

Safety Data Sheet SID3603.0 Date of issue: 09/03/2015 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 : (N,N-DIMETHYLAMINO)TRIETHYLSILANE

Product code · SID3603.0 Formula : C8H21NS

: TRIETHYLSILYLDIMETHYLAMINE Synonyms

: ORGANOSILANE 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)

Flam. Liq. 3 H226 Skin Corr. 1B 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)

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

H314 - Causes severe skin burns and eye damage

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

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

P233 - Keep container tightly closed

P240 - Ground/bond container and receiving equipment P241 - Use explosion-proof electrical equipment

P242 - Use only non-sparking tools

P243 - Take precautionary measures against static discharge

P260 - Do not breathe vapors

P264 - Wash hands thoroughly after handling

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

P321 - Specific treatment (see first aid instructions on this label)

P363 - Wash contaminated clothing before reuse

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

EN (English US) SDS ID: SID3603.0 09/03/2015 Page 1

Safety Data Sheet

P403+P235 - Keep in a cool place

P405 - Store locked up

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

2.3. Other hazards

Other hazards not contributing to the classification

: Additional diethylamine may be formed by reaction with moisture and water.;. The US ACGIH

(TWA) for diethylamine is 5 ppm.

2.4. Unknown acute toxicity (GHS US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Substance type : Mono-constituent

Name : (N,N-DIMETHYLAMINO)TRIETHYLSILANE

CAS No : 3550-35-4

Name	Product identifier	%	Classification (GHS-US)
(N,N-Dimethylamino)triethylsilane	(CAS No) 3550-35-4	95 - 100	Flam. Liq. 3, H226 Skin Corr. 1B, H314
			Eve Dam. 1. H318

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. 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 immediate 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 immediate 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

: Causes severe skin burns and eye damage.

Symptoms/injuries after inhalation

May cause irritation to the respiratory tract.

Symptoms/injuries after skin contact

: Causes (severe) skin burns.

Symptoms/injuries after eye contact Symptoms/injuries after ingestion : Causes serious eye damage.: May be harmful if swallowed.

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

: Water spray. Foam. Carbon dioxide. Dry chemical.

Unsuitable extinguishing media

: Do not use straight streams.

5.2. Special hazards arising from the substance or mixture

Fire hazard

: Flammable liquid and vapor. Irritating fumes of diethylamine and organic acid vapors may develop when material is exposed to water 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

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.

09/03/2015 EN (English US) SDS ID: **SID3603.0** 2/7

Safety Data Sheet

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".

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

For containment

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

streams

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. Take precautionary measures against static discharge. Use only non-sparking

Hygiene measures

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

Technical measures

Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof electrical equipment.

Storage conditions

Keep container tightly closed. Keep in a cool place. Store locked up.

Incompatible materials

Storage area

Acids. Alcohols. Moisture. Oxidizing agent. Water. Store in a well-ventilated place. Store away from heat.

Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

Control parameters

No additional information available

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 or face shield. 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. Molecular mass : 159.35 g/mol Color : Straw. Odor : Acrid. Amine. No data available Odor threshold Refractive index

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

Freezing point : < 0 °C

09/03/2015 EN (English US) SDS ID: SID3603.0 3/7

Safety Data Sheet

Boiling point : $166 - 167 \,^{\circ}\text{C}$ Flash point : $26 \,^{\circ}\text{C}$

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

Flammability (solid, gas) : Flammable liquid and vapor

Vapor pressure : No data available

Relative vapor density at 20 °C : > 1
Relative density : 0.8044
VOC content : 100 %

Solubility : Reacts with water. Log Pow : No data available Log Kow : No data available Viscosity, kinematic No data available No data available Viscosity, dynamic Explosive properties : No data available : No data available Oxidizing properties **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 stored under a dry inert atmosphere.

10.3. Possibility of hazardous reactions

Reacts with water and moisture in air, liberating diethylamine.

10.4. Conditions to avoid

Heat. Open flame. Sparks.

10.5. Incompatible materials

Acids. Alcohols. Moisture. Oxidizing agent. Water.

10.6. Hazardous decomposition products

Diethylamine. Organic acid vapors.

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)

Aspiration hazard : Not classified

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

Symptoms/injuries after skin contact : Causes (severe) skin burns.

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

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

Reason for classification : Expert judgment

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

09/03/2015 EN (English US) SDS ID: **SID3603.0** 4/7

Safety Data Sheet

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.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

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

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

14.2. UN proper shipping name

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

((N,N-DIMETHYLAMINO)TRIETHYLSILANE)

Department of Transportation (DOT) Hazard

Classes

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

Hazard labels (DOT) : 3 - Flammable liquid

8 - Corrosive





DOT Symbols : G - Identifies PSN requiring a technical name

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

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

09/03/2015 EN (English US) SDS ID: **SID3603.0** 5/7

Safety Data Sheet

SECTION 15: Regulatory information

15.1. US Federal regulations

(N,N-DIMETHYLAMINO)TRIETHYLSILANE (3550-35-4)

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.

(N,N-Dimethylamino)triethylsilane (3550-35-4)

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

15.2. International regulations

No additional information available

15.3. US State regulations

(N,N-DIMETHYLAMINO)TRIETHYLSILANE(3550-35-4)		
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	

(N,N-Dimethylamino)triethylsilane (3550-35-4)

- California - U	J.S California -	U.S California -	No significance risk level
oosition 65 - P	Proposition 65 -	Proposition 65 -	(NSRL)
elopmental Toxicity R	Reproductive Toxicity -	Reproductive Toxicity -	
F	emale	Male	
N	lo	No	
O	osition 65 - Follopmental Toxicity F	osition 65 - Proposition 65 -	Proposition 65 - Reproductive Toxicity - Female Proposition 65 - Reproductive Toxicity - Male

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::

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

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

Prepared by safety and environmental affairs.

Date of issue: 09/03/2015 Version: 1.0

SDS US (GHS HazCom 2012) - Custom

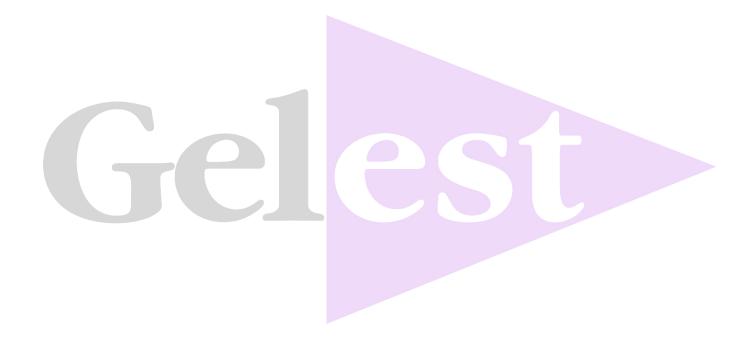
09/03/2015 EN (English US) SDS ID: **SID3603.0** 6/7

Safety Data Sheet

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

The information contained in this document has been gathered from reference materials and/or Gelest, Inc. test data and is to the best knowledge and belief of Gelest, Inc. accurate and reliable. Such information is offered solely for your consideration, investigation and verification. It is not suggested or guaranteed that the hazard precautions or procedures described are the only ones which exist. Gelest, Inc. makes no warranties, express or implied, with respect to the use of such information and assumes no responsibility therefore. Information on this safety data sheet is not intended to constitute a basis for product specifications.

© 2015 Gelest Inc. Morrisville, PA 19067



09/03/2015 EN (English US) SDS ID: **SID3603.0** 7/7