

**Product Information (203) 740-3471 / Emergency Assistance CHEMTREC 1-800-424-9300 or 202-483-7616**

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## MATERIAL SAFETY DATA SHEETS

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Part Number/Trade Name: ISOBUTYL ALCOHOL

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### General Information

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Manufacturer: Pharmco Products Inc.  
58 Vale Road  
Brookfield, Connecticut 06804, USA  
Phone (203) 740-3471  
Fax (203) 740-3481

1101 Isaac Shelby Drive  
Shelbyville, KY 40065  
Phone (502) 633-0650  
Fax (502) 633-0685

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### Ingredients/Identity Information

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| Ingredient: ISOBUTYL ALCOHOL (SARA III) | OSHA PEL: 100 PPM                       |
| Ingredient Sequence Number: 01          | ACGIH TLV: 50 PPM; 9293                 |
| NIOSH (RTECS) Number: NP9625000         | Other Recommended Limit: NONE SPECIFIED |
| CAS Number: 78-83-1                     | BY M.                                   |

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### Physical/Chemical Characteristics

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| Appearance And Odor: CLEAR,COLORLESS SOLUTION WITH MILD ALCOHOL-LIKE ODOR. | Vapor Density (Air=1): 2.6                      |
| Boiling Point: 108C,226F   | Specific Gravity: 0.803 (WATER=1)               |
| Melting Point: -108C,-226F   | Evaporation Rate And Ref: 0.8 (BUTYL ACETATE=1) |
| Vapor Pressure (MM Hg/70 F): 9 MMHG  | Solubility In Water: 8.7% @ 20C,68F             |
|  | Percent Volatiles By Volume: 100                |

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### Fire and Explosion Hazard Data

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Flash Point: 98.6F,37.0C  
Flash Point Method: TCC  
Lower Explosive Limit: 10.9  
Upper Explosive Limit: 1.6  
Extinguishing Media: DRY CHEMICAL,FOAM OR CARBON DIOXIDE.DO NOT USE A SOLID STREAM OF WATER,SINCE THE STREAM WILL SCATTER AND SPREAD FIRE.  
Special Fire Fighting Proc: USE NIOSH/MSHA APPROVED SCBA AND FULL PROT EQUIP. WATER SPRAY MAY BE USED TO COOL FIRE EXPOSED CONTRS. VAPOR CAN FLOW TO DISTANT IGNITION SOURCE & FLASH BACK.  
Unusual Fire And Expl Hazrds: ABOVE FLASH POINT, VAPOR-AIR MIXTURES ARE

EXPLOSIVE WITHIN FLAMMABLE LIMITS.

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Reactivity Data

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Stability: YES

Cond To Avoid (Stability): HEAT, OPEN FLAMES.

Materials To Avoid: OXIDIZING AGENTS,INORGANIC ACIDS,ALDEHYDES,ISOCYANATES.

Hazardous Decomp Products: THERMAL DECOMPOSITION WILL PRODUCE CARBON MONOXIDE,CARBON DIOXIDE,OR ISOBUTYLENE.

Hazardous Poly Occur: NO

Conditions To Avoid (Poly): WILL NOT OCCUR.

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Health Hazard Data

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Route Of Entry - Inhalation: YES

Route Of Entry - Skin: YES

Route Of Entry - Ingestion: YES

Health Haz Acute And Chronic: HARMFUL IF INHALED/SWALLOWED. CAUSES EYE AND SKIN IRRITATION. CAN CAUSE SEVERE EYE BURNS. INHALATION MAY CAUSE IRRITATION OF RESPIRATORY TRACT, DROWSINESS/UNCONSCIOUSNESS. NARCOTIC AT HIGH CONCENTRATIONS. CAN CAUSE ALLERGIC SKIN REACTIONS.

Carcinogenicity - NTP: NO

Carcinogenicity - IARC: NO

Carcinogenicity - OSHA: NO

Signs/Symptoms Of Overexp: EYES:IRRIT,REDNESS,BLURRED VISION. SKIN: IRRIT.

ABSORPTION-SYMP LIKE INGEST. INGEST:NAUSEA, DROWSINESS, UNCONSCIOUS. LRG AMT-CNS/LIVER DAMAGE. INHAL:NOSE/THROAT IRRIT, COUGHING, DROWSINESS, CNS PROBLEMS.

Med Cond Aggravated By Exp: PERSONS WITH PRE-EXISTING SKIN DISORDERS OR EYE PROBLEMS,OR IMPAIRED LIVER,KIDNEY OR RESPIRATORY FUNCTION MAY BE MORE SUSCEPTIBLE TO THE EFFECTS OF THE SUBSTANCE.

Emergency/First Aid Proc: INHALATION:REMOVE TO FRESH AIR, PROVIDE CPR/OXYGEN IF NEEDED. EYE CONTACT:FLUSH WITH WATER FOR 15 MINUTES. GET MEDICAL HELP. SKIN CONTACT:WASH WITH SOAP AND WATER. GET MED ATTENTION IF SYMPTOMS

PERSIST. INGESTION:DO NOT INDUCE VOMITING, DRINK 1-2 GLASSES OF WATER. GET MEDICAL HELP IMMEDIATELY.

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Precautions for Safe Handling and Use

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Steps If Matl Released/Spill: REMOVE IGNIT SOURCES. CLEAN-UP PERSONNEL NEED PROT CLOTHING & RESP PROT. CONTAIN & RECOVER LIQ FOR RECLAMATION WHEN

POSS. OR ABSORB USING INERT ABSORBENT AND SAVE IN CONTAINERS FOR DISPOSAL.

Waste Disposal Method: DISPOSAL MUST BE IN ACCORDANCE WITH FEDERAL,STATE AND LOCAL REGULATIONS.

Precautions-Handling/Storing: PROTECT FROM PHYSICAL DMG.STORE IN COOL,DRY, WELL-VENT AREA,AWAY FROM ACUTE FIRE HAZ & OXIDIZERS. OUTSIDE OR DETACHED STORE IS BEST.

Other Precautions: BOND/GROUND CONTR FOR TRANSFER TO AVOID STATIC SPARKS. USE NON-SPARKING TOOLS & EQUIP.NO SMOKING IN STOR/USE AREAS.MAINTAIN EYE WASH FOUNTAIN & QUICK-DRENCH FACILITY.DO NOT WEAR CONTACT LENSES.USE WITH

ADEQ VENT.AVOID BRTHG VAPORS.

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Control Measures

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Respiratory Protection: USE NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS IF TLV IS EXCEEDED OR WHEN USING IN CONFINED SPACES.

Ventilation: LOCAL AND GENERAL VENTILATION NECESSARY TO KEEP AIR CONCENTRATION BELOW TLV.

Protective Gloves: WEAR IMPERVIOUS GLOVES.

Eye Protection: CHEMICAL WORKERS GOGGLES (FP N).

Other Protective Equipment: WEAR IMPERVIOUS PROTECTIVE CLOTHING INCLUDING BOOTS, LAB COAT, APRON OR COVERALLS TO PREVENT SKIN CONTACT.

Work Hygienic Practices: WASH THOROUGHLY AFTER HANDLING.

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Transportation Data

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DOT PSN Code: GJL

DOT Proper Shipping Name: ISOBUTYL

ALCOHOL

DOT Class: 3

DOT ID Number: UN1212

DOT Pack Group: III

DOT Label: FLAMMABLE LIQUID

IMO PSN Code: HIA

IMO Proper Shipping Name: FLAMMABLE

LIQUID, N.O.S. \*

IMO Regulations Page Number: 3345

IMO UN Number: 1993

IMO UN Class: 3.3

IATA PSN Code: MCA

IATA UN ID Number: 1993

IATA Proper Shipping Name: FLAMMABLE

LIQUID, N.O.S. \* \*

IATA UN Class: 3

IATA Label: FLAMMABLE LIQUID

AFI PSN Code: MCA

AFI Prop. Shipping Name: FLAMMABLE

LIQUIDS, N.O.S. \*

AFI Class: 3

AFI ID Number: UN1993

AFI Pack Group: III

AFI Label: FLAMMABLE LIQUID

AFI Basic Pac Ref: 7-7

N.O.S. Shipping Name: ISOBUTYL

ALCOHOL

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Disposal Data

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Refer to applicable regional, state and federal codes.

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Label Data

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Common Name: ISOBUTYL ALCOHOL

Chronic Hazard: YES

Signal Word: WARNING!

Acute Health Hazard-Slight: X

Contact Hazard-Slight: X

Fire Hazard-Moderate: X

Reactivity Hazard-Slight: X

Special Hazard Precautions: FLAMMABLE LIQUID! HARMFUL IF INHALED/

SWALLOWED. CAUSES EYE AND SKIN IRRITATION. CAN CAUSE SEVERE EYE BURNS.

INHALATION MAY CAUSE IRRITATION OF RESPIRATORY TRACT, DROWSINESS/

UNCONSCIOUSNESS. NARCOTIC AT HIGH CONCENTRATIONS. STORE IN COOL, DRY, WELL-

VENT AREA, AWAY FROM ACUTE FIRE HAZ & OXIDIZERS. OUTSIDE OR DETACHED STORE

IS BEST. FIRST AID: INHALATION: REMOVE TO FRESH AIR, PROVIDE CPR/OXYGEN IF

NEEDED. EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES. GET MEDICAL HELP. SKIN

CONTACT: WASH WITH SOAP AND WATER. GET MED ATTENTION IF SYMPTOMS PERSIST.

INGESTION: DO NOT INDUCE VOMITING, DRINK 1-2 GLASSES OF WATER. GET MEDICAL

HELP IMMEDIATELY.

Protect Eye: Y

Protect Skin: Y  
Protect Respiratory: Y

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The information contained herein is based on data considered to be accurate. However, no warranty is expressed regarding the accuracy of these data or the results to be obtained from the use thereof. It is the user's obligation to determine the conditions of safe use of the product.

--Rev 2.2, 03/07, DH