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

1.1. Product identifier

Product form : Substance
Physical state : Solid
Substance name : TIN(II) PYROPHOSPHATE, hydrate
Product code : SNT7980
Formula : O₇P₂Sn₂∙xH₂O
Synonyms : DITIN PYROPHOSPHATE
             STANNOUS PYROPHOSPHATE
             DIPHOSPHORIC ACID TIN(2+) SALT (1:2)
Chemical family : INORGANIC TIN

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 2 : H315
Serious eye damage/eye irritation, Category 2 : H319
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation : H335
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) :

Signal word (CLP) : Warning
Hazard statements (CLP):  
H315 - Causes skin irritation.  
H319 - Causes serious eye irritation.  
H335 - May cause respiratory irritation.

Precautionary statements (CLP):  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P261 - Avoid breathing dust.  
P264 - Wash hands thoroughly after handling.  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.  
P312 - Call a doctor if you feel unwell.  
P501 - Dispose of contents/container to licensed waste disposal facility.

2.3. Other hazards  
No additional information available

SECTION 3: Composition/information on ingredients  
3.1. Substances  
Substance type: Mono-constituent  
Name: TIN(II) PYROPHOSPHATE, hydrate  
CAS-No.: 15578-26-4  
EC-No.: 239-635-5

<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>
</table>
| Tin(II) pyrophosphate       | (CAS-No.) 15578-26-4 (EC-No.) 239-635-5 | 95 - 100 | Skin Irrit. 2, H315  
Eye Irrit. 2, H319  
STOT SE 3, H335 |

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 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. Get medical advice/attention.

4.2. Most important symptoms and effects, both acute and delayed  
Symptoms/effects after inhalation: May cause respiratory irritation.

Symptoms/effects after skin contact: Causes skin irritation.

Symptoms/effects after eye contact: Causes serious eye irritation.

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

Chronic symptoms: Exposure to dust or fumes of inorganic tin compounds is known to cause a benign pneumoniosis. (stannosis).

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: Not flammable.

Unsuitable extinguishing media: None known.

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

5.3. Advice for firefighters  
Protection during firefighting: Do not attempt to take action without suitable protective equipment. Avoid contact with skin and eyes. Do not breathe dust.
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 product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up: Sweep or shovel spills into appropriate 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
Precautions for safe handling: Avoid contact with skin and eyes. Avoid dust formation. Do not breathe dust. 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
Storage conditions: Keep container tightly closed. Store locked up.
Incompatible materials: Strong oxidizing agents.
Storage area: Store in a well-ventilated place.

7.3. Specific end use(s)
No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
Tin(II) pyrophosphate (15578-26-4) Italy - Portugal - USA ACGIH ACGIH TWA (mg/m³) 2 mg/m³ as tin

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. 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 (orange cartridge) respirator.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties
Physical state: Solid
Appearance: Powder.
Molecular mass: 411.32 g/mol
TIN(II) PYROPHOSPHATE, hydrate
Safety Data Sheet

SECTION 10: Stability and reactivity

10.1. Reactivity
No additional information available

10.2. Chemical stability
Stable.

10.3. Possibility of hazardous reactions
No additional information available

10.4. Conditions to avoid
No additional information available

10.5. Incompatible materials
Strong oxidizing agents.

10.6. Hazardous decomposition products
Phosphorus oxide fumes. Tin oxide particulates.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity : Not classified

Tin(II) pyrophosphate (15578-26-4)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>3805 mg/kg</td>
</tr>
<tr>
<td>ATE CLP (oral)</td>
<td>3805 mg/kg bodyweight</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.
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
### TIN(II) PYROPHOSPHATE, hydrate

#### Safety Data Sheet

**STOT-single exposure** : May cause respiratory irritation.

**STOT-repeated exposure** : Not classified

**Aspiration hazard** : Not classified

**Symptoms/effects after inhalation** : May cause respiratory irritation.

**Symptoms/effects after skin contact** : Causes skin irritation.

**Symptoms/effects after eye contact** : Causes serious eye irritation.

**Symptoms/effects after ingestion** : May be harmful if swallowed.

**Chronic symptoms** : Exposure to dust or fumes of inorganic tin compounds is known to cause a benign pneumoniosis. (stannosis).

**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)** : Not applicable
  - **UN-No. (IMDG)** : Not applicable
  - **UN-No. (IATA)** : Not applicable
  - **UN-No. (ADN)** : Not applicable
  - **UN-No. (RID)** : Not applicable

- **14.2. UN proper shipping name**
  - **Proper Shipping Name (ADR)** : Not applicable
  - **Proper Shipping Name (IMDG)** : Not applicable
  - **Proper Shipping Name (IATA)** : Not applicable
  - **Proper Shipping Name (ADN)** : Not applicable
  - **Proper Shipping Name (RID)** : Not applicable

- **14.3. Transport hazard class(es)**
  - **ADR**
    - Transport hazard class(es) (ADR) : Not applicable
  - **IMDG**
    - Transport hazard class(es) (IMDG) : Not applicable
TIN(II) PYROPHOSPHATE, hydrate
Safety Data Sheet

IATA
Transport hazard class(es) (IATA) : Not applicable

ADN
Transport hazard class(es) (ADN) : Not applicable

RID
Transport hazard class(es) (RID) : Not applicable

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

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
  Not applicable

- Transport by sea
  Not applicable

- Air transport
  Not applicable

- Inland waterway transport
  Not applicable

- Rail transport
  Not applicable

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
TIN(II) PYROPHOSPHATE, hydrate is not on the REACH Candidate List
TIN(II) PYROPHOSPHATE, hydrate is not on the REACH Annex XIV List
TIN(II) PYROPHOSPHATE, hydrate 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.

% Volatiles : < 1 %

15.1.2. National regulations

Germany
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands
SZW-lijst van kankerverwekkende stoffen : The substance is not listed
SZW-lijst van mutagene stoffen : The substance is not listed

Print date: 11/04/2019  EN (English)  SDS ID: SNT7980
TIN(II) PYROPHOSPHATE, hydrate
Safety Data Sheet

NIEUW-lijst van voor de voortplanting
giftige stoffen – Borstvoeding
NIEUW-lijst van voor de voortplanting
giftige stoffen – Vruchtbaarheid
NIEUW-lijst van voor de voortplanting
giftige stoffen – Ontwikkeling

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:

| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| STOT SE 3 | Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H335 | MAY cause respiratory irritation. |

© 2019 Gelest Inc. Morrisville, PA 19067