SECTION 1 – PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: Beta Naphthol
SYNONYM: 2-Naphthol, 2-Hydroxynaphthalene
FORMULA: C10H8O
CAS NUMBER: 135-19-3

SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>PRODUCT NAME</th>
<th>CAS NUMBER</th>
<th>PURITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beta Naphthol</td>
<td>135-19-3</td>
<td>100%</td>
</tr>
</tbody>
</table>

SECTION 3 – HAZARDS IDENTIFICATION

Emergency Overview
OSHA Hazards
Target Organ Effect, Harmful by ingestion., Irritant
Target Organs
Damage to the eyes.

HMIS Classification
Health Hazard: 2
Chronic Health Hazard: *
Flammability: 1
Physical hazards: 0

NFPA Rating
Health Hazard: 2
Fire: 1
Reactivity Hazard: 0

Potential Health Effects
Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.
Skin: May be harmful if absorbed through skin. Causes skin irritation.
Eyes: Causes eye irritation.
Ingestion: Harmful if swallowed.

SECTION 4 – FIRST AID MEASURES

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
Material Safety Data Sheet  
(Beta Naphthol)

If inhaled  
If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician.

In case of skin contact  
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact  
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed  
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

SECTION 5 – FIRE FIGHTING MEASURES

Flammable properties
Flash point 153 °C (307 °F) - closed cup  
Ignition temperature no data available

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters
Wear self contained breathing apparatus for fire fighting if necessary.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions
Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods for cleaning up
Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

SECTION 7- HANDLING AND STORAGE

Handling
Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Storage
Keep container tightly closed in a dry and well-ventilated place. Light sensitive.

SECTION 8 - EXPOSURE CONTROLS/ PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment
### Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### Hand protection
Handle with gloves.

### Eye protection
Safety glasses

### Skin and body protection
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

### Hygiene measures
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td></td>
</tr>
<tr>
<td>Form</td>
<td>solid</td>
</tr>
<tr>
<td><strong>Safety data</strong></td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>no data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>120 - 122 °C (248 - 252 °F)</td>
</tr>
<tr>
<td>Boiling point</td>
<td>285 - 286 °C (545 - 547 °F)</td>
</tr>
<tr>
<td>Flash point</td>
<td>153 °C (307 °F) - closed cup</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>no data available</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>no data available</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>no data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>13 hPa (10 mmHg) at 145.5 °C (293.9 °F)</td>
</tr>
<tr>
<td>Water solubility</td>
<td>no data available</td>
</tr>
</tbody>
</table>

### SECTION 10 – STABILITY AND REACTIVITY DATA

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Storage stability</strong></td>
<td>Stable under recommended storage conditions.</td>
</tr>
<tr>
<td><strong>Materials to avoid</strong></td>
<td>Strong oxidizing agents, Strong bases</td>
</tr>
<tr>
<td><strong>Hazardous decomposition products</strong></td>
<td>Hazardous decomposition products formed under fire conditions. - Carbon oxides</td>
</tr>
</tbody>
</table>

### SECTION 11 – TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acute toxicity</strong></td>
<td></td>
</tr>
<tr>
<td>LD50 Oral - rat</td>
<td>1,960 mg/kg</td>
</tr>
<tr>
<td>LD50 Oral - rat</td>
<td>1,960 mg/kg</td>
</tr>
<tr>
<td>LD50 Dermal - rabbit</td>
<td>&gt; 10,000 mg/kg</td>
</tr>
</tbody>
</table>
LD50 Dermal - rabbit - > 10,000 mg/kg

Irritation and corrosion
Skin - rabbit - Mild skin irritation - 24 h
Eyes - rabbit - Moderate eye irritation

Sensitisation
no data available

Chronic exposure
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Signs and Symptoms of Exposure
Depending on the intensity and duration of exposure, effects may vary from mild irritation to severe destruction of tissue., Damage to the eyes., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Potential Health Effects
Inhalation May be harmful if inhaled. Causes respiratory tract irritation.
Skin May be harmful if absorbed through skin. Causes skin irritation.
Eyes Causes eye irritation.
Ingestion Harmful if swallowed.
Target Organs Damage to the eyes.,

Additional Information
RTECS: QL2975000

SECTION 12 – ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)
Biodegradability Zahn-Wellens Test
Result: 92 % - Readily biodegradable.

Ecotoxicity effects
Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 3.46 mg/l - 96 h

Further information on ecology
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic organisms.

SECTION 13 – DISPOSAL CONSIDERATION

Product
Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.
Contaminated packaging
Dispose of as unused product.

SECTION 14 - TRANSPORTATION DATA

DOT (US)
Not dangerous goods

IMDG
UN-Number: 3077  Class: 9  Packing group: III  EMS-No: F-A, S-F
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2-Naphthol)
Marine pollutant: No

IATA
UN-Number: 3077  Class: 9  Packing group: III
Proper shipping name: Environmentally hazardous substance, solid n.o.s. (2-Naphthol)

SECTION 15 – REGULATORY INFORMATION

OSHA Hazards
Target Organ Effect, Harmful by ingestion., Irritant

DSL Status
All components of this product are on the Canadian DSL list.

SARA 302 Components
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards
Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components
No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components
2-Naphthol  CAS-No. 135-19-3  Revision Date

New Jersey Right To Know Components
2-Naphthol  CAS-No. 135-19-3  Revision Date

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.
Material Safety Data Sheet
(Beta Naphthol)

SECTION 16 – OTHER INFORMATION

Disclaimer

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.