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                                                CAT NO: AC128191000
                                                                                       PO NBR: 81449
1-Naphthol
89143
         **** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION 1544
MSDS Name: 1-Naphthol
Catalog Numbers: 12819-1000, 12819-5000, 41530-0010, 41530-2500, 12819-15, 41530-14, 1026384, 1026400, 1026442, 1026467, EK 102 6442, EK 102 6467
Synonyms:

1-Naphthalenol, alpha-Naphthol, 1-Hydroxynaphthalene
Company Identification: Acros Organics
Janssen Pharmaceuticalaan 3a
2440 Geel, Belgium
For information in North America, call: 800-ACROS-01
For Information in Europe, call: 0032(0) 14575211
For emergencies in the US, call CHEMTREC: 800-424-9300
For emergencies outside the US, call: 0032(0) 14575299
            **** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****
                                Chemical Name % Einers#
                                                                   ca 100 unlisted
           Hazard Symbols: XN
Risk Phrases: 21 36/37/38
                     **** SECTION 3 - HAZARDS IDENTIFICATION ****
                                   EMERGENCY OVERVIEW
Appearance: Pinkish to white or colorless, fine powder 
Target Organs: Kidneys, liver.
Potential Health Effects
            Contact with eyes may cause severe irritation, and possible age
           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
            May cause liver and kidrey damage.
                       **** SECTION 4 - FIRST AID MEASURES ****
           Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids.
Get medical aid immediately.
          Get medical aid immediately.
Immediately flush skin with plenty of soap and water for at least 15 mmodes while removing contaminated clothing and shoes SPEEDY ACTION IS CRITICAL!
     Ingestion:
           Do NOT linduce 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.
           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 symptoma tically 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.
     Autoignition Temperature: Not applicable. Flash Point: 153 C (307.40 F)
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PAGE: 2 DATE: 01/12/96 ACCT: 419149001 INDEX: G60114196 CAT NO: AC128191000 PO NBR: 81449 Explosion Limits, Lower: 0.8 Upper: 5.0 **** SECTION 6 ACCIDENTAL RELEASE MEASURES **** General Information: Use proper personal protective equipment as indicated in Section 8 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 stin or in eyes. Do not ingest or inhale. Store in a coct, dry place Keep container closed when not in use. **** SECTION 8 EXPOSURE CONTROLS, PERSONAL PROTECTION **** Engineering Controls: Use adequate contilation to keep airborns concentrations low Exposure Limits ACGIH NIOSH OSHA - Finel PELs
none listed none listed none listed Chemical Name Alpha naphthol OSHA Vacated PELs: Alpha-naphthol: No OSHA Vacated PELs are listed for this chemical. Personal Protective Equipment Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133. Wear appropriate protective gloves to prevent skin exposure Clothing Wear appropriate protective clothing to prevent skin emposure. Respirators: A rescitatory protection program that meets OSHA's 29 CFR 1919.134 and ANSI 288.2 requirements must be followed whenever workplace conditions warrant a **** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES **** Physical State: Appearance: Finkish to white or colorless, fine powder. Oder of phenol flot available. Vapor Pressure Vapor Density: Evaporation Rate: Negligible. Not available Viscosity: Boiling Point: 278 280 C Freezing/Melting Point: 95 96 C.
Decomposition Temperature: Not available Specific Gravity/Density 1,224 Molecular Formula C10470H Molecular Weight: 144 nse4 **** SECTION 10 - STABILITY AND REACTIVITY **** Chemical Stability: Stable under normal temperatures and pressures. Conditions to Aveid: 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 administer
          ed to microorganisms and Escherichia coli
                                                                      and Bacillus subtili
          s bacteria.
                  **** SECTION 12 - ECOLOGICAL INFORMATION ****
     Ecotoxicity:
          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: CORROSIVE SOLIDS, N.O.S. (1-NAPHTHOL)
           Hazard Class: 8
          UN Number: UN1759
Packing Group: II
          Shipping Name: POISONOUS SOLIDS, N.O.S.
Hazard Class: 6.1
UN Number: 2811
          Packing Group: 3
         Shipping Name: TOXIC SOLID, ORGANIC, N O.S * Hazard Class: 6.1
              UN Number: 2811
          Packing Group: 3
     RID/ADR
   Shipping Name: POISONOUS SOLID, N.O S.*
Dangerous Goods Code: 6.1(14C)
UN Number: 2811
    Canadian TDG
Shipping Name: CORROSIVE SOLID NOS (1-NAPHTHOL)
Hazard Class: 8(9.2)
UN Number: UN1759
                  **** SECTION 15 - REGULATORY INFORMATION ****
A. 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
       None of the chemicals are listed under TSCA Section 12h
TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA
     CERCLA/SARA
Section 302 (RQ)
       None of the chemicals in this material have an RO. Section 302 (TPQ)
         None of the chemicals in this product have a TPQ.
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Section 313

Clean Water Act:

Clean Air Act:

No chemicals are reportable under Section 313.

This material does not contain any hazardous air pollutants This material does not contain any Class I Ozone depletors This material does not contain any Class 2 Ozone depletors

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.

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under the CWA OSHA

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

B 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

C. International

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.
European Labelling in Accordance with EC Directives
Hazard Symbols: XN Risk Chrases

R 21 Harmful in contact with skin. R 36/37/38 Irritating to eyes, respiratory system and stin

Safety Phrases: S 24/25 Avoid contact with skin and eyes.

Exposure Limits: OEL-RUSSIA STEL 0.5 mg m3

**** SECTION 16 ADDITIONAL INFORMATION ****

Additional Information: No additional information available. MSDS Creation Date: May 24, 1995 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.