

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

MATERIAL SAFETY DATA SHEETS

Part Number/Trade Name: N Butyl alcohol This MSDS is valid for all grades and catalog numbers === General Information ______ Company's Name: PHARMCO PRODUCTS, Date MSDS Revised: Nishant-8/23/99 INC. Safety Data Review Date: 8/23/99 Company's Street: 58 VALE RD. Preparer's Company: PHARMCO PRODUCTS, Company's City: BROOKFIELD INC. Company's State: CT Preparer's St Or P. O. Box: 58 VALE RD. Company's Zip Code: 06804 Preparer's City: BROOKFIELD Company's Emerg Ph #: (203) 740-3471 Preparer's State: CT Company's Info Ph #: (203) 740-3471 Preparer's Zip Code: 06804 ______ === Ingredients/Identity Information ______ Ingredient: BUTANOL, N-BUTYL ALCOHOL, PROPYL CARBINOL, BUTYL ALCOHOL Ingredient Sequence Number: 01 Percent: 100 NIOSH (RTECS) Number: EO1400000 CAS Number: 71-36-3 OSHA PEL: 100 PPM ACGIH TLV: C 152 MG/CUM Other Recommended Limit: 300 MG/CUM ______ Physical/Chemical Characteristics ______ Appearance And Odor: CLEAR, COLORLESS LIQUID W/A SHARP ALCOHOLIC ODOR Boiling Point: 243.5F Melting Point: -130F Vapor Pressure (MM Hg/70 F): 4.4 Vapor Density (Air=1): 2.55 Specific Gravity: 0.807 Evaporation Rate And Ref: (BU AC=1): 0.5 Solubility In Water: 7.8% Percent Volatiles By Volume: 100 ______

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Fire and Explosion Hazard Data

Flash Point: 84.2F Flash Point Method: TCC Lower Explosive Limit: 1.4 Upper Explosive Limit: 11.2

Extinguishing Media: CO2, DRY CHEMICAL/ALCOHOL FOAM

Special Fire Fighting Proc: WEAR FULL PROTECTIVE CLOTHING & SELF CONTAINED BREATHING APPARATUS. KEEP FIRE EXPOSED CONTAINERS COOL W/WATER SPRAY. Unusual Fire And Expl Hazrds: FLAMMABLE. HEAT WILL BUILD PRESSURE & MAY RUPTURE CLOSED STORAGE CONTAINERS. AUTO-IGNITION TEMP: 649.4F.

RUPTURE CLOSED STORAGE CONTAINERS. AUTO-IGNITION TEMP: 049.4F.

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Reactivity Data

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Stability: YES

Cond To Avoid (Stability): HEAT, SPARKS, OPEN FLAME, OPEN CONTAINERS, POOR

VENTILATION & DIRECT SUNLIGHT.

Materials To Avoid: STRONG OXIDIZING AGENTS, STRONG ACIDS & BASES.

Hazardous Decomp Products: CO & OTHER TOXIC VAPORS.

Hazardous Poly Occur: NO

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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: INHALATION: IRRITATION TO THE MUCOUS

MEMBRANES. EYES: IRRITATION. SKIN: IRRITAITON/DERMATITIS/TOXIC EFFECTS THROUGH ABSORPTION. INGESTION: GASTROINTESTINAL TRACT IRRITATION. PRODUCT

IS A MUCOUS MEMBRANE IRRITANT & CNS DEPRESSANT.

Carcinogenicity - NTP: NO
Carcinogenicity - IARC: NO
Carcinogenicity - OSHA: NO
Explanation Carcinogenicity: NONE

Signs/Symptoms Of Overexp: IRRITATION, LACHRYMATION, PHOTOPHOBIA,

HEADACHE, DIZZINESS, NAUSEA, INCOORDINATION, DROWSINESS, BLURRING OF

VISION, DEFATTING, GI DISCOMFORT.

Med Cond Aggravated By Exp: INDIVIDUALS SUSCEPTIBLE TO DERMATITIS.

SIMULTANEOUS EXPOSURE TO N-BUTYL ALCOHOL & EHTYL ALCOHOL CAN INCREASE

TOXIC HAZARDS OF N-BUTYL ALCOHOL.

Emergency/First Aid Proc: INHALATION: REMOVE TO FRESH AIR. ADMINISTER CPR FLUSH THOROUGHLY FOR 15 MINS. WASH W/SOAP & WATER. INGESTION: ASPIRATION HAZARD-DON'T INDUCE VOMITING. OBTAIN MEDICAL ATTENTION IN ALL CASES.

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Precautions for Safe Handling and Use

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Steps If Matl Released/Spill: PROTECT FROM IGNITION. WEAR PROTECTIVE CLOTHING & USE APPROVED RESPIRATOR EQUIPMENT. ABSORB MATERIAL IN AN ABSORBENT RECOMMENDED FOR SOLVENT SPILLS & REMOVE TO A SAFE LOCATION FOR

DISPOSAL BY APPROVED METHODS.

Waste Disposal Method: DISPOSE OF AS AN EPA HAZARDOUS WASTE IN ACCORDANCE W/LOCAL, STATE & FEDERAL REGULATIONS. FLAMMABLE LIQUID NA1120. HAZARDOUS WASTE NO: U031 (IGNITABLE); D001 (IGNITABLE).

Precautions-Handling/Storing: PROTECT FROM EXTREME TEMPS & DIRECT

SUNLIGHT. STORE IN AN ACCEPTABLY PROTECTED & SECURE FLAMMABLE LIQUID STORAGE ROOM.

Other Precautions: GROUND & BOND METAL CONTAINERS TO MINIMIZE STATIC SPARKS.

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Control Measures

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Respiratory Protection: USE APPROVED RESPIRATOR EQUIPMENT (AIR-PURIFYING,

AIR-SUPPLIED/SELF CONTAINED BREATHING APPARATUS).

Ventilation: LOCAL/GENERAL DEPENDING ON THE CONDITIONS OF USE, QUANTITY OF

MATERIAL & OTHER OPERATING PARAMETERS.

Protective Gloves: NEOPRENE/RUBBER/NITRILE RUBBER

Eye Protection: SAFETY GLASSES, GOGGLES/FACE SHIELD.

Other Protective Equipment: CHEMICAL RESISTANT CLOTHING, EYE WASH

FOUNTAINS & SAFETY SHOWERS

Work Hygienic Practices: REMOVE/LAUNDER CONTAMINATED CLOTHING BEFORE

REUSE. REMOVE/DISCARD CONTAMINATED SHOES.

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Transportation Data

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DOT: Butanol, 3, UN1120, PG III

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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: N-BUTYL ALCOHOL

Special Hazard Precautions: INHALATION: IRRITATION TO THE MUCOUS MEMBRANES. EYES: IRRITATION. SKIN: IRRITATION/DERMATITIS/TOXIC EFFECTS THROUGH ABSORPTION. INGESTION: GASTROINTESTINAL TRACT IRRITATION. PRODUCT IS A MUCOUS MEMBRANE IRRITANT & CNS DEPRESSANT. IRRITATION, LACHRYMATION, PHOTOPHOBIA, HEADACHE, DIZZINESS, NAUSEA, INCOORDINATION, DROWSINESS, BLURRING OF VISION, DEFATTING, GI DISCOMFORT.

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.