

Material Safety Data Sheet

1-Naphthol, 99+%

ACC# 96649

Section 1 - Chemical Product and Company Identification

MSDS Name: 1-Naphthol, 99+%

Catalog Numbers: AC128190000, AC128190050, AC128191000, AC128195000

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

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
90-15-3	1-Naphthol	>99	201-969-4

Hazard Symbols: XN

Risk Phrases: 21/22 37/38 41

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: white to pink. May cause blood abnormalities. May cause reproductive and fetal effects. Light sensitive. Air sensitive. May cause liver and kidney damage. **Warning!** Harmful if swallowed, inhaled, or absorbed through the skin. Causes severe eye and skin irritation. Causes severe respiratory tract irritation. May be readily absorbed through the skin.

Target Organs: Blood, kidneys, liver, eyes.

Potential Health Effects

Eye: May cause eye injury.

Skin: May cause severe skin irritation. Harmful if absorbed through the skin.

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

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 at 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.

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. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State: Solid

Appearance: white to pink

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 @ 760mm Hg

Freezing/Melting Point: 95 - 96 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. Substance undergoes color change upon exposure to light and air.

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;

Oral, rabbit: LD50 = 9 gm/kg;

Oral, rat: LD50 = 1870 mg/kg;

Skin, rabbit: LD50 = 880 mg/kg;

Carcinogenicity:

CAS# 90-15-3: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Epidemiology: No data available.

Teratogenicity: No data available.

Reproductive Effects: Fetotoxic effects have been observed in experiment where 1-Naphthol was administered to mice. TDLo=90 mg/kg.

Neurotoxicity: No data available.

Mutagenicity: Mutation has been observed in cases where 1-naphthol was administered to microorganisms and Escherichia coli and Bacillus subtilis bacteria.

Other Studies: See actual entry in RTECS for complete information.

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	IATA	RID/ADR	IMO	Canada TDG
Shipping Name:	TOXIC SOLIDS, ORGANIC, N.O.S.				No information available.
Hazard Class:	6.1				
UN Number:	UN2811				
Packing Group:	III				

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.

SARA

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: acute, chronic.

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 depleters. This material does not contain any Class 2 Ozone depleters.

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 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 E, D1B.

Canadian Ingredient Disclosure List

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

Exposure Limits

CAS# 90-15-3: OEL-RUSSIA:STEL 0.5 mg/m3

Section 16 - Additional Information

MSDS Creation Date: 8/19/1998

Revision #3 Date: 3/07/2001

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.