

PHIPPS PRODUCTS CORP. -- N-BUTANOL -- 6810-00-281-2685

===== Product Identification =====

Product ID:N-BUTANOL

MSDS Date:12/31/1988

FSC:6810

NIIN:00-281-2685

MSDS Number: BPNYN

=== Responsible Party ===

Company Name:PHIPPS PRODUCTS CORP.

Address:186 LINCOLN STREET SUITE 502

City:BOSTON

State:MA

ZIP:02111-2403

Country:US

Info Phone Num:COMPANY OUT OF BUSINESS

Emergency Phone Num:COMPANY OUT OF BUSINESS

CAGE:86511

=== Contractor Identification ===

Company Name:PHIPPS PRODUCTS CORP

Address:186 LINCOLN ST SUITE 502

Box:City:BOSTON

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===== Composition/Information on Ingredients =====

Ingred Name:N-BUTYL ALCOHOL (SARA III)

CAS:71-36-3

RTECS #:EO1400000

Fraction by Wt: 99.8%

Other REC Limits:NONE SPECIFIED

OSHA PEL:100 PPM

ACGIH TLV:S, C 50 PPM; 9293

EPA Rpt Qty:5000 LBS

DOT Rpt Qty:5000 LBS

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==== Hazards Identification =====

LD50 LC50 Mixture:ORAL LD50 (RAT) IS 2500 MG/KG  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:ACUTE-INHALATION:CAUSES IRRITATION OF  
NASAL PASSAGES,NAUSEA,DIZZINESS,HEADACHE.MAY CAUSE HEARING  
IMPAIRMENT.EYE:CAN CAUSE SEVERE INJURY-DAMAGE REVERSIBLE.SKIN:CAN  
CAUSE MODERATE INJURY. SLIGHTLY TOXIC TO ANIMALS BY  
ABSORPTION.INGESTION:CAUS  
ES MOUTH & THROAT  
IRRITATION,NAUSEA,HEADACHE,DIZZINESS.CHRONIC-NO INFORMATION.  
Effects of Overexposure:SNEEZING, COUGHING, NAUSEA, HEADACHE,  
DIZZINESS, REDNESS OF SKIN.  
Medical Cond Aggravated by Exposure:SIGNIFICANT EXPOSURE TO THIS  
CHEMICAL MAY ADVERSELY AFFECT PEOPLE WITH CHRONIC DISEASE OF THE  
RESPIRATORY SYSTEM, SKIN AND/OR EYES.

===== First Aid Measures =====

First Aid:INGESTION:IF CONSCIOUS, INDUCE VOMITING BY GIVING TWO GLASSES  
OF WATER. INHALATION:REMOVE FROM EXPOSURE. IF BREATHING IS  
DIFFICULT, PROVIDE CARDIOPULMONARY SUPPORT/OXYGEN. EYE:FLUSH WITH  
WATER FOR 15 MINUTES. SKIN:WASH WITH LARGE AMOUNT OFWATER. IN ALL  
CASES, SEEK MEDICAL HELP.

===== Fire Fighting Measures =====

Flash Point Method:TCC  
Flash Point:84.0F,28.9C  
Lower Limits:1.4  
Upper Limits:11.2  
Extinguishing Media:USE CO2/DRY CHEMICAL FOR SMALL FIRES. ALCOHOL-TYPE  
AQUEOUS FILM-FORMING FOAM/WATER SPRAY FOR  
LARGE FIRES.  
Fire Fighting Procedures:WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A  
FULL FACED SELF CONTAINED BREATHING APPARATUS.WATER MAY BE  
INEFFECTIVE BUT SHOULD BE USED TO COOL CONTAINERS.  
Unusual Fire/Explosion Hazard:VAPOR IS HEAVIER THAN AIR AND CAN TRAVEL  
CONSIDERABLE DISTANCE TO A SOURCE OF IGNITION AND FLASHBACK  
MATERIAL CREATES A SPECIAL HAZARD BECAUSE IT FLOATS ON H2O.

===== Accidental Release Measures =====

Spill Release Procedures:FIRE

HAZARD:ELIMINATE ALL SOURCES OF IGNITION.  
EVACUATE AREA. VENTILATE AREA. STOP RELEASE. DIKE TO CONTAIN SPILL.  
WEAR PROPER SAFETY EQUIPMENT. IF AMOUNT IS LARGE, REMOVE LIQUID BY  
VACUUM. IF SMALL, ABSORB ON INERT MATERIAL. AVOID ENTERING TO  
SEWERS

===== Handling and Storage =====

Handling and Storage Precautions:STORAGE-STORE IN COOL,WELL-VENTILATED  
AREA, IN TIGHTLY CLOSED CONTAINERS,AWAY FROM HEAT,SPARKS & FLAMES.  
Other Precautions:USE ONLY DOT-APPROVED CONTAINERS.USE SPARK-RESISTANT  
TOOLS.WHEN TRANSFERRING FOLLOW PROPER GROUNDING PROCEDURES.USE WITH  
ADEQUATE VENTILATION.AVOID BREATHING VAPORS.AVOID CONTACT WITH  
EYES,SKIN & CLOTHING. DISCARD CONTAMINATED CLOTHES.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:IF LEVELS EXCEED THE RECOMMENDED HEALTH  
STANDARDS, WEAR A NIOSH APPROVED ORGANIC VAPOR RESPIRATOR. FOR  
EMERGENCY, USE NIOSH APPROVED SELF-CONTAINED BREATHING  
APPARATUS.  
Ventilation:IF LEVELS EXCEED THE RECOMMENDED HEALTH STANDARDS, USE  
LOCAL EXHAUST VENTILATION.  
Protective Gloves:NEOPRENE OR RUBBER  
Eye Protection:CHEMICAL SAFETY GOGGLES  
Other Protective Equipment:FOR OPERATIONS WHERE SPILLS OR SPLASHING CAN  
OCCUR,USE IMPERVIOUS BODY COVERING AND TOOLS,A SAFETY SHOWER AND  
EYE BATH.  
Work Hygienic Practices:WASH HANDS BEFORE EATING, DRINKING, SMOKING, OR  
USING TOILET FACILITIES. WASH CONTAMINATED CLOTHING BEFORE REUSE.  
Supplemental Safety and Health  
NONE

===== Physical/Chemical Properties =====

HCC:F4  
Boiling Pt.=118.C, 244.4F  
Melt/Freeze Pt:=-90.C, -130.F  
Vapor Pressure:44  
Vapor Density:2.57  
Spec Gravity:0.8109  
Evaporation Rate & Reference:0.45 (N-BUTYL ACETATE=1)  
Solubility in Water:78%  
Appearance and Odor:CLEAR, COLORLESS, MOBILE LIQUID WITH MILD ALCOHOL  
ODOR  
Percent Volatiles by Volume:100

===== Stability and Reactivity Data =====

Stability Indicator/Materials

to Avoid: YES

OXIDIZING AGENTS SUCH AS HYDROGEN PEROXIDE, NITRIC ACID, PERCHLORIC ACID OR CHROMIUM TRIOXIDE

Stability Condition to Avoid: HEAT, SPARKS, OPEN FLAMES AND OTHER SOURCES OF IGNITION

Hazardous Decomposition Products: CARBON MONOXIDE

===== Disposal Considerations =====

Waste Disposal Methods: THIS PRODUCT WHEN SPILLED OR DISPOSED IS A HAZARDOUS SOLID WASTE AS DEFINED IN RESOURCE CONSERVATION RECOVERY ACT REGULATIONS (40CFR261). PREFERRED METHOD IS INCINERATION OR BIOLOGICAL TREATMENT IN FEDERAL/STATE APPROVED FACILITY. RQ IS 5000 LBS.

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