 1.4. Emergency telephone number

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

## **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

## Classification (GHS-US)

Flam. Liq. 3 H226 Skin Corr. 1A H314 Eye Dam. 1 H318

Full text of H-phrases: see section 16

## 2.2. Label elements

## **GHS-US** labeling

Hazard pictograms (GHS-US)



GHS02

GHS05

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H226 - Flammable liquid and vapor

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

Precautionary statements (GHS-US) : P210 - Keep away from ignition sources, open flames, sparks. - No smoking

P233 - Keep container tightly closed

P240 - Ground/bond container and receiving equipment

P241 - Use explosion-proof electrical, lighting, ventilating equipment

P242 - Use only non-sparking tools

P243 - Take precautionary measures against static discharge

P260 - Do not breathe vapors

P264 - Wash hands, forearms and face thoroughly after handling

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

P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting

P303+P361+P353 - If on skin (or hair): take off immediately all contaminated clothing. rinse

skin with water/shower

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, a POISON CENTER

P321 - Specific treatment (see first aid instructions on this label) P363 - Wash contaminated clothing before reuse

06/30/2015 EN (English US) SDS ID: **SIB1070.0** Page 1

## Safety Data Sheet

P370+P378 - In case of fire: Use dry powder, foam, sand, Water spray to extinguish

P403+P235 - Keep in a cool place

P405 - Store locked up

P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation

#### 2.3. Other hazards

No additional information available

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

No data available

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

#### 3.1. Substance

Substance type : Mono-constituent

Name : BIS(DIMETHYLAMINO)DIETHYLSILANE

CAS No : 33287-52-4

Name	Product identifier	%	Classification (GHS-US)
BIS(DIMETHYLAMINO)DIETHYLSILANE	(CAS No) 33287-52-4	60 -	Flam. Liq. 3, H226
		100	Skin Corr. 1A, H314

### 3.2. Mixture

Not applicable

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

## 4.1. Description of first aid measures

First-aid measures general : If exposed or concerned: get medical attention/advice. Show this safety data sheet to the

doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an

unconscious person.

First-aid measures after inhalation : IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get

medical attention. If breathing is difficult, supply oxygen. If breathing has stopped, give

artificial respiration.

First-aid measures after skin contact : IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with water for at least 15 minutes. Get medical attention immediately

least 15 minutes. Get medical attention immediately.

First-aid measures after eye contact : IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact

lenses if present and easy to do. Get medical attention immediately. Continue rinsing.

First-aid measures after ingestion : IF SWALLOWED: Rinse mouth thoroughly. Do not induce vomiting without advice from poison

control center or medical professional. Get medical attention immediately.

## 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after skin contact : Causes severe skin burns and eye damage.

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

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

No additional information available

## **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media : Dry powder. Foam. Water fog. Water spray.

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

Fire hazard : Irritating fumes of dimethylamine and organic acid vapors may develop when material is

exposed to water or open flame.

Explosion hazard : Product is not explosive. Reactivity : Reacts with water.

### 5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water in the

environment. Prevent human exposure to fire, fumes, smoke and products of combustion.

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

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

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

General measures : Evacuate area. Keep upwind. Ventilate area. Spill should be handled by trained clean-up crews properly equipped with respiratory equipment and full chemical protective gear (see Section 8).

## 6.1.1. For non-emergency personnel

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

06/30/2015 EN (English US) SDS ID: **SIB1070.0** 2/6

## Safety Data Sheet

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing, gloves and eyes or face 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 product enters sewers or public waters. Avoid release to the environment.

#### 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.

Methods for cleaning up : Soak up spills with inert absorbent solids as soon as possible. Use only non-sparking tools.

#### 6.4. Reference to other sections

No additional information available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapors are flammable.

Precautions for safe handling : Provide good ventilation in process area to prevent accumulation of vapors. Do not breathe vapors. Keep away from sources of ignition - No smoking. Ground/bond container and

receiving equipment.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work.

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

No additional information available

## 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 adequate general and local exhaust ventilation. Use explosion-proof equipment with

flammable materials. Ensure adequate ventilation, especially in confined areas.

Personal protective equipment : Gloves. Protective goggles. Face shield. Protective clothing.

Hand protection : Use gloves chemically resistant to this material when prolonged or repeated contact could

occur. Be aware that the chemical may penetrate the gloves. Frequent changes are advisable. Suggested glove materials are: Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl

alcohol laminate, PVC or vinyl.

Eye protection : Wear eye protection, including chemical splash goggles and a face shield when possibility

exists for eye contact due to spraying liquid or airborne particles.

Skin and body protection : Wear long sleeves, and chemically impervious PPE/coveralls to minimize bodily exposure.

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 : 174.36 g/mol
Color : Straw.
Odor : Acrid. Amine.
Odor threshold : No data available

Refractive index : 1.4362

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

Freezing point : < 0 °C

Boiling point :  $62 - 63 \,^{\circ}\text{C} \,^{\odot}$  15mm Hg

Flash point : 30 °C COC

06/30/2015 EN (English US) SDS ID: **SIB1070.0** 3/6

## Safety Data Sheet

Auto-ignition temperature : No data available : No data available Decomposition temperature Flammability (solid, gas) : No data available Vapor pressure No data available Relative vapor density at 20 °C 1 (AIR = 1)Relative density : 0.84 (WATER = 1) Solubility : Reacts with water. Log Pow No data available Log Kow No data available No data available Viscosity, kinematic 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

Reacts with water.

#### 10.2. Chemical stability

Stable in sealed containers stored under a dry inert atmosphere.

## 10.3. Possibility of hazardous reactions

Reacts with water and moisture in air, liberating dimethylamine.

#### 10.4. Conditions to avoid

Heat. Sparks. Open flame.

## 10.5. Incompatible materials

Water. Alcohol. Acids. Strong oxidizers. Moisture.

## 10.6. Hazardous decomposition products

Organic acid vapors. Dimethylamine.

## **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute toxicity : Not classified

Skin corrosion/irritation : Causes severe skin burns and eye damage.

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) : Not classified
Specific target organ toxicity (repeated : Not classified

exposure)

exposure)

Aspiration hazard : Not classified

Symptoms/injuries after skin contact : Causes severe skin burns and eye damage.

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

## **SECTION 12: Ecological information**

## 12.1. Toxicity

Ecology - general : No information available.

## 12.2. Persistence and degradability

## BIS(DIMETHYLAMINO)DIETHYLSILANE (33287-52-4)

Persistence and degradability No information available.

## 12.3. Bioaccumulative potential

No additional information available

06/30/2015 EN (English US) SDS ID: **SIB1070.0** 4/6

## Safety Data Sheet

#### **Mobility in soil**

No additional information available

#### Other adverse effects

Effect on ozone layer : No additional information available

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

## **SECTION 13: Disposal considerations**

#### Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Do not allow the

product to be released into the environment.

## SECTION 14: Transport information

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

UN-No.(DOT) : 2924 DOT NA no. UN2924

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

Proper Shipping Name (DOT) : Flammable liquids, corrosive, n.o.s.

Department of Transportation (DOT) Hazard

: 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120 Classes

Hazard labels (DOT) : 3 - Flammable liquid

8 - Corrosive



G - Identifies PSN requiring a technical name **DOT Symbols** 

Packing group (DOT) II - Medium Danger

DOT Packaging Exceptions (49 CFR 173.xxx) 150 DOT Packaging Non Bulk (49 CFR 173.xxx) 202 DOT Packaging Bulk (49 CFR 173.xxx) : 243

#### 14.3. Additional information

Other information : No supplementary information available.

## Transport by sea

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

passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this

section is exceeded.

**DOT Vessel Stowage Other** : 40 - Stow "clear of living quarters"

## Air transport

DOT Quantity Limitations Passenger aircraft/rail : 1 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 5 L

CFR 175.75)

## **SECTION 15: Regulatory information**

## 15.1. US Federal regulations

## **BIS(DIMETHYLAMINO)DIETHYLSILANE (33287-52-4)**

SARA Section 311/312 Hazard Classes Immediate (acute) health hazard Reactive hazard

## 15.2. International regulations

### **BIS(DIMETHYLAMINO)DIETHYLSILANE (33287-52-4)**

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.

SDS ID: SIB1070.0 06/30/2015 EN (English US) 5/6

## Safety Data Sheet

## 15.3. US State regulations

No
No
No
No

### **BIS(DIMETHYLAMINO)DIETHYLSILANE (33287-52-4)**

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	

## **SECTION 16: Other information**

## Full text of H-phrases::

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Eye Dam. 1	Serious eye damage/eye irritation Category 1
Flam. Liq. 3	Flammable liquids Category 3
Skin Corr. 1A	Skin corrosion/irritation Category 1A
H226	Flammable liquid and vapor
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage

NFPA health hazard

 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.

NFPA fire hazard

: 3 - Liquids and solids that can be ignited under almost all ambient conditions.

NFPA reactivity

: 1 - Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently.



#### **HMIS III Rating**

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

given

Flammability : 3 Serious Hazard
Physical : 1 Slight Hazard

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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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06/30/2015 EN (English US) SDS ID: **SIB1070.0** 6/6