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

1.1. Product identifier

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product form</td>
<td>Substance</td>
</tr>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Substance name</td>
<td>TRIMETHYLINDIUM</td>
</tr>
<tr>
<td>Product code</td>
<td>OMIN086</td>
</tr>
<tr>
<td>Formula</td>
<td>C3H9In</td>
</tr>
<tr>
<td>Synonyms</td>
<td>TMI, INDIUM, TRIMETHYL-</td>
</tr>
<tr>
<td>Chemical family</td>
<td>METAL ALKYL</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]

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyrophoric Solids</td>
<td>Category 1</td>
</tr>
<tr>
<td>Substances and Mixtures which, in contact with water, emit flammable gases</td>
<td>Category 1</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 1B</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 1</td>
</tr>
</tbody>
</table>

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]

Signal word (CLP): Danger
Trimethylindium
Safety Data Sheet

Hazard statements (CLP):
- H250 - Catches fire spontaneously if exposed to air.
- H260 - In contact with water releases flammable gases which may ignite spontaneously.
- H314 - Causes severe skin burns and eye damage.

Precautionary statements (CLP):
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P231+P232 - Handle under inert gas. Protect from moisture.
- P264 - Wash hands thoroughly after handling.

EUH-statements:
- EUH014 - Reacts violently with water.

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>
<th>EC-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mono-constituent</td>
<td>Trimethylindium</td>
<td>3385-78-2</td>
<td>222-200-9</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>Trimethylindium</td>
<td>(CAS-No.) 3385-78-2</td>
<td>97 - 100</td>
<td>Pyr. Sol. 1, H250 Water-react. 1, H260 Skin Corr. 1B, H314 Eye Dam. 1, H318</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

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 person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical advice.

First-aid measures after skin contact:
Wash with plenty of 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 if you feel unwell.

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

Symptoms/effects:
Causes severe skin burns and eye damage.

Symptoms/effects after inhalation:
Direct respiratory contact is usually not possible, but will cause burns. Inhalation of combustion products can cause irritation.

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.

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 chemical powder followed by sand or dolomite.

Unsuitable extinguishing media:
Water.
TRIMETHYLINDIUM
Safety Data Sheet

5.2. Special hazards arising from the substance or mixture
Fire hazard : Catches fire spontaneously if exposed to air. In contact with water releases flammable gases which may ignite spontaneously. PYROPHORIC! If heated above 100°C, can decompose explosively.
Explosion hazard : Container explosion may occur during fire conditions.

5.3. Advice for firefighters
Firefighting instructions : Exercise caution when fighting any chemical fire. If material is ignited, allow to burn. Concentrate containment efforts to adjacent combustibles.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Avoid contact with skin and eyes. Do not breathe dust.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
General measures : Remove ignition sources.
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 product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up : Cover with dry chemical extinguishing powder, lime, sand or soda ash. Do not use water. Remove sources of ignition. Remove combustible materials in the vicinity of the spill. Allow time for decomposition or fire to burn out, then sweep material and transfer to a suitable 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
Additional hazards when processed : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not allow contact with water.
Precautions for safe handling : Avoid contact with skin and eyes. Do not breathe dust. Do not allow contact with water. Handle under inert gas. Protect from moisture. Provide local exhaust or general room ventilation to minimize exposure to dust.
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
Technical measures : Laboratory and production areas must be equipped with special fire-extinguishing media for organometallics.
Storage conditions : Keep container tightly closed. Store locked up. Store in a dry place. Store in a closed container. Store in sealed containers under nitrogen or argon with <50 ppm oxygen.
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

| Trimethylindium (3385-78-2) | USA OSHA OSHA PEL (TWA) (mg/m³) | 0.1 mg/m³ Indium |
8.2. Exposure controls

Appropriate engineering controls:
Glove box or sealed system under inert atmosphere is required. 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:
Full face shield with chemical workers goggles. Contact lenses should not be worn

Skin and body protection:
Wear suitable protective clothing. Fire-resistant laboratory jacket or protective clothing.

Respiratory protection:
Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. NIOSH-certified organic vapor (black cartridge) respirator.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Solid
Appearance: Solid. Ignites on exposure to air.
Molecular mass: 159.92 g/mol
Colour: White.
Odour: 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: 88 °C
Freezing point: No data available
Boiling point: > 101 °C decomposes
Flash point: < 0 °C
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Flammability (solid, gas): No data available
Vapour pressure: 5 mm Hg @ 25°C
Relative vapour density at 20 °C: > 1
Relative density: 1.568
Solubility: Reacts violently 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 in sealed containers under dry inert atmosphere.
10.3. Possibility of hazardous reactions
No additional information available

10.4. Conditions to avoid
Heat. Open flame. Sparks.

10.5. Incompatible materials

10.6. Hazardous decomposition products

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

None of the components in this product at concentrations >0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified
Symptoms/effects after inhalation : Direct respiratory contact is usually not possible, but will cause burns. Inhalation of combustion products can cause irritation.
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 : Incinerate. Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to licensed waste disposal facility. This is a RCRA hazardous waste: 40 CFR 261.21 (i.e. ignitable) 40 CFR 261.23 (i.e. reactive).
Ecology - waste materials : Avoid release to the environment.
SECTION 14: Transport information

14.1. UN number
In accordance with ADR / RID / IMDG / IATA / ADN

<table>
<thead>
<tr>
<th>UN-No. (ADR)</th>
<th>UN-No. (IMDG)</th>
<th>UN-No. (IATA)</th>
<th>UN-No. (ADN)</th>
<th>UN-No. (RID)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3393</td>
<td>3393</td>
<td>3393</td>
<td>3393</td>
<td>3393</td>
</tr>
</tbody>
</table>

14.2. UN proper shipping name

<table>
<thead>
<tr>
<th>Proper Shipping Name (ADR)</th>
<th>Proper Shipping Name (IMDG)</th>
<th>Proper Shipping Name (IATA)</th>
<th>Proper Shipping Name (ADN)</th>
<th>Proper Shipping Name (RID)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORGANOMETALLIC SUBSTANCE, SOLID, PYROPHORIC, WATER REACTIVE</td>
<td>ORGANOMETALLIC SUBSTANCE, SOLID, PYROPHORIC, WATER-REACTIVE</td>
<td>Organometallic substance, solid, pyrophoric, water-reactive</td>
<td>ORGANOMETALLIC SUBSTANCE, SOLID, PYROPHORIC, WATER REACTIVE</td>
<td>ORGANOMETALLIC SUBSTANCE, SOLID, PYROPHORIC, WATER REACTIVE</td>
</tr>
</tbody>
</table>

Transport document description:

<table>
<thead>
<tr>
<th>Description (ADR)</th>
<th>Description (IMDG)</th>
<th>Description (IATA)</th>
<th>Description (ADN)</th>
<th>Description (RID)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN 3393 ORGANOMETALLIC SUBSTANCE, SOLID, PYROPHORIC, WATER REACTIVE (TRIMETHYLINDIUM), 4.2 (4.3), I, (B/E)</td>
<td>UN 3393 ORGANOMETALLIC SUBSTANCE, SOLID, PYROPHORIC, WATER-REACTIVE (TRIMETHYLINDIUM), 4.2 (4.3), I</td>
<td>UN 3393 Organometallic substance, solid, pyrophoric, water-reactive (TRIMETHYLINDIUM), 4.2</td>
<td>UN 3393 ORGANOMETALLIC SUBSTANCE, SOLID, PYROPHORIC, WATER REACTIVE (TRIMETHYLINDIUM), 4.2 (4.3), I</td>
<td>UN 3393 ORGANOMETALLIC SUBSTANCE, SOLID, PYROPHORIC, WATER-REACTIVE (TRIMETHYLINDIUM), 4.2 (4.3), I</td>
</tr>
</tbody>
</table>

14.3. Transport hazard class(es)

<table>
<thead>
<tr>
<th>Hazard Class (ADR)</th>
<th>Hazard Class (IMDG)</th>
<th>Hazard Class (IATA)</th>
<th>Hazard Class (ADN)</th>
<th>Hazard Class (RID)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2 (4.3)</td>
<td>4.2 (4.3)</td>
<td>4.2 (4.3)</td>
<td>4.2 (4.3)</td>
<td>4.2 (4.3)</td>
</tr>
</tbody>
</table>

ADR: 

IMDG: 

IATA: 

ADN: 

RID: 

Print date: 10/04/2019
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Transport hazard class(es) (RID) : 4.2 (4.3)
Danger labels (RID) : 4.2, 4.3

14.4. Packing group
Packing group (ADR) : I
Packing group (IMDG) : I
Packing group (IATA) : Not applicable
Packing group (ADN) : I
Packing group (RID) : I

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) : SW
  Special provisions (ADR) : 274
  Limited quantities (ADR) : 0
  Excepted quantities (ADR) : E0
  Packing instructions (ADR) : P404
  Special packing provisions (ADR) : PP86
  Mixed packing provisions (ADR) : MP2
  Portable tank and bulk container instructions (ADR) : T21
  Portable tank and bulk container special provisions (ADR) : TP7, TP33, TP36
  Tank code (ADR) : L21DH
  Tank special provisions (ADR) : TU4, TU14, TU22, TC1, TE21, TM1
  Vehicle for tank carriage : AT
  Transport category (ADR) : 0
  Special provisions for carriage - Packages (ADR) : V1
  Special provisions for carriage - Operation (ADR) : S20
  Orange plates : X432 3393
  Tunnel restriction code (ADR) : B/E
  EAC code : 4W

- Transport by sea
  Special provisions (IMDG) : 274
  Limited quantities (IMDG) : 0
  Excepted quantities (IMDG) : E0
  Packing instructions (IMDG) : P404
  Special packing provisions (IMDG) : PP86
  Tank instructions (IMDG) : T21
  Tank special provisions (IMDG) : TP7, TP33, TP36, TP41
  EmS-No. (Fire) : F-G
  EmS-No. (Spillage) : S-M
  Stowage category (IMDG) : D
  Stowage and handling (IMDG) : H1
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<table>
<thead>
<tr>
<th>Segregation (IMDG)</th>
<th>SG35, SG26</th>
</tr>
</thead>
<tbody>
<tr>
<td>Properties and observations (IMDG)</td>
<td>Liable to ignite spontaneously in air. If shaken, may produce sparks. React violently with moisture, water and acids evolving flammable gas.</td>
</tr>
</tbody>
</table>

**- Air transport**

| PCA Limited quantities (IATA) | Forbidden |
| PCA limited quantity max net quantity (IATA) | Forbidden |
| PCA packing instructions (IATA) | Forbidden |
| PCA max net quantity (IATA) | Forbidden |
| CAO packing instructions (IATA) | Forbidden |
| CAO max net quantity (IATA) | Forbidden |
| ERG code (IATA) | 4W |

**- Inland waterway transport**

| Classification code (ADN) | SW |
| Special provisions (ADN) | 274 |
| Limited quantities (ADN) | 0 |
| Excepted quantities (ADN) | E0 |
| Equipment required (ADN) | PP, EX, A |
| Ventilation (ADN) | VE01 |
| Number of blue cones/lights (ADN) | 0 |

**- Rail transport**

| Classification code (RID) | SW |
| Special provisions (RID) | 274 |
| Limited quantities (RID) | 0 |
| Excepted quantities (RID) | E0 |
| Packing instructions (RID) | P404 |
| Special packing provisions (RID) | PP86 |
| Mixed packing provisions (RID) | MP2 |
| Portable tank and bulk container instructions (RID) | T21 |
| Portable tank and bulk container special provisions (RID) | TP7, TP33, TP36 |
| Tank codes for RID tanks (RID) | L21DH |
| Special provisions for RID tanks (RID) | TU4, TU14, TU22, TU38, TC1, TE21, TE22, TE25, TM1 |
| Transport category (RID) | 0 |
| Special provisions for carriage – Packages (RID) | W1 |
| Hazard identification number (RID) | X432 |

### 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
TRIMETHYLINDIUM is not on the REACH Candidate List
TRIMETHYLINDIUM is not on the REACH Annex XIV List
TRIMETHYLINDIUM 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**

12th Ordinance Implementing the Federal Immission Control Act - 12.BlmSchV

Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

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

Denmark
Classification remarks: Emergency management guidelines for the storage of flammable liquids must be followed
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:

| Eye Dam. 1 | Seriously eye damage/eye irritation, Category 1 |
| Pyr. Sol. 1 | Pyrophoric Solids, Category 1 |
| Skin Corr. 1B | Skin corrosion/irritation, Category 1B |
| Water-react. 1 | Substances and Mixtures which, in contact with water, emit flammable gases, Category 1 |
| H250 | Catches fire spontaneously if exposed to air. |
| H260 | In contact with water releases flammable gases which may ignite spontaneously. |
| H314 | Causes severe skin burns and eye damage. |
| H318 | Causes serious eye damage. |
| EUH014 | Reacts violently with water. |

SDS EU (REACH Annex II) - Custom

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