

DATE: 08/18/97  
INDE: D72271636

ACCT: 888235001  
CAT NO: AC415302500

PO NBR: UNH-81586

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\*\*\*\* MATERIAL SAFETY DATA SHEET \*\*\*\*

1-Naphthol (techn)  
26135

\*\*\*\* SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION \*\*\*\*

MSDS Name: 1-Naphthol (techn)

Catalog Numbers:

N12 100, N12-100, N12100

Synonyms:

1-Naphthalenol, alpha-Naphthol, 1-Hydroxynaphthalene

Company Identification: Fisher Scientific

1 Reagent Lane

Fairlawn, 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	%	EINECS#
90-15-3	Alpha-naphthol	ca 100	201-969-4

Hazard Symbols: XN

\*\*\*\* SECTION 3 - HAZARDS IDENTIFICATION \*\*\*\*

EMERGENCY OVERVIEW

Appearance: Grey-beige crystalline flakes.

Warning! Harmful if absorbed through the skin. Irritant. Light sensitive. Causes eye and skin burns. Causes digestive and respiratory tract burns. May cause liver and kidney damage. May cause reproductive and fetal effects.

Target Organs: Kidneys, liver.

Potential Health Effects

Eye:

Contact with eyes may cause severe irritation, and possible eye burns.

Skin:

Harmful if absorbed through the skin. May cause severe skin irritation with possible burns, especially if skin is wet or moist.

Ingestion:

May cause burns to the digestive tract.

Overexposure may result in hemolytic anemia, leading to kidney failure. Symptoms include diarrhea, headache, perspiration, listlessness and confusion.

Inhalation:

May cause severe irritation of the upper respiratory tract with pain, burns, and inflammation. May cause effects similar to those described for ingestion.

Chronic:

May cause liver and kidney damage.

\*\*\*\* SECTION 4 - FIRST AID MEASURES \*\*\*\*

Eyes:

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

Skin:

Get medical aid immediately. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. SPEEDY ACTION IS CRITICAL!

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 to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

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.

Extinguishing Media:

In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam.

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Autoignition Temperature: 541 C ( 1,005.80 F)  
Flash Point: 125 C ( 257.00 F)  
NFPA Rating: Not published.  
Explosion Limits, Lower: .80 vol %  
Upper: 5.00 vol %

\*\*\*\* SECTION 6 - ACCIDENTAL RELEASE MEASURES \*\*\*\*

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

Spills/Leaks:

Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable clean, dry container for disposal.

\*\*\*\* SECTION 7 - HANDLING and STORAGE \*\*\*\*

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Do not get on skin or in eyes. Do not ingest or inhale.

Storage:

Store in a cool, dry place. Keep container closed when not in use.

\*\*\*\* SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION \*\*\*\*

Engineering Controls:

Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Alpha-naphthol	none listed	none listed	none listed

OSHA Vacated PELs:

Alpha-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.

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 29CFR 1910.134. Always use a NIOSH-approved respirator when necessary.

\*\*\*\* SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES \*\*\*\*

Physical State: Solid  
Appearance: Grey-beige crystalline flakes  
Odor: Odor of phenol.  
pH: Not available.  
Vapor Pressure: 1 mm Hg @ 94 C  
Vapor Density: 4.5  
Evaporation Rate: Negligible.  
Viscosity: Not available.  
Boiling Point: 278 - 280 C @ 760.00mm Hg  
Freezing/Melting Point: 95 - 96 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.

Conditions to Avoid:

Incompatible materials.

Incompatibilities with Other Materials:

Strong oxidizing agents, strong bases, acid chlorides, acid anhydrides, air, light, halogens.

Hazardous Decomposition Products:

Carbon monoxide, carbon dioxide.

Hazardous Polymerization: Will not occur.

\*\*\*\* SECTION 11 - TOXICOLOGICAL INFORMATION \*\*\*\*

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RTECS#:  
 CAS# 90-15-3: QL2800000

LD50/LC50:  
 CAS# 90-15-3: 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:  
 Alpha-naphthol -  
 Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

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

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

\*\*\*\* SECTION 12 - ECOLOGICAL INFORMATION \*\*\*\*

Ecotoxicity:  
 Not available.  
 Environmental Fate:  
 Not available.  
 Physical/Chemical:  
 Not available.  
 Other:  
 Not available.

\*\*\*\* SECTION 13 - DISPOSAL CONSIDERATIONS \*\*\*\*

Dispose of in a manner consistent with federal, state, and local regulations.  
 RCRA D-Series Maximum Concentration of Contaminants: Not listed.  
 RCRA D-Series Chronic Toxicity Reference Levels: Not listed.  
 RCRA F-Series: Not listed.  
 RCRA P-Series: Not listed.  
 RCRA U-Series: Not listed.  
 Not listed as a material banned from land disposal according to RCRA.

\*\*\*\* SECTION 14 - TRANSPORT INFORMATION \*\*\*\*

US DOT  
 Shipping Name: TOXIC SOLID, ORGANIC, N.O.S.  
 (1-NAPHTHOL)

Hazard Class: 6.1  
 UN Number: UN2811  
 Packing Group: III

IMO  
 Shipping Name: POISONOUS SOLIDS, N.O.S.  
 Hazard Class: 6.1  
 UN Number: 2811  
 Packing Group: 3

IATA  
 Shipping Name: TOXIC SOLID, ORGANIC, N.O.S.\*  
 Hazard Class: 6.1  
 UN Number: 2811  
 Packing Group: 3

RID/ADR  
 Shipping Name: TOXIC SOLID, ORGANIC, N.O.S.  
 Dangerous Goods Code: 6.1(25C)  
 UN Number: 2811

Canadian TDG  
 Shipping Name: CORROSIVE SOLID, NOS (1-NAPHTHOL)  
 Hazard Class: 8(9.2)  
 UN Number: UN1759

\*\*\*\* SECTION 15 - REGULATORY INFORMATION \*\*\*\*

FEDERAL

TSCA

CAS# 90-15-3 is listed on the TSCA inventory.  
 Health & Safety Reporting List  
 CAS# 90-15-3: Effective Date: September 30, 1991  
 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

Section 302 (RQ)  
 None of the chemicals in this material have an RQ.  
 Section 302 (TPQ)  
 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.

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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

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.

INTERNATIONAL

European Labeling in Accordance with EC Directives

Hazard Symbols: XN

Risk Phrases:

Safety Phrases:

S 22 Do not inhale 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.

Canada

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

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

Exposure Limits:

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

\*\*\*\* SECTION 16 - ADDITIONAL INFORMATION \*\*\*\*

Additional Information:

No additional information available.

MSDS Creation Date: 5/24/1995 Revision #4 Date: 6/11/1996

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 way 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.