1 Identification of substance

Product details

Trade name
7-Hydroxy-3,4-dihydro-2(1H)-quinolinone

Stock number: H27485

Manufacturer/Supplier:
Alfa Aesar
Shore Road
Port of Heysham Industrial Park
Heysham Lancashire LA3 2XY
United Kingdom
Office Tel: +44 (0) 1524 850506

Informing department:
Product safety department.

Emergency information:
Call Carechem 24 at +44 (0) 1865 407333

2 Hazards identification

Hazard designation:

Xi Irritant

Information pertaining to particular dangers for man and environment
R 36/37/38 Irritating to eyes, respiratory system and skin.

GHS label elements

Warning

3.2/2 - Causes skin irritation.
3.3/2A - Causes serious eye irritation.
3.8/3 - May cause respiratory irritation.

Prevention:
Avoid breathing dust/fume/gas/mist/vapours/spray.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.

Response:

IF ON SKIN: Wash with plenty of soap and water.
IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
Call a POISON CENTER or doctor/physician if you feel unwell.
Specific treatment (see label).

IF skin irritation occurs: Get medical advice/attention.
IF eye irritation persists: Get medical advice/attention.
Take off contaminated clothing and wash before reuse.

Storage:
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.

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

3 Composition/information on ingredients

Chemical characterization:

Designation: (CAS#)
7-Hydroxy-3,4-dihydro-2(1H)-quinolinone (CAS# 22246-18-0): 100%

4 First aid measures

After inhalation
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
Seek immediate medical advice.

After skin contact
Instantly wash with water and soap and rinse thoroughly.
Seek immediate medical advice.

After eye contact
Rinse opened eye for several minutes under running water. Then consult doctor.

After swallowing
Seek immediate medical advice.

5 Fire fighting measures

Suitable extinguishing agents
CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
Can be released in case of fire:
Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)

Protective equipment:
Wear self-contained breathing apparatus.
Wear full protective suit.

6 Accidental release measures

Person-related safety precautions:
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation.

Measures for environmental protection:
Do not allow material to be released to the environment without proper governmental permits.
Ensure adequate ventilation.

Measures for cleaning/collecting:
See Section 7 for information on safe handling.
See section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

7 Handling and storage

Handling
Information for safe handling:
Keep containers tightly sealed.
Store in cool, dry place in tightly closed containers.
Ensure good ventilation/exhaustion at the workplace.

Information about protection against explosions and fires:
Keep ignition sources away - Do not smoke.

Storage
Requirements to be met by storerooms and containers:
No special requirements.

Information about storage in one common storage facility:
Store away from oxidizing agents.

Further information about storage conditions:
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.

(Contd. on page 2)
**8 Exposure controls and personal protection**

**Additional information about design of technical systems:**
- Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

**Components with critical values that require monitoring at the workplace:**
- Not required.

**Additional information:**
- No data

**Personal protective equipment**

**General protective and hygienic measures**
- The usual precautionary measures should be adhered to in handling the chemicals.
  - Keep away from foodstuffs, beverages and food.
  - Instantly remove any soiled and impregnated garments.
  - Wash hands during breaks and at the end of the work.
  - Avoid contact with the eyes and skin.

**Breathing equipment:**
- Use breathing protection with high concentrations.

**Protection of hands:**
- Check protective gloves prior to each use for their proper condition.

**Material of gloves**
- The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

**Penetration time of glove material**
- Not determined

**Eye protection:**
- Safety glasses

**Face protection**

**Body protection:**
- Protective work clothing

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**9 Physical and chemical properties:**

**General Information**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Crystalline powder</td>
</tr>
<tr>
<td>Colour</td>
<td>White</td>
</tr>
<tr>
<td>Smell</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

**Change in condition**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point/Melting range</td>
<td>233-237°C</td>
</tr>
<tr>
<td>Boiling point/Boiling range</td>
<td>Not determined</td>
</tr>
<tr>
<td>Sublimation temperature / start</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

**Flammable properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

**Non-flammable properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ignition temperature</td>
<td>Not determined</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not determined</td>
</tr>
<tr>
<td>Danger of explosion</td>
<td>Product is not explosive.</td>
</tr>
</tbody>
</table>

**Critical values for explosion**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower</td>
<td>Not determined</td>
</tr>
<tr>
<td>Upper</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

**Steam pressure**
- Not determined

**Density**
- Not determined

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**10 Stability and reactivity**

**Thermal decomposition / conditions to be avoided:**
- No decomposition if used and stored according to specifications.

**Materials to be avoided:**
- Oxidizing agents

**Dangerous reactions:**
- No dangerous reactions known

**Dangerous products of decomposition:**
- Carbon monoxide and carbon dioxide
- Nitrous vitriol gases

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**11 Toxicological information**

**Acute toxicity**
- Primary irritant effect:
  - on the skin: Irritant for skin and mucous membranes.
  - on the eye: Irritant effect.

**Sensitization:**
- No sensitizing effect known.

**Additional toxicological information:**
- To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.
- No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

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**12 Ecological information**

**General notes:**
- Water hazard class 1 (Self-assessment): slightly hazardous for water.
- Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.
- Do not allow material to be released to the environment without proper governmental permits.

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**13 Disposal considerations**

**Product:**

**Recommendation:**
- Consult state, local or national regulations for proper disposal.
- Hand over to disposers of hazardous waste.
- Must be specially treated under adherence to official regulations.

**Uncleaned packagings:**

**Recommendation:**
- Disposal must be made according to official regulations.

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**14 Transport information**

**Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)**
- ADR/RID-GGVS/E Class: None

**Maritime transport IMDG/GGVSSea:**
- IMDG/GGVSSea Class: None

**Air transport ICAO-TI and IATA-DGR:**
- ICAO/IATA Class: None

**Transport/Additional information:**
- Not dangerous according to the above specifications.
### 15 Regulatory information

**Designation according to EC guidelines:**
- **Code letter and hazard designation of product:**
  - Xi Irritant

**Risk phrases:**
- 36/37/38 Irritating to eyes, respiratory system and skin.

**Safety phrases:**
- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 37 Wear suitable gloves.

**National regulations**
- **Information about limitation of use:**
  - For use only by technically qualified individuals.
  - Employment restrictions concerning young persons must be observed.

**Water hazard class:**
- Water hazard class 1 (Self-assessment): slightly hazardous for water.

### 16 Other information:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

**Department issuing data specification sheet:** Health, Safety and Environmental Department.

**Contact:**
- Zachariah Holt

**Abbreviations and acronyms:**
- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- IATA-DGR: Dangerous Goods Regulations by the “International Air Transport Association” (IATA)
- ICAO: International Civil Aviation Organization
- ICAO-TI: Technical Instructions by the “International Civil Aviation Organization” (ICAO)
- GHS: Globally Harmonized System of Classification and Labeling of Chemicals
- CAS: Chemical Abstracts Service (division of the American Chemical Society)