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

1.1. Product identifier

Name of the substance: H3 Re-N-Acetylation Reagent
Identification number: 607-008-00-9
Registration number: -
Synonyms: None.
SDS number: SDS WS0157
Product code: WS0157
Issue date: 20-October-2013
Version number: AD
Revision date: -
Supersedes date: 25-August-2009

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

Identified uses: Research and development.
Uses advised against: None known.

1.3. Details of the supplier of the safety data sheet

Supplier
Company name: ProZyme, Inc.
Address: 3832 Bay Center Place
Hayward, CA 94545
Division: -
Telephone: 1-510-638-6900
e-mail: Not available.
Contact person: Not available.

1.4. Emergency telephone number

1-760-476-3961

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Directive 67/548/EEC or 1999/45/EC as amended
Classification: R10, C; R34, Xn; R20/22

Classification according to Regulation (EC) No 1272/2008 as amended
Classification: H226 - Flammable liquid and vapour.

Hazard summary
Physical hazards: Flammable.
Health hazards: Harmful by inhalation and if swallowed. Causes burns. Occupational exposure to the substance or mixture may cause adverse health effects.
Environmental hazards: Not classified for hazards to the environment.
Specific hazards  
Not available.

Main symptoms  
Burning pain and severe corrosive skin damage. Permanent eye damage including blindness could result. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Vapours may irritate throat and respiratory system and cause coughing.

2.2. Label elements  

Label according to Regulation (EC) No. 1272/2008 as amended  
Contains:  
Acetic anhydride  
Identification number: 607-008-00-9  

Hazard pictograms  

Signal word  
Danger  

Hazard statements  
H226 - Flammable liquid and vapour.  
H302 - Harmful if swallowed.  
H314 - Causes severe skin burns and eye damage.  
H318 - Causes serious eye damage.  
H332 - Harmful if inhaled.  
H335 - May cause respiratory irritation.

Precautionary statements  

Prevention  
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P260 - Do not breathe mist or vapour.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P271 - Use only outdoors or in a well-ventilated area.

Response  
P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
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 POISON CENTRE or doctor/physician.

Storage  
P405 - Store locked up.

Disposal  
P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental label information  
Corrosive to the respiratory tract.

2.3. Other hazards  
None known.

SECTION 3: Composition/information on ingredients  

3.1. Substances  

General information  

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>%</th>
<th>CAS-No. / EC No.</th>
<th>REACH Registration No.</th>
<th>INDEX No.</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>Acetic anhydride</td>
<td>100</td>
<td>108-24-7, 203-564-8</td>
<td>-</td>
<td>607-008-00-9</td>
<td></td>
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</table>

Classification:  
DSD: R10, C;R34, Xn;R20/22  
CLP: Flam. Liq. 3;H226, Acute Tox. 4;H302, Skin Corr. 1B;H314, Eye Dam. 1;H318, Acute Tox. 4;H332, STOT SE 3;H335

DSD: Directive 67/548/EEC.  
#: This substance has been assigned Community workplace exposure limit(s).

Composition comments  
All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. The full text for all R- and H-phrases is displayed in section 16.

SECTION 4: First aid measures  

General information  
If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

4.1. Description of first aid measures  

Inhalation  
Move to fresh air. For breathing difficulties, oxygen may be necessary. If not breathing, give artificial respiration. Call a physician if symptoms develop or persist.

Skin contact  
Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.
Eye contact
Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion
Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Call a physician or poison control center immediately.

SECTION 5: Firefighting measures

4.2. Most important symptoms and effects, both acute and delayed
Burning pain and severe corrosive skin damage. Permanent eye damage including blindness could result. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Vapours may irritate throat and respiratory system and cause coughing.

4.3. Indication of any immediate medical attention and special treatment needed
Treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
For non-emergency personnel
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all sources of ignition. Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained.

For emergency responders
Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up.

6.2. Environmental precautions
Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up
Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil etc) away from spilled material.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use.

6.4. Reference to other sections
For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Vapours may form explosive mixtures with air. May be ignited by open flame. Eliminate all sources of ignition. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Explosion-proof general and local exhaust ventilation. Do not get in eyes, on skin, on clothing. Do not breathe vapour. Wear appropriate personal protective equipment. Use only outdoors or in a well-ventilated area. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities
Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up. Store away from incompatible materials (see section 10 of the SDS).

7.3. Specific end use(s)
Research and development.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
### Austria. MAK List

<table>
<thead>
<tr>
<th>Material</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetic anhydride (CAS 108-24-7)</td>
<td>Ceiling</td>
<td>40 mg/m³</td>
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<tr>
<td></td>
<td></td>
<td>10 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 ppm</td>
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</table>

### Belgium. Exposure Limit Values.

<table>
<thead>
<tr>
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<th>Type</th>
<th>Value</th>
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<tbody>
<tr>
<td>Acetic anhydride (CAS 108-24-7)</td>
<td>TWA</td>
<td>21 mg/m³</td>
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<tr>
<td></td>
<td></td>
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</table>

### Czech Republic. OELs. Government Decree 361

<table>
<thead>
<tr>
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<th>Value</th>
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</thead>
<tbody>
<tr>
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<tr>
<td></td>
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<td>4 mg/m³</td>
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### Denmark. Exposure Limit Values

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<td>20 mg/m³</td>
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### Finland. Workplace Exposure Limits

<table>
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<th>Type</th>
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<tr>
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<td>21 mg/m³</td>
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### France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984

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### Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

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<tr>
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<td>21 mg/m³</td>
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### Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace

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### Greece. OELs (Decree No. 90/1999, as amended)

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<td></td>
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<td>20 mg/m³</td>
</tr>
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<td></td>
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### Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

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<tr>
<td>Material</td>
<td>Type</td>
<td>Value</td>
</tr>
<tr>
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<tr>
<td>Hungary. OELs. Joint Decree on Chemical Safety of Workplaces</td>
<td>TWA</td>
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<tr>
<td>Iceland. OELs. Regulation 154/1999 on occupational exposure limits</td>
<td>STEL</td>
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<tr>
<td>Acetic anhydride (CAS 108-24-7)</td>
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</tr>
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<td></td>
<td></td>
<td>5 ppm</td>
</tr>
<tr>
<td>Ireland. Occupational Exposure Limits</td>
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<td>Acetic anhydride (CAS 108-24-7)</td>
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<td></td>
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<tr>
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<td>Italy. OELs</td>
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<td>Acetic anhydride (CAS 108-24-7)</td>
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<td>Latvia. OELs. Occupational exposure limit values of chemical substances in work environment</td>
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<td>5 mg/m³</td>
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<tr>
<td>Acetic anhydride (CAS 108-24-7)</td>
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<tr>
<td>Lithuania. OELs. Limit Values for Chemical Substances, General Requirements (Hygiene Norm HN 23:2007)</td>
<td>Ceiling</td>
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<tr>
<td>Acetic anhydride (CAS 108-24-7)</td>
<td></td>
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</tr>
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<td></td>
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<td>5 ppm</td>
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<tr>
<td>Norway. Administrative Norms for Contaminants in the Workplace</td>
<td>Ceiling</td>
<td>20 mg/m³</td>
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<tr>
<td>Acetic anhydride (CAS 108-24-7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
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<td>5 ppm</td>
</tr>
<tr>
<td>Poland. MACs. Minister of Labour and Social Policy Regarding Maximum Allowable Concentrations and Intensities in Working Environment</td>
<td>Ceiling</td>
<td>20 mg/m³</td>
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<tr>
<td>Acetic anhydride (CAS 108-24-7)</td>
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<tr>
<td>Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)</td>
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<td>Acetic anhydride (CAS 108-24-7)</td>
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<tr>
<td>Romania. OELs. Protection of workers from exposure to chemical agents at the workplace</td>
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<td>6 ppm</td>
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<td>TWA</td>
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### Slovakia. OELs. Decree of the government of the Slovak Republic concerning protection of health in work with chemical agents

<table>
<thead>
<tr>
<th>Material</th>
<th>Type</th>
<th>Value</th>
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<tbody>
<tr>
<td>Acetic anhydride (CAS 108-24-7)</td>
<td>TWA</td>
<td>21 mg/m³</td>
</tr>
<tr>
<td></td>
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<td>5 ppm</td>
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</tbody>
</table>

### Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

<table>
<thead>
<tr>
<th>Material</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetic anhydride (CAS 108-24-7)</td>
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<td>21 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 ppm</td>
</tr>
</tbody>
</table>

### Spain. Occupational Exposure Limits

<table>
<thead>
<tr>
<th>Material</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetic anhydride (CAS 108-24-7)</td>
<td>TWA</td>
<td>21 mg/m³</td>
</tr>
<tr>
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<td>5 ppm</td>
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### Sweden. Occupational Exposure Limit Values

<table>
<thead>
<tr>
<th>Material</th>
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</tr>
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<tbody>
<tr>
<td>Acetic anhydride (CAS 108-24-7)</td>
<td>Ceiling</td>
<td>20 mg/m³</td>
</tr>
<tr>
<td></td>
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<td>5 ppm</td>
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### Switzerland. SUVA Grenzwerte am Arbeitsplatz

<table>
<thead>
<tr>
<th>Material</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetic anhydride (CAS 108-24-7)</td>
<td>STEL</td>
<td>20 mg/m³</td>
</tr>
<tr>
<td></td>
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<td>5 ppm</td>
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<tr>
<td></td>
<td>TWA</td>
<td>20 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 ppm</td>
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</tbody>
</table>

### UK. EH40 Workplace Exposure Limits (WELs)

<table>
<thead>
<tr>
<th>Material</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetic anhydride (CAS 108-24-7)</td>
<td>STEL</td>
<td>10 mg/m³</td>
</tr>
<tr>
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<td>2 ppm</td>
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<tr>
<td></td>
<td>TWA</td>
<td>2.5 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.5 ppm</td>
</tr>
</tbody>
</table>

#### Biological limit values

No biological exposure limits noted for the ingredient(s).

#### Recommended monitoring procedures

Follow standard monitoring procedures.

#### Derived no-effect level (DNEL)

Not available.

#### Predicted no effect concentrations (PNECs)

Not available.

### 8.2. Exposure controls

**Appropriate engineering controls**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Explosion-proof general and local exhaust ventilation. Eye wash facilities and emergency shower must be available when handling this product.

**Individual protection measures, such as personal protective equipment**

**General information**

Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

**Eye/face protection**

Wear safety glasses with side shields (or goggles) and a face shield.

**Skin protection**

- **Hand protection**
  
  Wear appropriate chemical resistant gloves.

- **Other**
  
  Wear appropriate chemical resistant clothing.
Respiratory protection
If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

Hygiene measures
When using, do not eat, drink or smoke. Do not get this material on clothing. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Environmental exposure controls
Environmental manager must be informed of all major releases.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance
Clear liquid.

Physical state
Liquid.

Form
Liquid.

Colour
Colorless

Odour
Vinegar-like.

Odour threshold
Not available.

pH
Not available.

Melting point/freezing point
-73 °C (-99,4 °F)

Initial boiling point and boiling range
139,25 °C (282,65 °F)

Flash point
48,9 °C (120,0 °F) Closed cup
49,0 °C (120,2 °F) Estimated

Evaporation rate
Not available.

Flammability (solid, gas)
Not available.

Upper/lower flammability or explosive limits
Flammability limit - lower (%)
Not available.

Flammability limit - upper (%)
Not available.

Vapour pressure
0,68 kPa at 25 ºC
0,68 kPa at 25 ºC
4 mm Hg @ 20ºC

Vapour density
3,5

Relative density
Not available.

Solubility(ies)
120 g/l

Partition coefficient (n-octanol/water)
Not available.

Auto-ignition temperature
316 ºC (600,8 ºF)
316 ºC (600,8 ºF)

Percent volatile
100 %
SECTION 10: Stability and reactivity

10.1. Reactivity
The product is stable and non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability
Material is stable under normal conditions.

10.3. Possibility of hazardous reactions
Hazardous polymerisation does not occur.

10.4. Conditions to avoid
Contact with incompatible materials. Avoid heat, sparks, open flames and other ignition sources. Do not allow water to get into container because of violent reaction.

10.5. Incompatible materials

10.6. Hazardous decomposition products
No hazardous decomposition products are known.

SECTION 11: Toxicological information

General information
Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

- **Ingestion**: Harmful if swallowed. Causes digestive tract burns.
- **Inhalation**: Harmful if inhaled. Causes respiratory tract burns.
- **Skin contact**: Causes severe skin burns.
- **Eye contact**: Causes severe eye burns. Causes serious eye damage.

Symptoms
Burning pain and severe corrosive skin damage. Permanent eye damage including blindness could result. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Vapours may irritate throat and respiratory system and cause coughing.

11.1. Information on toxicological effects

**Acute toxicity**
Harmful if inhaled. Harmful if swallowed.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test results</th>
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<td></td>
</tr>
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<td>Dermal</td>
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<td>LD50</td>
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<td>LC50</td>
<td>Rat</td>
<td>1,68 mg/l, 6 Hours</td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>1780 mg/kg</td>
</tr>
</tbody>
</table>

**Skin corrosion/irritation**: Causes severe skin burns and eye damage.

**Serious eye damage/eye irritation**: Causes severe eye burns. Causes serious eye damage.

**Respiratory sensitisation**: Due to lack of data the classification is not possible.

**Skin sensitisation**: Due to lack of data the classification is not possible.

**Germ cell mutagenicity**: Due to lack of data the classification is not possible.

**Carcinogenicity**: Due to lack of data the classification is not possible.

**Reproductive toxicity**: Due to lack of data the classification is not possible.

**Specific target organ toxicity - single exposure**: Respiratory tract irritation.

**Specific target organ toxicity - repeated exposure**: Due to lack of data the classification is not possible.

**Aspiration hazard**: Due to lack of data the classification is not possible.

**Mixture versus substance information**: Not available.

**Other information**: Not available.

SECTION 12: Ecological information

12.1. Toxicity
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

12.2. Persistence and degradability
No data is available on the degradability of this product.

12.3. Bioaccumulative potential
No data available for this product.
Partition coefficient
n-octanol/water (log Kow) Not available.
Bioconcentration factor (BCF) Not available.
12.4. Mobility in soil Not available.
12.5. Results of PBT and vPvB assessment Not available.
12.6. Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Residual waste Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
EU waste code The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Disposal methods/information Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

SECTION 14: Transport information

ADR
14.1. UN number UN1715
14.2. UN proper shipping name Acetic anhydride
14.3. Transport hazard class(es) 8
14.4. Packing group II
14.5. Environmental hazards No
14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
* The transportation information provided represents the regulatory transport classification of the product without consideration to packaging, quantity, or modal restrictions and exceptions. It is the user's responsibility to determine the appropriate packaging and modal requirements and/or limitations for the product quantity being shipped.

RID
14.1. UN number UN1715
14.2. UN proper shipping name Acetic anhydride
14.3. Transport hazard class(es) 8
14.4. Packing group II
14.5. Environmental hazards No
14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
* The transportation information provided represents the regulatory transport classification of the product without consideration to packaging, quantity, or modal restrictions and exceptions. It is the user's responsibility to determine the appropriate packaging and modal requirements and/or limitations for the product quantity being shipped.

ADN
14.1. UN number UN1715
14.2. UN proper shipping name Acetic anhydride
14.3. Transport hazard class(es) 8
14.4. Packing group II
14.5. Environmental hazards
Labels required No

14.6. Special precautions for user
* The transportation information provided represents the regulatory transport classification of the product without consideration to packaging, quantity, or modal restrictions and exceptions. It is the user's responsibility to determine the appropriate packaging and modal requirements and/or limitations for the product quantity being shipped.

Read safety instructions, SDS and emergency procedures before handling.

IATA
14.1. UN number UN1715
14.2. UN proper shipping name Acetic anhydride
14.3. Transport hazard class(es) 8
14.4. Packing group II
14.5. Environmental hazards No
Labels required *
ERG code 8F
14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
* The transportation information provided represents the regulatory transport classification of the product without consideration to packaging, quantity, or modal restrictions and exceptions. It is the user's responsibility to determine the appropriate packaging and modal requirements and/or limitations for the product quantity being shipped.

IMDG
14.1. UN number UN1715
14.2. UN proper shipping name ACETIC ANHYDRIDE
14.3. Transport hazard class(es) 8
14.4. Packing group II
14.5. Environmental hazards Marine pollutant No
Labels required *
EmS F-E, S-C
14.6. Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
* The transportation information provided represents the regulatory transport classification of the product without consideration to packaging, quantity, or modal restrictions and exceptions. It is the user's responsibility to determine the appropriate packaging and modal requirements and/or limitations for the product quantity being shipped.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
This substance/mixture is not intended to be transported in bulk.

SECTION 15: Regulatory information

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

EU regulations
- Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I
  Not listed.
- Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II
  Not listed.
  Not listed.
- Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended
  Not listed.
- Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended
  Not listed.
Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended
Not listed.
Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V as amended
Not listed.
Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry
Not listed.
Regulation (EC) No. 1907/2006, REACH Article 59(1) Candidate List as currently published by ECHA
Not listed.
Authorisations
Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended
Not listed.
Restrictions on use
Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended
Not listed.
Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work
Not regulated.
Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding
Not regulated.
Other EU regulations
Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances
Not regulated.
Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work
Acetic anhydride (CAS 108-24-7)
Directive 94/33/EC on the protection of young people at work
Acetic anhydride (CAS 108-24-7)
Other regulations
The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.
National regulations
Young people under 18 years old are not allow to work with this product according to the EU Directive 94/33/EC on the protection of young people at work.
15.2. Chemical safety assessment
No Chemical Safety Assessment has been carried out.
SECTION 16: Other information
List of abbreviations
LD50: Lethal Dose, 50%.
LC50: Lethal Concentration, 50%.
TWA: Time weighted average.
STEL: Short term exposure limit.
References
HSDB® - Hazardous Substances Data Bank
Information on evaluation method leading to the classification of mixture
The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.
Full text of any statements or R-phrases and H-statements under Sections 2 to 15
R10 Flammable.
R20/22 Harmful by inhalation and if swallowed.
R34 Causes burns.
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
Training information
Follow training instructions when handling this material.
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