1 Identification

- **Product identifier**
  - **Trade name:** 7-amino-4-hydroxynaphthalene-2-sulphonic acid
  - **Part number:** N-0959
  - **CAS Number:** 87-02-5
  - **EC number:** 201-718-9
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:**
    ULTRA Scientific, Inc.
    250 Smith Street
    North Kingstown, RI 02852
    USA
  - **Information department:**
    Telephone: (401) 294-9400
    Fax: (401) 295-2300
    E-mail: regulatory@ultrasci.com
  - **Emergency telephone number:**
    US: +1-800-424-9300
    Outside US: +1-703-527-3887

2 Hazard(s) identification

- **Classification of the substance or mixture**
  - GHS05 Corrosion
    Skin Corr. 1B  H314  Causes severe skin burns and eye damage.
  - **Label elements**
  - **GHS label elements**
    The substance is classified and labeled according to the Globally Harmonized System (GHS).
  - **Hazard pictograms**
  - GHS05

- **Signal word** Danger
- **Hazard-determining components of labeling:**
  7-amino-4-hydroxynaphthalene-2-sulphonic acid
- **Hazard statements**
  Causes severe skin burns and eye damage.
- **Precautionary statements**
  Do not breathe dusts or mists.
  Wash thoroughly after handling.
  Wear protective gloves/protective clothing/eye protection/face protection.
  If swallowed: Rinse mouth. Do NOT induce vomiting.
  If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

(Contd. on page 2)
Trade name: 7-amino-4-hydroxynaphthalene-2-sulphonic acid

IF INHALED: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Specific treatment (see on this label). Wash contaminated clothing before reuse. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations.

- Classification system:
  - NFPA ratings (scale 0 - 4)
    - Health = 3
    - Fire = 0
    - Reactivity = 0
  
- HMIS-ratings (scale 0 - 4)
  - HEALTH
    - Health = 3
  - FIRE
    - Fire = 0
  - REACTIVITY
    - Reactivity = 0

- Other hazards
  - Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.

3 Composition/information on ingredients

- Chemical characterization: Substances
- CAS No. Description
  87-02-5 7-amino-4-hydroxynaphthalene-2-sulphonic acid
- Identification number(s)
  - EC number: 201-718-9

4 First-aid measures

- Description of first aid measures
  - General information: Immediately remove any clothing soiled by the product.
  - After inhalation: In case of unconsciousness place patient stably in side position for transportation.
  - After skin contact: Immediately wash with water and soap and rinse thoroughly.
  - After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
  - After swallowing: Drink copious amounts of water and provide fresh air. Immediately call a doctor.
- Information for doctor:
  - Most important symptoms and effects, both acute and delayed: No further relevant information available.
  - Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
Trade name: 7-amino-4-hydroxynaphthalene-2-sulphonic acid

· Special hazards arising from the substance or mixture
  During heating or in case of fire poisonous gases are produced.
· Advice for firefighters
· Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures
  Mount respiratory protective device.
  Wear protective equipment. Keep unprotected persons away.
· Environmental precautions: Do not allow to enter sewers/ surface or ground water.
· Methods and material for containment and cleaning up:
  Use neutralizing agent.
  Dispose contaminated material as waste according to item 13.
  Ensure adequate ventilation.
· Reference to other sections
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.
· Protective Action Criteria for Chemicals
  · PAC-1:
    Substance is not listed.
  · PAC-2:
    Substance is not listed.
  · PAC-3:
    Substance is not listed.

7 Handling and storage

· Handling:
  · Precautions for safe handling
    Thorough dedusting.
    Ensure good ventilation/exhaustion at the workplace.
  · Information about protection against explosions and fires: Keep respiratory protective device available.
· Conditions for safe storage, including any incompatibilities
· Storage:
  · Requirements to be met by storerooms and receptacles: No special requirements.
  · Information about storage in one common storage facility: Not required.
  · Further information about storage conditions: Keep receptacle tightly sealed.
  · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

· Additional information about design of technical systems: No further data; see item 7.
Trade name: 7-amino-4-hydroxynaphthalene-2-sulphonic acid

· Control parameters
  · Components with limit values that require monitoring at the workplace:
    The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.
    The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
    At this time, the remaining constituent has no known exposure limits.
    At this time, the other constituents have no known exposure limits.
  · Additional information: The lists that were valid during the creation were used as basis.

· Exposure controls
  · Personal protective equipment:
    · General protective and hygienic measures:
      Keep away from foodstuffs, beverages and feed.
      Immediately remove all soiled and contaminated clothing.
      Wash hands before breaks and at the end of work.
      Avoid contact with the eyes and skin.
  · Breathing equipment:
    In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
  · Protection of hands:
    · 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
      The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
    · Eye protection:
      Tightly sealed goggles

9 Physical and chemical properties

· Information on basic physical and chemical properties
  · General Information
  · Appearance:
    · Form: Powder
    · Color: Beige
    · Odor: Characteristic
    · Odor threshold: Not determined.
  · pH-value: Not applicable.
  · Change in condition
    · Melting point/Melting range: Undetermined.
### Trade name: 7-amino-4-hydroxynaphthalene-2-sulphonic acid

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling point/Boiling range</td>
<td>Undetermined</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability (solid, gaseous)</td>
<td>Product is not flammable</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not determined</td>
</tr>
<tr>
<td>Auto igniting</td>
<td>Not determined</td>
</tr>
<tr>
<td>Danger of explosion</td>
<td>Product does not present an explosion hazard</td>
</tr>
<tr>
<td>Explosion limits</td>
<td></td>
</tr>
<tr>
<td>Lower</td>
<td>Not determined</td>
</tr>
<tr>
<td>Upper</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability (solid, gaseous)</td>
<td>Product is not flammable</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not determined</td>
</tr>
<tr>
<td>Auto igniting</td>
<td>Not determined</td>
</tr>
<tr>
<td>Danger of explosion</td>
<td>Product does not present an explosion hazard</td>
</tr>
<tr>
<td>Explosion limits</td>
<td></td>
</tr>
<tr>
<td>Lower</td>
<td>Not determined</td>
</tr>
<tr>
<td>Upper</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Density at 20 °C (68 °F)</td>
<td>0.5 g/cm³ (4.1725 lbs/gal)</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Solubility in / Miscibility with Water</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>Not determined</td>
</tr>
<tr>
<td>Viscosity</td>
<td></td>
</tr>
<tr>
<td>Dynamic</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Kinematic</td>
<td>Not applicable</td>
</tr>
<tr>
<td>VOC content</td>
<td>0.00 %</td>
</tr>
<tr>
<td>0.0 g/l / 0.00 lb/gl</td>
<td></td>
</tr>
<tr>
<td>Other information</td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

### Stability and reactivity

- **Reactivity**: No further relevant information available.
- **Chemical stability**: No decomposition if used according to specifications.
- **Thermal decomposition / conditions to be avoided**: No dangerous reactions known.
- **Possibility of hazardous reactions**: No further relevant information available.
- **Conditions to avoid**: No further relevant information available.
- **Incompatible materials**: No further relevant information available.
- **Hazardous decomposition products**: No dangerous decomposition products known.

### Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**:
  - **LD/LC50 values that are relevant for classification**:
    - 87-02-5 7-amino-4-hydroxynaphthalene-2-sulphonic acid
    - Oral LD50 11,500 mg/kg (rat)
  - **Primary irritant effect**: Caustic effect on skin and mucous membranes.
  - **on the skin**: Caustic effect on skin and mucous membranes.
  - **on the eye**: Strong caustic effect.
Safety Data Sheet
acc. to OSHA HCS

Trade name: 7-amino-4-hydroxynaphthalene-2-sulphonic acid

- Sensitization: No sensitizing effects known.
- Additional toxicological information:
  Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

- Carcinogenic categories
  - IARC (International Agency for Research on Cancer)
    Substance is not listed.
  - NTP (National Toxicology Program)
    Substance is not listed.
  - OSHA-Ca (Occupational Safety & Health Administration)
    Substance is not listed.

12 Ecological information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability No further relevant information available.
  - Behavior in environmental systems:
  - Bioaccumulative potential No further relevant information available.
  - Mobility in soil No further relevant information available.
  - Additional ecological information:
  - General notes:
    Water hazard class 1 (Assessment by list): slightly hazardous for water
    Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
    Must not reach bodies of water or drainage ditch undiluted or unneutralized.
  - Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.
  - Other adverse effects No further relevant information available.

13 Disposal considerations

- Waste treatment methods
  - Recommendation:
    Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packagings:
  - Recommendation: Disposal must be made according to official regulations.

14 Transport information

- UN-Number
  - DOT, IMDG, IATA UN2585
- UN proper shipping name
  - DOT Alkyl sulfonic acids, solid
  - IMDG, IATA ALKYSULPHONIC ACIDS, SOLID

(Contd. on page 7)
Trade name: 7-amino-4-hydroxynaphthalene-2-sulphonic acid

- Transport hazard class(es)
  - DOT
    - Class 8 Corrosive substances
    - Label 8

- IMDG, IATA
  - Class 8 Corrosive substances
  - Label 8
  - Packing group DOT, IMDG, IATA III
  - Environmental hazards: Not applicable.
  - Special precautions for user Warning: Corrosive substances
    - Danger code (Kemler): 80
    - EMS Number: F-A,S-B
    - Segregation groups Acids
    - Stowage Category A
  - Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.
  - Transport/Additional information:
    - DOT
      - Quantity limitations
        On passenger aircraft/rail: 25 kg
        On cargo aircraft only: 100 kg
    - IMDG
      - Limited quantities (LQ) 5 kg
      - Code: E1
      - Exempted quantities (EQ)
        Maximum net quantity per inner packaging: 30 g
        Maximum net quantity per outer packaging: 1000 g
      - UN "Model Regulation": UN 2585 ALKYL SULFONIC ACIDS, SOLID, 8, III

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Sara
    - Section 355 (extremely hazardous substances):
      Substance is not listed.
  - Section 313 (Specific toxic chemical listings):
    Substance is not listed.
Trade name: 7-amino-4-hydroxynaphthalene-2-sulphonic acid

- TSCA (Toxic Substances Control Act):
  Substance is listed.

- Proposition 65
- Chemicals known to cause cancer:
  Substance is not listed.

- Chemicals known to cause reproductive toxicity for females:
  Substance is not listed.

- Chemicals known to cause reproductive toxicity for males:
  Substance is not listed.

- Chemicals known to cause developmental toxicity:
  Substance is not listed.

- Carcinogenic categories
- EPA (Environmental Protection Agency)
  Substance is not listed.

- TLV (Threshold Limit Value established by ACGIH)
  Substance is not listed.

- NIOSH-Ca (National Institute for Occupational Safety and Health)
  Substance is not listed.

- GHS label elements
  The substance is classified and labeled according to the Globally Harmonized System (GHS).

- Hazard pictograms
  GHS05

- Signal word Danger

- Hazard-determining components of labeling:
  7-amino-4-hydroxynaphthalene-2-sulphonic acid

- Hazard statements
  Causes severe skin burns and eye damage.

- Precautionary statements
  Do not breathe dusts or mists.
  Wash thoroughly after handling.
  Wear protective gloves/protective clothing/eye protection/face protection.
  If swallowed: Rinse mouth. Do NOT induce vomiting.
  If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
  IF INHALED: Remove person to fresh air and keep comfortable for breathing.
  If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
  Continue rinsing.
  Immediately call a poison center/doctor.
  Specific treatment (see on this label).
  Wash contaminated clothing before reuse.
  Store locked up.
  Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 9)
Trade name: 7-amino-4-hydroxynaphthalene-2-sulphonic acid

- **Chemical safety assessment**: A Chemical Safety Assessment has not been carried out.

**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Date of preparation / last revision**: 04/20/2018 / -
- **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)
  - IMDG: International Maritime Code for Dangerous Goods
  - DOT: US Department of Transportation
  - IATA: International Air Transport Association
  - ACGIH: American Conference of Governmental Industrial Hygienists
  - EINECS: European Inventory of Existing Commercial Chemical Substances
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - NFPA: National Fire Protection Association (USA)
  - HMIS: Hazardous Materials Identification System (USA)
  - VOC: Volatile Organic Compounds (USA, EU)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative
  - NIOSH: National Institute for Occupational Safety
  - OSHA: Occupational Safety & Health
  - TLV: Threshold Limit Value
  - PEL: Permissible Exposure Limit
  - REL: Recommended Exposure Limit
  - Skin Corr. 1B: Skin corrosion/irritation – Category 1B