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

1.1. Product identifier

- Product form: Substance
- Physical state: Liquid
- Substance name: THALLIUM(I) ETHOXIDE
- Product code: AKT825
- Formula: C2H5OTl
- Synonyms: ETHOXYTHALLIUM, THALLIUM ETHYLATE, THALLOUS ETHOXIDE, THALLIUM(I) ETHANOLATE
- Chemical family: METAL COMPOUND

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]
- Acute toxicity (oral), Category 2: H300
- Acute toxicity (inhal.), Category 2: H330
- Specific target organ toxicity — Repeated exposure, Category 2: H373
- Hazardous to the aquatic environment — Chronic Hazard, Category 2: H411

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):
  - GHS06
  - GHS08
  - GHS09
THALLIUM(I) ETHOXIDE
Safety Data Sheet

Signal word (CLP): Danger

Hazard statements (CLP):
- H300+H330 - Fatal if swallowed or if inhaled.
- H373 - May cause damage to organs through prolonged or repeated exposure.
- H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP):
- P260 - Do not breathe vapours.
- P264 - Wash hands thoroughly after handling.
- P271 - Use only outdoors or in a well-ventilated area.
- P273 - Avoid release to the environment.
- P284 - Wear respiratory protection.
- P310 - Immediately call a POISON CENTER or doctor/physician

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>Mono-constituent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>THALLIUM(I) ETHOXIDE</td>
</tr>
<tr>
<td>CAS-No.</td>
<td>20398-06-5</td>
</tr>
<tr>
<td>EC-No.</td>
<td>243-786-2</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>Thallium(I) ethoxide</td>
<td>(CAS-No.) 20398-06-5</td>
<td>95 - 100</td>
<td>Acute Tox. 2 (Oral), H300 Acute Tox. 2 (Inhalation), H330 STOT RE 2, H373 Aquatic Chronic 2, H411</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. Immediately call a POISON CENTER/doctor.

- First-aid measures after skin contact:
  - Wash with plenty of 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. Immediately call a POISON CENTER/doctor.

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

- Symptoms/effects:
  - May cause damage to organs through prolonged or repeated exposure.

- Symptoms/effects after inhalation:
  - Fatal if inhaled. May cause irritation to the respiratory tract.

- Symptoms/effects after skin contact:
  - May cause skin irritation.

- Symptoms/effects after eye contact:
  - May cause eye irritation.

- Symptoms/effects after ingestion:
  - Swallowing a small quantity of this material will result in serious health hazard. Fatal if swallowed.

- Chronic symptoms:
  - Note: The hydrolysis products of thallium ethoxide are thallium oxides and ethanol. Of primary concern is the toxic effect of thallium. However, overexposure to ethanol by skin absorption, inhalation or ingestion may have a narcotic effect.

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

(Note to physician: The following treatment for thallium metal poisoning has recommended by the International Technical Information Institute. The applicability to thallium ethoxide poisoning has not been determined. Treat swallowing by inducing vomiting, practice stomach was with 1% sodium iodide solution, followed by saline catharsis and then provide laxative. Prescribe 10cc of 10% sodium thiosulfate solution intravenously three times daily).
SECTION 5: Firefighting measures

5.1. Extinguishing media
Unsuitable extinguishing media: Do not use straight streams.

5.2. Special hazards arising from the substance or mixture
Fire hazard: Toxic, irritating fumes and organic acid vapors will develop when material is exposed to elevated temperatures or open flame.

5.3. Advice for firefighters
Firefighting instructions: 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 vapour and mist. Leave area of fire unless equipped with a self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
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. 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: Collect spillage. Clean up any spills as soon as possible, using an absorbent material to collect it.

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: Avoid all eye and skin contact and do not breathe vapour and mist. Use only outdoors or in a well-ventilated area.
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: Physical Examination: Physical examinations of exposed personnel should be conducted annually, with special attention to vision and weight, and including a complete blood count, urinalysis and studies of kidney and liver function.
Storage conditions: Keep container tightly closed. Store locked up.
Incompatible materials: Oxidizing agent.
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

<table>
<thead>
<tr>
<th>Substance</th>
<th>ACGIH TWA (mg/m³)</th>
<th>OSHA PEL (TWA) (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thallium(I) ethoxide (20398-06-5)</td>
<td>0.1 mg/m³ (Tl)</td>
<td>0.1 mg/m³ (Tl)</td>
</tr>
</tbody>
</table>

Print date: 09/04/2019 EN (English) SDS ID: AKT825
8.2. Exposure controls

Appropriate engineering controls:
Handle in an enclosing hood with exhaust 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 dust and mist (teal cartridge) respirator.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Hazy liquid</td>
</tr>
<tr>
<td>Molecular mass</td>
<td>249.43 g/mol</td>
</tr>
<tr>
<td>Colour</td>
<td>No data available</td>
</tr>
<tr>
<td>Odour</td>
<td>No data available</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>Refractive index</td>
<td>1.6714</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>-3 °C</td>
</tr>
<tr>
<td>Boiling point</td>
<td>130 °C decomposes</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 110 °C</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>3.493</td>
</tr>
<tr>
<td>Solubility</td>
<td>Reacts with water.</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Kow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>

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.
**THALLIUM(I) ETHOXIDE**
Safety Data Sheet

### 10.3. Possibility of hazardous reactions

Material decomposes slowly in contact with air by reaction with water and carbon dioxide, liberating ethanol.

### 10.4. Conditions to avoid

Heat. Open flame. Sparks.

### 10.5. Incompatible materials

Oxidizing agent.

### 10.6. Hazardous decomposition products

Ethanol. Organic acid vapors.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

**Acute toxicity**

- Fatal if swallowed. Fatal if inhaled.

**THALLIUM(I) ETHOXIDE (20398-06-5)**

<table>
<thead>
<tr>
<th>Exposure</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE CLP (oral)</td>
<td>5 mg/kg bodyweight</td>
</tr>
<tr>
<td>ATE CLP (gases)</td>
<td>100 ppmv/4h</td>
</tr>
<tr>
<td>ATE CLP (vapours)</td>
<td>0.5 mg/l/4h</td>
</tr>
<tr>
<td>ATE CLP (dust,mist)</td>
<td>0.05 mg/l/4h</td>
</tr>
<tr>
<td>Toxicity information</td>
<td>50 mg/kg LDLo, rat: thallium; Oral toxicity of thallium ethoxide has not been determined.</td>
</tr>
</tbody>
</table>

**Thallium(I) ethoxide (20398-06-5)**

<table>
<thead>
<tr>
<th>Exposure</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE CLP (oral)</td>
<td>5 mg/kg bodyweight</td>
</tr>
<tr>
<td>ATE CLP (gases)</td>
<td>100 ppmv/4h</td>
</tr>
<tr>
<td>ATE CLP (vapours)</td>
<td>0.5 mg/l/4h</td>
</tr>
<tr>
<td>ATE CLP (dust,mist)</td>
<td>0.05 mg/l/4h</td>
</tr>
</tbody>
</table>

**Skin corrosion/irritation**

- Not classified

**Serious eye damage/irritation**

- Not classified

**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**

May cause damage to organs through prolonged or repeated exposure.

**Aspiration hazard**

- Not classified

**Potential adverse human health effects and symptoms**

Acute poisoning may occur. Can be fatal. Possible effects include paralysis, joint pain, hair loss. At lower levels or onset of exposure swelling of the feet and legs, vomiting, angina-like pain, nephritis and mental confusion may occur.

**Symptoms/effects after inhalation**

- Fatal if inhaled. May cause irritation to the respiratory tract.

**Symptoms/effects after skin contact**

- May cause skin irritation.

**Symptoms/effects after eye contact**

- May cause eye irritation.

**Symptoms/effects after ingestion**

- Swallowing a small quantity of this material will result in serious health hazard. Fatal if swallowed.

**Chronic symptoms**

- Note: The hydrolysis products of thallium ethoxide are thallium oxides and ethanol. Of primary concern is the toxic effect of thallium. However, overexposure to ethanol by skin absorption, inhalation or ingestion may have a narcotic effect.

### SECTION 12: Ecological information

#### 12.1. Toxicity

**Ecology - general**

- Toxic to aquatic life with long lasting effects.

**Acute aquatic toxicity**

- Not classified

**Chronic aquatic toxicity**

- Toxic to aquatic life with long lasting effects.

#### 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) : 1707
UN-No. (IMDG) : 1707
UN-No. (IATA) : 1707
UN-No. (ADN) : 1707
UN-No. (RID) : 1707

14.2. UN proper shipping name
Proper Shipping Name (ADR) : THALLIUM COMPOUND, N.O.S.
Proper Shipping Name (IMDG) : THALLIUM COMPOUND, N.O.S.
Proper Shipping Name (IATA) : Thallium compound, n.o.s.
Proper Shipping Name (ADN) : THALLIUM COMPOUND, N.O.S.
Proper Shipping Name (RID) : THALLIUM COMPOUND, N.O.S.

Transport document description (ADR): UN 1707 THALLIUM COMPOUND, N.O.S. (THALLIUM(I) ETHOXIDE), 6.1, II, (D/E), ENVIRONMENTALLY HAZARDOUS
Transport document description (IMDG): UN 1707 THALLIUM COMPOUND, N.O.S. (THALLIUM(I) ETHOXIDE), 6.1, II, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS
Transport document description (IATA): UN 1707 Thallium compound, n.o.s. (THALLIUM(I) ETHOXIDE), 6.1, II, ENVIRONMENTALLY HAZARDOUS
Transport document description (ADN): UN 1707 THALLIUM COMPOUND, N.O.S. (THALLIUM(I) ETHOXIDE), 6.1, II, ENVIRONMENTALLY HAZARDOUS
Transport document description (RID): UN 1707 THALLIUM COMPOUND, N.O.S. (THALLIUM(I) ETHOXIDE), 6.1, II, ENVIRONMENTALLY HAZARDOUS

14.3. Transport hazard class(es)
ADR
Transport hazard class(es) (ADR) : 6.1
Danger labels (ADR) : 6.1

IMDG
Transport hazard class(es) (IMDG) : 6.1
Danger labels (IMDG) : 6.1
THALLIUM(I) ETHOXIDE
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IATA
Transport hazard class(es) (IATA) : 6.1
Hazard labels (IATA) : 6.1

ADN
Transport hazard class(es) (ADN) : 6.1
Danger labels (ADN) : 6.1

RID
Transport hazard class(es) (RID) : 6.1
Danger labels (RID) : 6.1

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 : Yes
Marine pollutant : Yes
Other information : No supplementary information available

14.6. Special precautions for user
- Overland transport
  Classification code (ADR) : T5
  Special provisions (ADR) : 43, 274
  Limited quantities (ADR) : 500g
  Excepted quantities (ADR) : E4
  Packing instructions (ADR) : P002, IBC08
  Mixed packing provisions (ADR) : MP10
  Portable tank and bulk container instructions (ADR) : T3
  Portable tank and bulk container special provisions (ADR) : TP33
  Tank code (ADR) : SGAH, L4BH
  Tank special provisions (ADR) : TU15, TE19
  Vehicle for tank carriage : AT
  Transport category (ADR) : 2
  Special provisions for carriage - Packages (ADR) : V11
THALLIUM(I) ETHOXIDE
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Special provisions for carriage - Loading, unloading and handling (ADR) : CV13, CV28
Special provisions for carriage - Operation (ADR) : S9, S19
Hazard identification number (Kemler No.) : 60
Orange plates : 60/1707

Tunnel restriction code (ADR) : D/E
EAC code : 2Z

- Transport by sea
Special provisions (IMDG) : 43, 274
Limited quantities (IMDG) : 500 g
Excepted quantities (IMDG) : E4
Packing instructions (IMDG) : P002
IBC packing instructions (IMDG) : IBC08
IBC special provisions (IMDG) : B2, B4
Tank instructions (IMDG) : T3
Tank special provisions (IMDG) : TP33
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-A
Stowage category (IMDG) : A
Properties and observations (IMDG) : White crystals or powder. Toxic if swallowed, by skin contact or by dust inhalation.

- Air transport
PCA Excepted quantities (IATA) : E4
PCA Limited quantities (IATA) : Y644
PCA limited quantity max net quantity (IATA) : 1kg
PCA max net quantity (IATA) : 25kg
CAO packing instructions (IATA) : 676
CAO max net quantity (IATA) : 100kg
Special provisions (IATA) : A6
ERG code (IATA) : 6L

- Inland waterway transport
Classification code (ADN) : T5
Special provisions (ADN) : 43, 274, 802
Limited quantities (ADN) : 500 g
Excepted quantities (ADN) : E4
Equipment required (ADN) : PP, EP
Number of blue cones/lights (ADN) : 2

- Rail transport
Classification code (RID) : T5
Special provisions (RID) : 43, 274
Limited quantities (RID) : 500g
Excepted quantities (RID) : E4
Packing instructions (RID) : P002, IBC08
Special packing provisions (RID) : B4
Mixed packing provisions (RID) : MP10
Portable tank and bulk container instructions (RID) : T3
Portable tank and bulk container special provisions (RID) : TP33
Tank codes for RID tanks (RID) : SGAH, L4BH
Special provisions for RID tanks (RID) : TU15
Transport category (RID) : 2
THALLIUM(I) ETHOXIDE
Safety Data Sheet

Special provisions for carriage – Packages (RID): W11
Special provisions for carriage - Loading, unloading and handling (RID): CW13, CW28, CW31
Colis express (express parcels) (RID): CE9
Hazard identification number (RID): 60

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
THALLIUM(I) ETHOXIDE is not on the REACH Candidate List
THALLIUM(I) ETHOXIDE is not on the REACH Annex XIV List
THALLIUM(I) ETHOXIDE 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-lijst van kankerverwekkende stoffen: The substance is not listed
SZW-lijst 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
Danish National Regulations: Young people below the age of 18 years are not allowed to use the product
Pregnant/breastfeeding women working with the product must not be in direct contact with 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:
Acute Tox. 2 (Inhalation) Acute toxicity (inhal.), Category 2
Acute Tox. 2 (Oral) Acute toxicity (oral), Category 2
Aquatic Chronic 2 Hazardous to the aquatic environment — Chronic Hazard, Category 2
STOT RE 2 Specific target organ toxicity — Repeated exposure, Category 2
H300 Fatal if swallowed.
H330 Fatal if inhaled.
H373 May cause damage to organs through prolonged or repeated exposure.
| H411 | Toxic to aquatic life with long lasting effects. |

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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