

Material Safety Data Sheet

1-Naphthol >98%

ACC# 26135

Section 1 - Chemical Product and Company Identification

MSDS Name: 1-Naphthol >98%

Catalog Numbers: AC128190000, AC128190050, AC128191000, AC415300000, AC415302500, 12819-5000, 41530-0010, B12281, N12-100

Synonyms: 1-Naphthalenol; alpha-Naphthol; 1-Hydroxynaphthalene; alpha-Hydroxynaphthalene.

Company Identification:

Fisher Scientific
1 Reagent Lane
Fair Lawn, NJ 07410

For information, call: 201-796-7100

Emergency Number: 201-796-7100

For CHEMTREC assistance, call: 800-424-9300

For International CHEMTREC assistance, call: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
90-15-3	1-Naphthol	>98	201-969-4

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: gray or beige to brown flakes.

Warning! Causes severe eye irritation and possible eye injury. Harmful if swallowed, inhaled, or absorbed through the skin. Causes skin and respiratory tract irritation. May cause blood abnormalities. May cause liver and kidney damage.

Target Organs: Blood, kidneys, liver, eyes.

Potential Health Effects

Eye: May cause eye injury.

Skin: Causes skin irritation. Harmful if absorbed through the skin.

Ingestion: Harmful if swallowed. Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May cause burns to the digestive tract. Overexposure may result in hemolytic anemia, leading to kidney failure. Symptoms include diarrhea, headache, perspiration, listlessness and

Inhalation: Harmful if inhaled. May cause severe irritation of the upper respiratory tract with pain, burns, and inflammation.

Chronic: May cause liver and kidney damage. May cause anemia and other blood cell abnormalities. Chronic inhalation, skin absorption or ingestion of naphthalene have caused severe hemolytic anemia.

Section 4 - First Aid Measures

Eyes: In case of contact, immediately flush eyes with plenty of water for a t least 15 minutes. Get medical aid immediately.

Skin: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid immediately. Wash clothing before reuse.

Ingestion: If swallowed, do NOT induce vomiting. Get medical aid immediately. If victim is fully

conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. This material in sufficient quantity and reduced particle size is capable of creating a dust explosion.

Extinguishing Media: Use dry chemical, carbon dioxide, or appropriate foam.

Flash Point: 125 deg C (257.00 deg F)

Autoignition Temperature: 541 deg C (1,005.80 deg F)

Explosion Limits, Lower: .80 vol %

Upper: 5.00 vol %

NFPA Rating: (estimated) Health: 2; Flammability: 1; Instability: 0

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Do not breathe dust.

Storage: Keep container closed when not in use. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Storage under a nitrogen blanket has been recommended. Store protected from light.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
1-Naphthol	none listed	none listed	none listed

OSHA Vacated PELs: 1-Naphthol: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Flakes

Appearance: gray or beige to brown

Odor: slight phenolic odor

pH: Not available.

Vapor Pressure: 1 mm Hg @ 94 deg C

Vapor Density: 4.5 (air=1)

Evaporation Rate: Not available.

Viscosity: Not available.

Boiling Point: 278 - 280 deg C @ 760 mmHg

Freezing/Melting Point: 94 - 98 deg C

Decomposition Temperature: Not available.

Solubility: practically insoluble in water

Specific Gravity/Density: Not available.

Molecular Formula: C₁₀H₈O

Molecular Weight: 144.17

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures. Darkens on exposure to light.

Conditions to Avoid: Light, dust generation, exposure to air.

Incompatibilities with Other Materials: Strong oxidizing agents, strong bases, acid chlorides, acid anhydrides, halogens.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, acrid smoke and fumes.

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#:

CAS# 90-15-3: QL2800000

LD50/LC50:

CAS# 90-15-3:

Draize test, rabbit, eye: 1 mg Severe;

Draize test, rabbit, skin: 500 mg/24H Severe;

Inhalation, rat: LC50 = >420 mg/m³/1H;

Oral, mouse: LD50 = 275 mg/kg;

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Oral, rabbit: LD50 = 9 gm/kg;

Oral, rabbit: LD50 = 9000 mg/kg;

Oral, rat: LD50 = 1870 mg/kg;

Oral, rat: LD50 = 2000 mg/kg;

Skin, rabbit: LD50 = 880 mg/kg;

Skin, rabbit: LD50 = 880 mg/kg;

Carcinogenicity:

CAS# 90-15-3: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No data available.

Teratogenicity: 1-Naphthol was not teratogenic when tested in mice or rats. The rat study used doses as high as 5% in the diet, which produced mild maternal toxicity but no effects on the offspring.

Reproductive Effects: No data available.

Mutagenicity: See actual entry in RTECS for complete information.

Neurotoxicity: No data available.

Other Studies:

Section 12 - Ecological Information

No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	TOXIC SOLIDS, ORGANIC, N.O.S.	CORROSIVE SOLID NOS (1-NAPHTHOL)
Hazard Class:	6.1	8
UN Number:	UN2811	UN1759
Packing Group:	III	II

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 90-15-3 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 90-15-3: immediate, delayed.

Section 313 No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 90-15-3 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

XN

Risk Phrases:

R 21/22 Harmful in contact with skin and if swallowed.

R 37/38 Irritating to respiratory system and skin.

R 41 Risk of serious damage to eyes.

Safety Phrases:

S 22 Do not breathe dust.

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 37/39 Wear suitable gloves and eye/face protection.

WGK (Water Danger/Protection)

CAS# 90-15-3: 1

Canada - DSL/NDSL

CAS# 90-15-3 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of D1B, D2B.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

CAS# 90-15-3 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

MSDS Creation Date: 8/19/1998

Revision #9 Date: 2/15/2008

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.