



SAFETY DATA SHEET

Preparation Date: 3/12/2014 Revision date 4/1/2019 Revision Number: G2

1. IDENTIFICATION

Product identifier

Product code: A1116

Product Name: 4-AMINO-3-HYDROXY-1-NAPHTHALENE SULFONIC ACID, REAGENT, ACS

Other means of identification

Synonyms: 1-Amino-2-naphthol-4-sulfonic acid

1-Amino-4-sulfo-2-naphthol

2-Hydroxyl-4-sulfo-1-naphthylamine

CAS #: 116-63-2
RTECS # QK1292000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use:
Uses advised against
No information available.
No information available

Supplier: Spectrum Chemical Mfg. Corp

14422 South San Pedro St. Gardena, CA 90248 (310) 516-8000

Order Online At: https://www.spectrumchemical.com

Emergency telephone number Chemtrec 1-800-424-9300

Contact Person:Tom Tyner (USA - West Coast)Contact Person:Ibad Tirmiz (USA - East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

| Skin corrosion/irritation | Category 2 |
|--|-------------|
| Serious eye damage/eye irritation | Category 2A |
| Specific target organ toxicity (single exposure) | Category 3 |

Label elements

Warning

Hazard statements

Causes skin irritation

Causes serious eye irritation May cause respiratory irritation

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Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Not available

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

IF IN EYES: 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.

IF ON SKIN: Wash with plenty of water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash it before reuse

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Precautionary Statements - Storage

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

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | CAS No | Weight-% |
|--|----------|----------|
| 4-Amino-3-hydroxy-1-naphthalene Sulfonic | 116-63-2 | 100 |
| Acid | | |

4. FIRST AID MEASURES

First aid measures

General Advice: National Capital Poison Center in the United States can provide assistance if you

have a poison emergency and need to talk to a poison specialist. Call

1-800-222-1222.

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothing and

shoes. Get medical attention. If skin irritation persists, call a physician.

Eye Contact: Flush eyes with water for 15 minutes. Get medical attention.

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give

oxygen. Get medical attention.

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Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an

unconscious person. Obtain medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms Irritating to eyes and skin

Irritating to respiratory system
It may cause dermatitis

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically.

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Dry chemical. Carbon dioxide (CO2). Water spray mist or

foam.

Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical

Hazardous combustion products Carbon Monoxide, Carbon Dioxide. Nitrogen oxides (NOx).

Sulfur oxides.

Specific hazardsMay be combustible at high temperatures.

Special Protective Actions for Firefighters

Specific Methods: No information available

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus

pressure-demand, MSHA/NIOSH (approved or equivalent)

and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Use personal

protective equipment. Avoid dust formation. Remove all sources of ignition.

Environmental precautions No information available.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Cover with plastic sheet to prevent

spreading.

Methods for cleaning up Sweep up and shovel into suitable containers for disposal. Clean contaminated

surface thoroughly.

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7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not ingest. Do not breathe vapors/dust. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

Incompatible Materials:

Strong oxidizing agents Strong bases Acid anhydrides Acid chlorides

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

| Component | CAS No | OSHA | NIOSH | ACGIH | AIHA WEEL |
|-------------------------|----------|------|-------|-------|-----------|
| 4-Amino-3-hydroxy-1-na | 116-63-2 | None | None | None | None |
| phthalene Sulfonic Acid | | | | | |

Canada

| Component | CAS No | Canada - Alberta | Canada - British Columbia | Canada - Ontario | Canada - Quebec |
|--|--------|------------------|------------------------------|------------------|-----------------|
| 4-Amino-3-hydroxy-1-na phthalene Sulfonic Acid | | None | None | None | None |

Australia and Mexico

| Component | CAS No | Australia | Mexico |
|---|----------|-----------|--------|
| 4-Amino-3-hydroxy-1-naphthalene Sulfonic Acid | 116-63-2 | None | None |

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

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Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection: Goggles

Skin and body protection: Long sleeved clothing

Chemical resistant apron

Gloves

Respiratory protection: Wear respirator with dust filter.

Hygiene measures: Avoid contact with skin, eyes and clothing. Wash hands before breaks and

immediately after handling the product When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Appearance: Color:

Solid Powder. White to Red and Pink. Purple. Light

Purple.

Odor: Taste Formula

Molecular/Formula weight (g/mole): Flammability (solid, gas)

Flashpoint (°C/°F):

239.25 no data available No information available

Flash Point Tested according to: Autoignition Temperature (°C/°F): Lower Explosion Limit (%):

Not applicable No information available No information available

Upper Explosion Limit (%): Melting point/range(°C/°F): Decomposition temperature(°C/°F):

No information available 295 °C/563 °F No information available

Boiling point/range(°C/°F): Bulk density: Density (g/cm3):

No information available No information available No information available

Specific gravity: pH Vapor pressure @ 20°C (kPa):

No information available
No information available
No information available

Evaporation rate:No information available

Vapor density:
VOC content (g/L):
No information available

No information available

Odor threshold (ppm): Partition coefficient Viscosity:

No information available (n-octanol/water): No information available

No information available

Miscibility: Solubility:

No information available
No information available

10. STABILITY AND REACTIVITY

Reactivity

Reactive with oxidizing agents Reacts with strong bases

Chemical stability

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Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

<u>Conditions to avoid:</u> Heat. Avoid dust formation. Incompatible materials.

Incompatible Materials: Strong oxidizing agents

Strong bases Acid anhydrides Acid chlorides

Hazardous decomposition

products:

Carbon monoxide. Carbon dioxide. Nitrogen oxides (NOx). Sulfur oxides.

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:

Ingestion. Inhalation.

Acute Toxicity

Component Information

4-Amino-3-hydroxy-1-naphthalene Sulfonic Acid
CAS No 116-63-2

LD50/oral/rat = No information available

LD50/oral/mouse = No information available

LD50/dermal/rabbit = No information available

LD50/dermal/rat = No information available

LC50/inhalation/rat = No information available

LC50/inhalation/mouse = No information available

Other LD50 or LC50information = No information available

Product Information

LD50/oral/rat =

Value - Acute Tox = No information available

LD50/oral/mouse =

Value - Acute Tox Oral = No information available

LD50/dermal/rabbit

Value - Acute Tox = No information available

LD50/dermal/rat

VALUE - Acute Tox Dermal = No information available

LC50/inhalation/rat

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VALUE-Vapor = No information available
VALUE-Gas = No information available
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse

VALUE-Vapor = No information available
VALUE - Gas = No information available
VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: Causes skin irritation.

Eye Contact: Causes eye irritation.

Inhalation Irritating to respiratory system.

Ingestion Low hazard. Health injuries are not known or expected under normal use. May

cause digestive (gastointestinal) tract irritation.

Aspiration hazard No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity Repeated or prolonged skin contact may cause skin sensitization. Prolonged or

repeated skin contact may cause dermatitis.

Sensitization: No information available.

Mutagenic Effects: No information available

Carcinogenic effects: Not considered carcinogenic.

| Component | CAS No | IARC | ACGIH - Carcinogens | NTP | OSHA HCS - Carcinogens | Australia - Notifiable Carcinogenic Substances | Australia - Prohibited Carcinogenic Substances |
|--|----------|------------|------------------------|------------|---------------------------|---|---|
| 4-Amino-3-hydroxy-1-naphth alene Sulfonic Acid | 116-63-2 | Not listed | Not listed | Not listed | Not listed | Not listed | Not listed |

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity No data is available

Reproductive Effects: No information available Developmental Effects: No information available Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure respiratory system. **STOT - repeated exposure**No information available.

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Target Organs: No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: No data available.

Persistence and degradability: No information available

Bioaccumulative potential: No information available.

Mobility in soilNo information availableOther adverse effectsNo information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

| Component | CAS No | RCRA - F Series Wastes | RCRA - K Series Wastes | RCRA - P Series Wastes | RCRA - U Series Wastes |
|------------------------------|----------|---------------------------|---------------------------|---------------------------|---------------------------|
| 4-Amino-3-hydroxy-1-naphthal | 116-63-2 | None | None | None | None |
| ene Sulfonic Acid | | | | | |

14. TRANSPORT INFORMATION

DOT

UN-No: Not Regulated

Proper Shipping Name: No information available Hazard Class No information available Subsidiary Class No information available Packing group: No information available Emergency Response Guide No information available

Number

Marine PollutantNo data availableDOT RQ (lbs):No information availableSpecial ProvisionsNo Information availableSymbol(s):No information availableDescription:No information available

TDG (Canada)

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class
Subsidiary Risk:
Packing Group:
Marine Pollutant

No information available
No information available
No information available
No Information available

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Description: No information available

ADR

UN Number Not regulated

Proper Shipping Name:
Transport hazard class(es)
Packing group
Subsidiary Risk:

No information available
No information available
No information available

IMDG

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
Packing Group:
Marine Pollutant

No information available
No information available
No information available
No information available

RID

UN Number Not Regulated

Proper Shipping Name:
Transport hazard class(es)
Subsidiary Risk:
Packing group

No information available
No information available
No information available
No information available

ICAO (air)

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class
Subsidiary Risk:
No information available
No information available
No information available
No information available

IATA

UN Number Not Regulated

Proper Shipping Name:
Transport hazard class(es)
Subsidiary Risk:
Packing group
Precautionary Statements No information available
No information available
No information available
No information available

Response

Special Provisions No information available

15. REGULATORY INFORMATION

International Inventories

| Component | CAS No | U.S. TSCA | KOREA KECL | Philippines (PICCS) | Japan ENCS | China IECSC | Australia (AICS) | EINECS-No. |
|-----------------------|----------|--------------|-------------|------------------------|------------|-------------|---------------------|------------|
| 4-Amino-3-hydroxy-1-n | 116-63-2 | PresentACTIV | Not present | Present | Present | Present | Present | Present |
| aphthalene Sulfonic | | E | | | (4)-437 | | | 204-147-3 |
| Acid | | | | | ` ' | | | |

U.S. Regulations

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

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This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

| Component | CAS No | Carcinogen | Developmental Toxicity | Male | Female |
|---|----------|------------|------------------------|--------------|--------------|
| | | | | Reproductive | Reproductive |
| | | | | Toxicity | Toxicity: |
| 4-Amino-3-hydroxy-1-naphthalene Sulfonic Acid | 116-63-2 | Not Listed | Not Listed | Not Listed | Not Listed |

CERCLA/SARA

| Component | CAS No | CERCLA - Hazardous Substances and their Reportable Quantities | Section 302 Extremely Hazardous Substances and TPQs | Section 302 Extremely Hazardous Substances and RQs | Section 313 - Chemical Category | Section 313 - Reporting de minimis |
|--|----------|---|---|--|------------------------------------|--|
| 4-Amino-3-hydroxy- 1-naphthalene Sulfonic Acid | 116-63-2 | None | None | None | None | None |

U.S. TSCA

| Component | | TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS) | TSCA 8(d) -Health and Safety Reporting |
|--|----------|---|---|
| 4-Amino-3-hydroxy-1-naphthalene Sulfonic Acid | 116-63-2 | Not Applicable | Not Applicable |

Canada

WHIMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

The WHMIS 2015 classification of this product has not been validated or reviewed yet.

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

DSL/NDSL

| Component | CAS No | Canada (DSL) | Canada (NDSL) |
|---------------------------------|----------|--------------|---------------|
| 4-Amino-3-hydroxy-1-naphthalene | 116-63-2 | Present | Not Listed |
| Sulfonic Acid | | | |

| Component | CAS No | CEPA Schedule I - Toxic Substances | |
|---|----------|--------------------------------------|--|
| 4-Amino-3-hydroxy-1-naphthalene Sulfonic Acid | 116-63-2 | Not listed | |
| Component | CAS No | CEPA - 2010 Greenhouse Gases Subject | |
| | | to Mandatory Reporting | |
| 4-Amino-3-hydroxy-1-naphthalene Sulfonic Acid | 116-63-2 | Not listed | |

EU Classification

EU GHS - SV - CLP 1272/2008

| Component | CAS No | EU GHS - SV - CLP (1272/2008) |
|---|----------|-------------------------------|
| 4-Amino-3-hydroxy-1-naphthalene Sulfonic Acid | 116-63-2 | |

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EU - CLP (1272/2008)

R-phrase(s)

R36/37/38 - Irritating to eyes, respiratory system and skin

S -phrase(s)

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

| Component | CAS No | Concentration Limits: | Safety Phrases |
|---|----------|--------------------------|----------------|
| 4-Amino-3-hydroxy-1-nap hthalene Sulfonic Acid | 116-63-2 | No information | |

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

Xi - Irritant

Χi



16. OTHER INFORMATION

Preparation Date:3/12/2014Revision date4/1/2019Prepared by:Sonia Owen

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet

Product code: A1116