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

1.1. Product identifier

<table>
<thead>
<tr>
<th>Product form</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Substance name</td>
<td>(3-(N-ETHYLAMINO)ISOBUTYL)METHYLDIETHOXYSILANE</td>
</tr>
<tr>
<td>Product code</td>
<td>SIE4885.8</td>
</tr>
<tr>
<td>Formula</td>
<td>C11H27NO2Si</td>
</tr>
<tr>
<td>Synonyms</td>
<td>3-(DIETHOXYMETHYLSILYL)-N-ETHYL-2-METHYL-1-PROPANAMINE, 3-(DIETHOXYMETHYLSILYL)-N-ETHYL-2-METHYL-1-PROPANAMINE</td>
</tr>
<tr>
<td>Chemical family</td>
<td>ORGANOETHOXYSILANE</td>
</tr>
</tbody>
</table>

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

1.2.1. Relevant identified uses

Use of the substance/mixture: Chemical intermediate

1.2.2. Uses advised against

No additional information available

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

GELEST INC.
Fritz-Klatte-Strasse 8
65933 Frankfurt
Germany
T +49 (0) 69 3535106-500 - F +49 (0) 69 3535106-501 - (M-F): 8:00 AM - 4:00 PM
info@gelestde.com - www.gelestde.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 according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 1B  H314
Serious eye damage/eye irritation, Category 1  H318

Full text of H statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP): 

<table>
<thead>
<tr>
<th>Signal word (CLP)</th>
<th>Danger</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard statements (CLP)</td>
<td>H314 - Causes severe skin burns and eye damage.</td>
</tr>
<tr>
<td>Precautionary statements (CLP)</td>
<td>P280 - Wear protective gloves/protective clothing/eye protection/face protection. P260 - Do not breathe vapours.</td>
</tr>
</tbody>
</table>
2.3. Other hazards
No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

<table>
<thead>
<tr>
<th>Substance type</th>
<th>Name</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mono-constituent</td>
<td>(3-(N-ethylamino)isobutyl)methyldiethoxysilane</td>
<td>275378-62-6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>(3-(N-ethylamino)isobutyl)methyldiethoxysilane (CAS-No.) 275378-62-6</td>
<td>97 - 100</td>
<td>Skin Corr. 1B, H314 Eye Dam. 1, H318</td>
<td></td>
</tr>
</tbody>
</table>

Full text of H-statements: see section 16

3.2. Mixtures
Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

<table>
<thead>
<tr>
<th>First-aid measures general</th>
<th>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.</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-aid measures after inhalation</td>
<td>Remove person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical advice.</td>
</tr>
<tr>
<td>First-aid measures after skin contact</td>
<td>Wash with plenty of water/….... Get immediate medical advice/attention.</td>
</tr>
<tr>
<td>First-aid measures after eye contact</td>
<td>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.</td>
</tr>
<tr>
<td>First-aid measures after ingestion</td>
<td>Never give anything by mouth to an unconscious person. Get medical advice/attention.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Symptoms/effects after inhalation</th>
<th>May cause irritation to the respiratory tract.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptoms/effects after skin contact</td>
<td>Causes (severe) skin burns.</td>
</tr>
<tr>
<td>Symptoms/effects after eye contact</td>
<td>Causes serious eye damage.</td>
</tr>
<tr>
<td>Symptoms/effects after ingestion</td>
<td>May be harmful if swallowed.</td>
</tr>
</tbody>
</table>

4.3. Indication of any immediate medical attention and special treatment needed
No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsuitable extinguishing media</td>
<td>Do not use straight streams.</td>
</tr>
</tbody>
</table>

5.2. Special hazards arising from the substance or mixture

| Fire hazard | Combustible liquid. Irritating fumes and organic acid vapors may develop when material is exposed to elevated temperatures or open flame. |

5.3. Advice for firefighters

<table>
<thead>
<tr>
<th>Firefighting instructions</th>
<th>Use water spray to cool exposed surfaces. Exercise caution when fighting any chemical fire.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protection during firefighting</td>
<td>Do not enter fire area without proper protective equipment, including respiratory protection. Avoid all eye and skin contact and do not breathe vapour and mist.</td>
</tr>
</tbody>
</table>

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. |

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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.
Methods for cleaning up: Clean up any spills as soon as possible, using an absorbent material to collect it. Use only non-sparking tools.

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
Additional hazards when processed: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Precautions for safe handling: Avoid all eye and skin contact and do not breathe vapour and mist. Ground/bond container and receiving equipment. Provide good ventilation in process area to prevent formation of vapour. Use only non-sparking tools.
Hygiene measures: Wash contaminated clothing before reuse. 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
Storage conditions: Keep container tightly closed. Keep in a cool place. Store locked up.
Storage area: Store in a dark 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 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

9.1. Information on basic physical and chemical properties
Physical state: Liquid
(3-(N-ETHYLAMINO)ISOBUTYL)METHYLDIETHOXYSILANE
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Appearance: Liquid.
Molecular mass: 233.43 g/mol
Colour: No data available
Odour threshold: No data available
Refractive index: No additional information available
pH: No data available
Relative evaporation rate (butylacetate=1): No data available
Melting point: No data available
Freezing point: No data available
Boiling point: 89 °C @ 27 mm Hg
Flash point: No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Flammability (solid, gas): Combustible liquid
Vapour pressure: No data available
Relative vapour density at 20 °C: No data available
Relative density: No data available
Solubility: Reacts with water.
Log Pow: No data available
Log Kow: No data available
Viscosity, kinematic: No data available
Viscosity, dynamic: No data available
Explosive properties: No data available
Oxidising properties: No data available
Explosive 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. Open flame. Sparks.

10.5. Incompatible materials

10.6. Hazardous decomposition products
Ethanol. 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 sensitisation: Not classified
Germ cell mutagenicity: Not classified
Carcinogenicity: Not classified

Reproductive toxicity: Not classified
STOT—single exposure: Not classified

None of the components in this product at concentrations >0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.
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STOT-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 (severe) skin burns.
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
Acute aquatic toxicity: Not classified
Chronic aquatic toxicity: Not classified

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. Results of PBT and vPvB assessment
No additional information available

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

SECTION 13: Disposal considerations

13.1. Waste treatment 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
In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number
UN-No. (ADR) : 2735
UN-No. (IMDG) : 2735
UN-No. (IATA) : 2735
UN-No. (ADN) : 2735
UN-No. (RID) : 2735

14.2. UN proper shipping name
Proper Shipping Name (ADR) : AMINES, LIQUID, CORROSIVE, N.O.S.
Proper Shipping Name (IMDG) : AMINES, LIQUID, CORROSIVE, N.O.S.
Proper Shipping Name (IATA) : Amines, liquid, corrosive, n.o.s.
Proper Shipping Name (ADN) : AMINES, LIQUID, CORROSIVE, N.O.S.
Proper Shipping Name (RID) : AMINES, LIQUID, CORROSIVE, N.O.S.
Transport document description (ADR) : UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. ((3-(N-ETHYLAMINO)ISOBUTYL)METHYLDIETHOXYSILANE), 8, II, (E)
Transport document description (IMDG) : UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. ((3-(N-ETHYLAMINO)ISOBUTYL)METHYLDIETHOXYSILANE), 8, II
Transport document description (IATA) : UN 2735 Amines, liquid, corrosive, n.o.s. ((3-(N-ETHYLAMINO)ISOBUTYL)METHYLDIETHOXYSILANE), 8, II
Transport document description (ADN) : UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. ((3-(N-ETHYLAMINO)ISOBUTYL)METHYLDIETHOXYSILANE), 8, II
Transport document description (RID) : UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. ((3-(N-ETHYLAMINO)ISOBUTYL)METHYLDIETHOXYSILANE), 8, II
14.3. Transport hazard class(es)

ADR
Transport hazard class(es) (ADR) : 8
Danger labels (ADR) : 8

IMDG
Transport hazard class(es) (IMDG) : 8
Danger labels (IMDG) : 8

IATA
Transport hazard class(es) (IATA) : 8
Hazard labels (IATA) : 8

ADN
Transport hazard class(es) (ADN) : 8
Danger labels (ADN) : 8

RID
Transport hazard class(es) (RID) : 8
Danger labels (RID) : 8

14.4. Packing group

Packing group (ADR) : II
Packing group (IMDG) : II
Packing group (IATA) : II
Packing group (ADN) : II
Packing group (RID) : II

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available
14.6. Special precautions for user

- Overland transport
  Classification code (ADR) : C7
  Special provisions (ADR) : 274
  Limited quantities (ADR) : 1L
  Excepted quantities (ADR) : E2
  Packing instructions (ADR) : P001, IBC02
  Mixed packing provisions (ADR) : MP15
  Portable tank and bulk container instructions (ADR) : T11
  Portable tank and bulk container special provisions (ADR) : TP1, TP27
  Tank code (ADR) : L4BN
  Vehicle for tank carriage : AT
  Transport category (ADR) : 2
  Hazard identification number (Kemler No.) : 80
  Orange plates :
  
  Tunnel restriction code (ADR) : E
  EAC code : 2X
  APP code : B

- Transport by sea
  Special provisions (IMDG) : 274
  Limited quantities (IMDG) : 1 L
  Excepted quantities (IMDG) : E2
  Packing instructions (IMDG) : P001
  IBC packing instructions (IMDG) : IBC02
  Tank instructions (IMDG) : T11
  Tank special provisions (IMDG) : TP1, TP27
  EmS-No. (Fire) : F-A
  EmS-No. (Spillage) : S-B
  Stowage category (IMDG) : A
  Segregation (IMDG) : SG35
  Properties and observations (IMDG) : Colourless to yellowish liquids or solutions with a pungent odour. Miscible with or soluble in water. When involved in a fire, evolve toxic gases. Corrosive to most metals, especially to copper and its alloys. Reacts violently with acids. Cause burns to skin, eyes and mucous membranes.

- Air transport
  PCA Excepted quantities (IATA) : E2
  PCA Limited quantities (IATA) : Y840
  PCA limited quantity max net quantity (IATA) : 0.5L
  PCA packing instructions (IATA) : 851
  PCA max net quantity (IATA) : 1L
  CAO packing instructions (IATA) : 855
  CAO max net quantity (IATA) : 30L
  Special provisions (IATA) : A3
  ERG code (IATA) : 8L

- Inland waterway transport
  Classification code (ADN) : C7
  Special provisions (ADN) : 274
  Limited quantities (ADN) : 1 L
  Excepted quantities (ADN) : E2
  Carriage permitted (ADN) : T
  Equipment required (ADN) : PP, EP
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Number of blue cones/lights (ADN) : 0

- Rail transport
  Classification code (RID) : C7
  Special provisions (RID) : 274
  Limited quantities (RID) : 1L
  Excepted quantities (RID) : E2
  Packing instructions (RID) : P001, IBC02
  Mixed packing provisions (RID) : MP15
  Portable tank and bulk container instructions (RID) : T11
  Portable tank and bulk container special provisions (RID) : TP1, TP27
  Tank codes for RID tanks (RID) : L4BN
  Transport category (RID) : 2
  Colis express (express parcels) (RID) : CE6
  Hazard identification number (RID) : 80

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations
No REACH Annex XVII restrictions
(3-(N-ETHYLAMINO)ISOBUTYL)METHYLDIETHOXYSILANE is not on the REACH Candidate List
(3-(N-ETHYLAMINO)ISOBUTYL)METHYLDIETHOXYSILANE is not on the REACH Annex XIV List
(3-(N-ETHYLAMINO)ISOBUTYL)METHYLDIETHOXYSILANE is not subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

15.1.2. National regulations

Germany

Netherlands
SZW-lijs van kankerverwekkende stoffen : The substance is not listed
SZW-lijs van mutagene stoffen : The substance is not listed
NIET-elimitatie lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed
NIET-elimitatie lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed
NIET-elimitatie lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

Denmark
Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment
No additional information available

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.: Chemical 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
## Other information
Prepared by safety and environmental affairs.

### Full text of H- and EUH-statements:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Dam. 1</td>
<td>Serious eye damage/eye irritation, Category 1</td>
</tr>
<tr>
<td>Skin Corr. 1B</td>
<td>Skin corrosion/irritation, Category 1B</td>
</tr>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage.</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage.</td>
</tr>
</tbody>
</table>

**SDS EU (REACH Annex II) - Custom**

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.

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