SECTION 1: Identification

1.1. Identification
Product form : Mixture
Product name : 8-Hydroxyquinoline Solution
Product code : LC15580

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture : For laboratory and manufacturing use only

1.3. Details of the supplier of the safety data sheet
LabChem Inc
Jackson's Pointe Commerce Park Building 1000, 1010 Jackson's Pointe Court
Zelienople, PA 16063 - USA
T 412-826-5230 - F 724-473-0647
info@labchem.com - www.labchem.com

1.4. Emergency telephone number
Emergency number : CHEMTREC: 1-800-424-9300 or 011-703-527-3887

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture
GHS-US classification
Skin corrosion/irritation Category 2 H315
Serious eye damage/eye irritation Category 2A H319
Full text of H statements : see section 16

2.2. Label elements
GHS-US labeling
Hazard pictograms (GHS-US) :

Signal word (GHS-US) : Warning
Hazard statements (GHS-US) : H315 - Causes skin irritation
H319 - Causes serious eye irritation
Precautionary statements (GHS-US) :
P264 - Wash exposed skin thoroughly after handling
P280 - Wear protective gloves, eye protection
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P332 + P313 - If skin irritation occurs: Get medical advice/attention
P337 + P313 - If eye irritation persists: Get medical advice/attention
P362 + P364 - Take off contaminated clothing and wash it before reuse

2.3. Other hazards
Other hazards not contributing to the classification : None.

2.4. Unknown acute toxicity (GHS US)
Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substance
Not applicable

3.2. Mixture
8-Hydroxyquinoline Solution
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>(CAS No) 7732-18-5</td>
<td>91.76</td>
<td>Not classified</td>
</tr>
<tr>
<td>Acetic Acid</td>
<td>(CAS No) 64-19-7</td>
<td>6.24</td>
<td>Flam. Liq. 3, H226 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402</td>
</tr>
<tr>
<td>8-Hydroxyquinoline, ACS</td>
<td>(CAS No) 148-24-3</td>
<td>2</td>
<td>Acute Tox. 4 (Oral), H302 Skin Irr. 2, H315 Eye Irr. 2A, H319 STOT SE 3, H335</td>
</tr>
</tbody>
</table>

Full text of hazard classes and H-statements : see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/injuries after skin contact : Causes skin irritation.

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

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

Obtain medical assistance.

SECTION 5: Firefighting measures

5.1. Extinguishing media


Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Safety glasses. Gloves.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

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: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

Hygiene measures: Wash exposed skin thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep container closed when not in use.


Incompatible materials: Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th></th>
<th>ACGIH TWA (ppm)</th>
<th>ACGIH STEL (ppm)</th>
<th>OSHA PEL (TWA) (mg/m³)</th>
<th>OSHA PEL (TWA) (ppm)</th>
<th>IDLH</th>
<th>NIOSH REL (TWA) (mg/m³)</th>
<th>NIOSH REL (TWA) (ppm)</th>
<th>NIOSH REL (STEL) (mg/m³)</th>
<th>NIOSH REL (STEL) (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetic Acid (64-19-7)</td>
<td>10 ppm (Acetic acid; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)</td>
<td>15 ppm (Acetic acid; USA; Short time value; TLV - Adopted Value)</td>
<td>25 mg/m³</td>
<td>10 ppm</td>
<td></td>
<td>25 mg/m³</td>
<td>10 ppm</td>
<td>37 mg/m³</td>
<td>15 ppm</td>
</tr>
<tr>
<td>Water (7732-18-5)</td>
<td>Not applicable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8-Hydroxyquinoline, ACS (148-24-3)</td>
<td>Not applicable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal protective equipment: Safety glasses. Gloves.

Hand protection: Wear protective gloves.

Eye protection: Chemical goggles or safety glasses.

Skin and body protection: Wear suitable protective clothing.

Respiratory protection: Wear appropriate mask.

Other information: Do not eat, drink or smoke during use.

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>Color</td>
<td>Yellow</td>
</tr>
<tr>
<td>Odor</td>
<td>Vinegar odour</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
</tbody>
</table>
8-Hydroxyquinoline Solution
Safety Data Sheet

section 1: Identification
1.1. Product Identifiers
Acetic Acid (64-19-7)
8-Hydroxyquinoline, ACS (148-24-3)

section 2: Hazards identification
2.1. Emergency and first aid measures
2.2. Hazards identifiers
2.3. Immediate first aid measures
2.4. Specific protective actions
2.5. Extinguishing media
2.6. Exposure controls
2.7. Personal protective equipment

section 3: Hazards synthesis
3.1. Fire and explosion hazards
3.2. Reactivity hazards
3.3. Reactivity criteria

section 4: Transport information
4.1. Transport hazard classification
4.2. Packaging group

section 5: Technical and formulation information
5.1. Formulation

section 6: Reference sources
6.1. Literature sources

section 7: Other information
7.1. Additional hazards information

section 8: Exposure controls and personal protection
8.1. Control points and measures
8.2. Personal protective equipment

section 9: Physical and chemical properties
9.1. Physical data
9.2. Other information
9.3. Flash point
9.4. Explosion limits
9.5. Decomposition temperature
9.6. Auto-ignition temperature
9.7. Viscosity, kinematic
9.8. Viscosity, dynamic
9.9. Solubility
9.10. Specific gravity / density
9.11. Relative evaporation rate (butyl acetate=1)
9.12. Flammability (solid, gas)
9.13. Vapor pressure
9.15. Melting point
9.16. Freezing point
9.17. Boiling point

section 10: Stability and reactivity
10.1. Reactivity
10.2. Chemical stability
10.3. Possibility of hazardous reactions
10.4. Conditions to avoid
10.5. Incompatible materials
10.6. Hazardous decomposition products

section 11: Toxicological information
11.1. Information on toxicological effects
11.2. Acute toxicity
11.3. Skin corrosion/irritation
11.4. Respiratory irritancy
11.5. Sensitization
11.6. Eye irritation/nociception
11.7. Skin sensitization
11.8. Local effects
11.9. Skin and eye irritation
11.10. Hydroxyquinoline, ACS (148-24-3)

section 12: Ecological information
12.1. Biological effects
12.2. Degradation

section 13: Disposal considerations
13.1. Disposal of container and packaging
13.2. Disposal of contents

section 14: Transport information
14.1. Transport hazard classification
14.2. Packaging group

section 15: Regulatory information
15.1. Regulations
15.2. Other regulatory requirements

section 16: Other legal information
16.1. National regulations
16.2. EU classification
16.3. EU labeling
16.4. Other labeling

section 17: Other information
17.1. Additional information

section 18: Instruction for use
18.1. Description of risk and safety phrases
18.2. Precautions for safe handling
18.3. Precautions for safe storage

section 19: Physical and chemical properties
19.1. Physical data
19.2. Chemical data

section 20: Reference sources
20.1. Literature sources
20.2. Other sources

section 21: Other information
21.1. Additional information
21.2. Additional data

section 22: Regulatory information
22.1. Regulations
22.2. Other regulatory requirements

section 23: Other information
23.1. Additional information
23.2. Additional data

section 24: Instruction for use
24.1. Description of risk and safety phrases
24.2. Precautions for safe handling
24.3. Precautions for safe storage

section 25: Physical and chemical properties
25.1. Physical data
25.2. Chemical data

section 26: Reference sources
26.1. Literature sources
26.2. Other sources

section 27: Other information
27.1. Additional information
27.2. Additional data

section 28: Regulatory information
28.1. Regulations
28.2. Other regulatory requirements

section 29: Other information
29.1. Additional information
29.2. Additional data
# 8-Hydroxyquinoline Solution

## Safety Data Sheet

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<table>
<thead>
<tr>
<th>Serious eye damage/irritation</th>
<th>Causes serious eye irritation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory or skin sensitization</td>
<td>Not classified</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

### 8-Hydroxyquinoline, ACS (148-24-3)

| IARC group | 3 - Not classifiable |
| Reproductive toxicity | Not classified |
| Specific target organ toxicity (single exposure) | Not classified |
| Specific target organ toxicity (repeated exposure) | Not classified |
| Aspiration hazard | Not classified |
| Potential Adverse human health effects and symptoms | Based on available data, the classification criteria are not met. |
| Symptoms/injuries after skin contact | Causes skin irritation. |
| Symptoms/injuries after eye contact | Causes serious eye irritation. |

### SECTION 12: Ecological information

#### 12.1. Toxicity

No additional information available

#### 12.2. Persistence and degradability

<table>
<thead>
<tr>
<th>8-Hydroxyquinoline Solution</th>
<th>Persistence and degradability</th>
<th>Not established.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochemical oxygen demand (BOD)</td>
<td>0.6 - 0.74 g O₂/g substance</td>
<td></td>
</tr>
<tr>
<td>Chemical oxygen demand (COD)</td>
<td>1.03 g O₂/g substance</td>
<td></td>
</tr>
<tr>
<td>ThOD</td>
<td>1.07 g O₂/g substance</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Water (7732-18-5)</th>
<th>Persistence and degradability</th>
<th>Not established.</th>
</tr>
</thead>
</table>

| 8-Hydroxyquinoline, ACS (148-24-3) | Persistence and degradability | Not established. |

#### 12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>8-Hydroxyquinoline Solution</th>
<th>Bioaccumulative potential</th>
<th>Not established.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Acetic Acid (64-19-7)</th>
<th>BCF fish 1</th>
<th>3.16 (BCF; Pisces)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Pow</td>
<td>-0.17 (Experimental value; 25 °C)</td>
<td></td>
</tr>
<tr>
<td>Bioaccumulative potential</td>
<td>Low potential for bioaccumulation (Log Kow &lt; 4).</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Water (7732-18-5)</th>
<th>Bioaccumulative potential</th>
<th>Not established.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>8-Hydroxyquinoline, ACS (148-24-3)</th>
<th>Bioaccumulative potential</th>
<th>Not established.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Pow</td>
<td>0.26</td>
<td></td>
</tr>
<tr>
<td>Bioaccumulative potential</td>
<td>Not established.</td>
<td></td>
</tr>
</tbody>
</table>

#### 12.4. Mobility in soil

<table>
<thead>
<tr>
<th>Acetic Acid (64-19-7)</th>
<th>Surface tension</th>
<th>0.028 N/m (20 °C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Koc</td>
<td>log Koc,0.06; QSAR</td>
<td></td>
</tr>
<tr>
<td>Ecology - soil</td>
<td>May be harmful to plant growth, blooming and fruit formation.</td>
<td></td>
</tr>
</tbody>
</table>
8-Hydroxyquinoline Solution
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12.5. Other adverse effects
Effect on the global warming : No known effects from this product.
GWPmix comment : No known effects from this product.
Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)
In accordance with DOT
Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

8-Hydroxyquinoline Solution
SARA Section 311/312 Hazard Classes Immediate (acute) health hazard
All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory
This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

Acetic Acid (64-19-7)
RQ (Reportable quantity, section 304 of EPA's List of Lists) 5000 lb

8-Hydroxyquinoline, ACS (148-24-3)
SARA Section 311/312 Hazard Classes Immediate (acute) health hazard

15.2. International regulations

CANADA

8-Hydroxyquinoline Solution
WHMIS Classification Class D Division 2 Subdivision B - Toxic material causing other toxic effects

Acetic Acid (64-19-7)
Listed on the Canadian DSL (Domestic Substances List)
WHMIS Classification Class B Division 3 - Combustible Liquid
Class E - Corrosive Material

Water (7732-18-5)
WHMIS Classification Uncontrolled product according to WHMIS classification criteria

8-Hydroxyquinoline, ACS (148-24-3)
Listed on the Canadian DSL (Domestic Substances List)
WHMIS Classification Class D Division 2 Subdivision B - Toxic material causing other toxic effects

EU-Regulations
No additional information available

National regulations

Acetic Acid (64-19-7)
Listed on the Canadian IDL (Ingredient Disclosure List)
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8-Hydroxyquinoline, ACS (148-24-3)
Listed on the Canadian IDL (Ingredient Disclosure List)

15.3. US State regulations
California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information
Revision date : 09/02/2016
Other information : None.

Full text of H-phrases: see section 16:

H226  Flammable liquid and vapor
H302  Harmful if swallowed
H314  Causes severe skin burns and eye damage
H315  Causes skin irritation
H318  Causes serious eye damage
H319  Causes serious eye irritation
H335  May cause respiratory irritation
H402  Harmful to aquatic life

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
NFPA fire hazard : 0 - Materials that will not burn.
NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

HMIS III Rating
Health : 1 Slight Hazard - Irritation or minor reversible injury possible
Flammability : 0 Minimal Hazard - Materials that will not burn
Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.
Personal protection : B
   B - Safety glasses, Gloves

SDS US LabChem

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