DADE BEHRING

# Material Safety Data Sheet

## MicroScan(R) Alpha Naphthol Reagent

**MSDS No.** SAMS0005-00

## 1. Product and Company Identification

**Product Trade Name** MicroScan(R) Alpha Naphthol Reagent

**Synonyms** alpha--Naphthol
1-Naphthol
1-Naphthalenol; Alpha-Naphthol; Alpha-Hydroxy Naph-Thalene

**Product Information** 800-677-7226

**Manufactured/ Supplied** Dade Behring Inc.
1584 Enterprise Blvd.
West Sacramento CA 95691
USA

**In Case of Emergency** Transportation: (800) 424-9300 (CHEMTREC)
Medical: (800) 228-5635 ext. 284 (Prosar)

**Validation Date** 11 May 2000

**Product Code** B1010-42

**Internal Code** B101042/1010-42A

**CAS No.** 90-15-3

**U.N. No.** 2811

## 2. Composition and Information on Ingredients

| Ingredient Name | Conc. (% w/w) | CAS No. | U.N. No. | EU Symbol | R-Phrases |
|---|---|---|---|---|---|
| 1) 1-Naphthol | 100 | 90-15-3 | 2811 | Xn | R21/22, R37/38, R41 |

**Note: See section 8 for occupational exposure limits and section 11 for LC50/LD50 information.**

## 3. Hazards Identification

**Primary Hazards and Critical Effects** : DANGER!
CAUSES SEVERE EYE AND SKIN IRRITATION.
CAUSES DAMAGE TO THE FOLLOWING ORGANS: KIDNEYS, LIVER, MUCOUS MEMBRANES, RESPIRATORY TRACT, SKIN, EYES.
MAY BE HARMFUL IF INHALED, ABSORBED THROUGH SKIN OR SWALLOWED.
MAY CAUSE RESPIRATORY TRACT IRRITATION.
Avoid contact with eyes, skin and clothing. Avoid prolonged contact with eyes, skin, and clothing. Do not ingest. Do not breathe dust. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

## 4. First Aid Measures

**Inhalation** : If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention immediately.

**Ingestion** : Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately.

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

**Eye Contact** : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

## 5. Fire-Fighting Measures

**Extinguishing Media** : Use foam or all purpose dry chemicals to extinguish.

**Fire-Fighting Procedures** : Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

**Fire/Explosion Hazards** : Not applicable.

**Hazardous Decomposition Products** : These products are carbon oxides (CO, CO2).

## 6. Accidental Release Measures

**Personal Precautions** : Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment (Section 8). Follow all fire fighting procedures (Section 5).

**Environmental Precautions and Clean-up Methods** : If emergency personnel are unavailable vacuum or carefully scoop up spilled materials and place in an appropriate container for disposal. Avoid creating dusty conditions and prevent wind dispersal. Minimize contact of spilled material with soils to prevent runoff to surface waterways.

**Note: See section 1 for emergency contact information and section 13 for waste disposal.**

## 7. Handling and Storage

**Handling** : Avoid contact with eyes, skin and clothing. Avoid prolonged contact with eyes, skin, and clothing. Do not ingest. Do not breathe dust. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

**Storage** : Keep container tightly closed. Keep container in a cool, well-ventilated area.

## 8. Exposure Controls and Personal Protection

**Occupational Exposure Limits**

| Ingredient Name | OEL United States | OEL Canada |
|---|---|---|
| 1) MicroScan(R) Alpha Naphthol Reagent | Not available. | Not available. |

**Engineering Controls** : Provide a readily accessible eyewash facility and quick drench safety shower.

**Personal Protective Equipment**

**Respiratory System** : A respirator is not needed under normal and intended conditions of product use.

**Skin and Body** : Additional body garments should be used based upon the task being performed (e.g., sleevelets, apron, gauntlets, disposable suits) to avoid exposed skin surfaces.

**Hands** : Gloves, Chemical resistant.

**Eyes** : Safety glasses. Goggles, face shield, or other full-face protection if potential exists for direct exposure to dust.

## 9. Physical and Chemical Properties

**Physical State and Appearance** : Solid. (Crystals solid. Flakes solid.)

**Color** : Colorless. Off-white.

**Odor** : Unpleasant.
0.00051 to 0.00088 ppm

**Molecular Weight** : 144.18 g/mole

**Molecular Formula** : C10-H8-O

**Melting Point** : 96°C (204.8°F)

**Boiling Point** : 278°C (532.4°F)

**Vapor Density** : 5 (Air = 1)

**Specific Gravity** : 1.1 (Water = 1)

**Solubility** : Easily soluble in diethyl ether.
Soluble in methanol, acetone.
Very slightly soluble in cold water.
Insoluble in hot water.

**Partition Coefficient (LogKow)** : The product is more soluble in oil; log(oil/water) = 2.9

**Flash Point** : CLOSED CUP: 307°C (584.6°F).

**Explosibility** : Explosive in presence of oxidizing materials.

## 10. Stability and Reactivity

**Stability** : The product is stable.

**Conditions and Materials to Avoid** : Reactive with oxidizing agents.

**Hazardous Decomposition Products** : Not available.

## 11. Toxicological Information

**Toxicity Data**

| Ingredient Name | Test | Result | Route | Species |
|---|---|---|---|---|
| 1) MicroScan(R) Alpha Naphthol Reagent | LD50 | 1870 mg/kg | Oral | Rat |
| | LD50 | 275 mg/kg | Oral | Mouse |
| | LD50 | 9000 mg/kg | Oral | Rabbit |
| | LD50 | 880 mg/kg | Dermal | Rabbit |
| | LC50 | >420 mg/m$^3$ (1 hours) | Inhalation | Rat |

**Routes of Entry** : Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.

**Acute Effects**

**Inhalation** : Moderately irritating to the respiratory system.

**Ingestion** : Harmful if swallowed.

**Skin Contact** : Severely irritating to the skin.

**Eye Contact** : Severely irritating to the eyes.

**Chronic Effects**

**Adverse Effects** : Not available.

**Target Organs** : Causes damage to the following organs: kidneys, liver, mucous membranes, upper respiratory tract, skin, eyes.

**Carcinogenic Effects** : Not available.

**Mutagenic Effects** : Mutagenic for bacteria and/or yeast.

**Other Information** : Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

## 12. Ecological Information

**Ecotoxicity Data**

| Ingredient Name | Species | Period | Result |
|---|---|---|---|
| 1) MicroScan(R) Alpha Naphthol Reagent | Fish-Fathead minnow. | 24 hours | 7.01 mg/l |
| | Fish-Carp. | 96 hours | 1.46 mg/l |

**Environmental Hazards** : Harmful to aquatic organisms.

## 13. Disposal Consideration

**Waste Handling and Disposal** : Disposal.: in a landfill
Storage: not available
Recycling: not available

## 14. Transport Information

**United States**

**Shipping Description** : POISONOUS SOLIDS, N.O.S., (MicroScan(R) Alpha Naphthol Reagent), 6.1, 2811, III

**Packaging Instruction** : **Passenger Aircraft**
Quantity limitation: 100 kg
Packaging instructions: 619

**Cargo Aircraft**
Quantity limitation: 200 kg
Packaging instructions: 619

**Canada**

**Shipping Description** : POISONOUS SOLIDS, N.O.S., 6.1 9.2, 2811, III

**Sea**

**Shipping Description** : Shipping name: POISONOUS SOLIDS, N.O.S. UNNA: 2811 PG: III

## 15. Regulatory Information

**US Regulations**

**Haz-Com Standard** : CLASS: Toxic.
CLASS: Irritating substance.

**EPA** : TSCA 8(a) PAIR: MicroScan(R) Alpha Naphthol Reagent
TSCA 8(b) inventory: MicroScan(R) Alpha Naphthol Reagent
TSCA 8(d) H and S data reporting: MicroScan(R) Alpha Naphthol Reagent: Sept. 30, 1991
SARA 302/304/311/312 hazardous chemicals: MicroScan(R) Alpha Naphthol Reagent
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: MicroScan(R) Alpha Naphthol Reagent: immediate health hazard, delayed health hazard
Clean air act (CAA) 112 regulated toxic substances: MicroScan(R) Alpha Naphthol Reagent

**State** : Not available.

**Canadian Regulations**

**WHMIS** : CLASS D-1A: Material causing immediate and serious toxic effects (VERY TOXIC).
CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC).
CLASS D-2B: Material causing other toxic effects (TOXIC).

**CEPA** : CEPA DSL: MicroScan(R) Alpha Naphthol Reagent

**Provincial** : No products were found.

## 16. Other Information

**Validated by baldwinron on 05/11/2000.**

**Version** : 1.1

**Date of Printing** : **05/26/2000.**

**Notice to Reader**

***To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.***
***Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.***