

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

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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:CAU

SES 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:FIR

E 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

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===== 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 ON

LY 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 LEATHERS.

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===== 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 Sa

fety and Health

NONE

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

HCC:F4

Boiling Pt:=118.C, 244.4F

Melt/Freeze Pt:=-90.C, -130.F

Vapor Pres: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

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===== 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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