

Material Safety Data Sheet

2-Naphthol, 99+%

ACC# 83203

Section 1 - Chemical Product and Company Identification

MSDS Name: 2-Naphthol, 99+%**Catalog Numbers:** AC180820000, AC180820050, AC180821000, AC180825000**Synonyms:** 2-Hydroxynaphthalene; beta-Naphthol; beta-Hydroxynaphthalene; Isonaphthol; beta-Monoxynaphthalene; Naphthalenol; Naphthol B; beta-Naphthyl alcohol; beta-Naphthyl hydroxide**Company Identification:**

Acros Organics N.V.

One Reagent Lane

Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01**For emergencies in the US, call CHEMTREC:** 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
135-19-3	2-Naphthol	99+	205-182-7

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: white or yellow-white crystals.

Danger! Highly toxic. May be fatal if inhaled. Causes eye, skin, and respiratory tract irritation. Aspiration hazard if swallowed. Can enter lungs and cause damage. May be harmful if swallowed. Light sensitive.

Target Organs: Blood, kidneys, liver, eyes.

Potential Health Effects

Eye: Causes moderate eye irritation. May cause lens opacities and retinal changes.**Skin:** Causes mild skin irritation.**Ingestion:** Aspiration hazard. May cause irritation of the digestive tract. May be harmful if swallowed.**Inhalation:** May be fatal if inhaled. Causes respiratory tract irritation.**Chronic:** Chronic inhalation may cause effects similar to those of acute inhalation. Laboratory experiments have resulted in mutagenic effects. Prolonged exposure may cause abdominal pain, nausea, vomiting, and possible convulsions. Intestinal and percutaneous absorption may lead to severe nephritis, liver injury and acute hemolytic anemia.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

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

Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

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.

Extinguishing Media: Use extinguishing media most appropriate for the surrounding fire. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Flash Point: 160 deg C (320.00 deg F)

Autoignition Temperature: Not available.

Explosion Limits, Lower:Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 4; 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. Clean up spills immediately, observing precautions in the Protective Equipment section. If sweeping is necessary, use a dust suppressant agent. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Minimize dust generation and accumulation. Do not get on skin and clothing. Do not ingest or inhale. Store protected from light. Use only in a chemical fume hood. Do not breathe dust or fumes.

Storage: Keep away from heat, sparks, and flame. Keep away from sources of ignition. Do not store in direct sunlight. Keep container closed when not in use. Store in a tightly closed container. Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from strong bases. Material darkens in color during storage.

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 only under a chemical fume hood.

Exposure Limits

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

OSHA Vacated PELs: 2-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: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Crystals

Appearance: white or yellow-white

Odor: Slight phenolic

pH: Not available.

Vapor Pressure: 10 mm Hg @145.5

Vapor Density: 4.97 (air=1)

Evaporation Rate: Not available.

Viscosity: Not available.

Boiling Point: 285 - 286 deg C @ 760.00mm Hg

Freezing/Melting Point: 120 - 124 deg C

Decomposition Temperature: 400 deg C

Solubility: Slightly soluble.

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. May discolor on exposure to light. Light sensitive.

Conditions to Avoid: Incompatible materials, light, dust generation, excess heat.

Incompatibilities with Other Materials: Strong oxidizing agents, strong bases, acid chlorides, acid anhydrides, antipyrine, camphor, ferric salts, menthol, phenols, potassium permanganate, urethane.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, toxic fumes of sodium oxide.

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#:**CAS#** 135-19-3: QL2975000**LD50/LC50:**

CAS# 135-19-3:

Draize test, rabbit, eye: 100 mg Moderate;
 Draize test, rabbit, skin: 500 mg/24H Mild;
 Inhalation, rat: LC50 = >770 mg/m³/1H;
 Oral, mouse: LD50 = 98 mg/kg;
 Oral, rabbit: LD50 = 5400 mg/kg;
 Oral, rat: LD50 = 1960 mg/kg;
 Oral, rat: LD50 = 1980 mg/kg;
 Skin, rabbit: LD50 = >10 gm/kg;

Carcinogenicity:

CAS# 135-19-3: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information found**Teratogenicity:** No information found**Reproductive Effects:** No information found**Mutagenicity:** DNA repair: Escherichia coli = 2 mg/disk. DNA repair: Bacillus subtilis = 5 gm/L.**Neurotoxicity:** No information found**Other Studies:**

Section 12 - Ecological Information

Ecotoxicity: No data available. Fish toxicity: LC50 fathead minnow 3.5 mg/L/96H LC50 rainbow trout 0.12 mg/L/27day Invertebrate toxicity: LC50 Daphnia magna 3.5 mg/L/48H EC50 Selenastrum capricornutum 19 mg/L/4H EC50 Photobacterium phosphoreum 0.275 ppm/5-30 min Microtox test (The Dictionary of Substances and their Effects, 1992).

Environmental: Degradation studies: Biodegradable (The Dictionary of Substances and their Effects, 1992).

Physical: No information available.

Other: Estimated Koc value = 0.45. This value indicates that 2-Naphthol has very high soil mobility and may not adsorb to suspended solids and sediments in water. Estimated BCF value = 0.26. This value suggests that the product will not bioconcentrate in aquatic organisms and will easily biodegrade in water.

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.	TOXIC SOLID ORGANIC NOS (2-NAPTHOL)
Hazard Class:	6.1	6.1
UN Number:	UN2811	UN2811
Packing Group:	III	III

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 135-19-3 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 # 135-19-3: 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# 135-19-3 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 20/22 Harmful by inhalation and if swallowed.

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

CAS# 135-19-3: 2

Canada - DSL/NDSL

CAS# 135-19-3 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of D1B.

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# 135-19-3 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information
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MSDS Creation Date: 2/25/1999**Revision #4 Date:** 11/20/2008

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.