

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

MATERIAL SAFETY DATA SHEETS

Part Number/Trade Name: BUTYLAMINE
This MSDS is valid for all grades and catalog numbers

General Information

Company's Name: PHARMCO PRODUCTS, INC.
Company's Street: 58 VALE RD.
Company's City: BROOKFIELD
Company's State: CT
Company's Zip Code: 06804
Company's Emerg Ph #: (203) 740-3471
Company's Info Ph #: (203) 740-3471
Date MSDS Revised: Nishant-8/23/99

Safety Data Review Date: 8/23/99
Preparer's Company: PHARMCO PRODUCTS,
INC.
Preparer's St Or P. O. Box: 58 VALE RD.
Preparer's City: BROOKFIELD
Preparer's State: CT
Preparer's Zip Code: 06804

Ingredients/Identity Information

Ingredient: BUTYLAMINE (SARA III)
Ingredient Sequence Number: 01
Percent: 90-100
NIOSH (RTECS) Number: EO2975000

CAS Number: 109-73-9
OSHA PEL: S, C 5 PPM
ACGIH TLV: S, C 5 PPM; 9192

Physical/Chemical Characteristics

Appearance And Odor: COLORLESS LIQUID.
AMINE-LIKE ODOR.
Boiling Point: 171F,77C
Melting Point: -58F,-50C
Vapor Pressure (MM Hg/70 F): 82 @ 20C
Vapor Density (Air=1): 2.5

Specific Gravity: 0.74
Evaporation Rate And Ref: 7.3 (BUTYL
ACETATE=1)
Solubility In Water: COMPLETE (100%)
Percent Volatiles By Volume: 100
pH: N/A

Fire and Explosion Hazard Data

Flash Point: 10F,-12C
Flash Point Method: CC
Lower Explosive Limit: 1.7%
Upper Explosive Limit: 9.8%
Extinguishing Media: USE ALCOHOL FOAM, DRY CHEMICAL OR CO*2. (WATER MAY BE
INEFFECTIVE.)
Special Fire Fighting Proc: FIREFIGHTERS SHOULD WEAR NIOSH/MSHA APPROVED
SCBA WITH FULL FACEPIECE OPERATED IN POSITIVE PRESSURE MODE AND FULL
PROTECTIVE EQUIP (FP N). (SEE SUPP DATA)
Unusual Fire And Expl Hazrds: VAPORS MAY FLOW ALONG SURFACES TO DISTANT

IGNITION SOURCES & FLASH BACK. CLOSED CNTNRS EXPOSED TO HEAT MAY EXPLODE.
CNTCT WITH STRONG OXIDIZERS MAY CAUSE FIRE.

Reactivity Data

Stability: YES

Cond To Avoid (Stability): HEAT, FLAME,
OTHER SOURCES OF IGNITION.

Materials To Avoid: STRONG OXIDIZING
AGENTS, STRONG ACIDS.

Hazardous Decomp Products: NO*X, CO, CO*2.

Hazardous Poly Occur: NO

Conditions To Avoid (Poly): NOT RELEVANT.

Health Hazard Data

LD50-LC50 Mixture: SEE SUPP DATA

Route Of Entry - Inhalation: YES

Route Of Entry - Skin: YES

Route Of Entry - Ingestion: YES

Health Haz Acute And Chronic: ACUTE: INHAL: SEVERE IRRITATION OF
RESPIRATORY SYSTEM, COUGHING, DIFFICULT BREATHING, CHEST PAINS, PULMONARY
RAPID ABSORPTION. INGEST: NAUSEA, VOMITING, GI IRRITATION, BURNS TO MOUTH &
THROAT. CHRONIC: NONE IDENTIFIED.

Carcinogenicity - NTP: NO

Carcinogenicity - IARC: NO

Carcinogenicity - OSHA: NO

Explanation Carcinogenicity: NOT RELEVANT.

Signs/Symptoms Of Overexp: SEE HEALTH HAZARDS.

Med Cond Aggravated By Exp: SKIN DISORDERS, EYE DISORDERS, RESPIRATORY
SYSTEM DISEASE.

Emergency/First Aid Proc: INGEST: CALL MD. DO NOT INDUCE VOMITING. GIVE
LARGE AMOUNTS OF WATER. INHAL: REMOVE TO FRESH AIR. IF NOT BREATHING GIVE
IMMEDIATELY FLUSH SKIN WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES WHILE
IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES.

Precautions for Safe Handling and Use

Steps If Matl Released/Spill: WEAR NIOSH/MSHA APPRVD SCBA/FULL PROT EQUIP
(FP N). SHUT OFF IGNIT SOURCES; NO FLARES/SMOKING/FLAMES IN AREA. STOP
LEAK. USE WATER SPRAY TO REDUCE VAPS. TAKE UP W/SAND OR OTHER NONCOMBUST
ABSORB AND PLACE INTO CNTNR FOR LATER DISP. (SEE SUPP DATA)

Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.

Waste Disposal Method: DISPOSE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL,
D001, D002 (IGNITABLE, CORROSIVE WASTE).

Precautions-Handling/Storing: KEEP CONTAINER TIGHTLY CLOSED. STORE IN A
COOL, DRY, WELL-VENTILATED, FLAMMABLE LIQUID STORAGE AREA.

Other Precautions: BOND AND GROUND CONTAINERS WHEN TRANSFERRING LIQUID.

Control Measures

Respiratory Protection: RESPIRATORY PROTECTION REQUIRED IF AIRBORNE CONC
EXCEEDS TLV. AT CONC UP TO 250 PPM, A NIOSH/MSHA APPROVED CHEMICAL
CARTRIDGE RESPIRATOR WITH AMMONIA/AMINE CARTRIDGE IS RECOMMENDED. ABOVE
THIS LEVEL, A NIOSH/MSHA APPROVED SCBA IS ADVISED.

Ventilation: USE GENERAL OR LOCAL EXHAUST VENTILATION TO MEET TLV
REQUIREMENTS.

Protective Gloves: RUBBER GLOVES.

Eye Protection: CHEMICAL WORKERS GOGGLES (FP N).

Other Protective Equipment: UNIFORM, APRON RECOMMENDED.

Work Hygienic Practices: NONE SPECIFIED BY MANUFACTURER.
Suppl. Safety & Health Data: FIRE FIGHT PROC: MOVE CONTAINERS FROM FIRE
AREA IF IT CAN BE DONE WITHOUT RISK. USE WATER TO KEEP FIRE EXPOSED
CONTAINERS COOL. LD50-LC50 MIX: LD50:(ORL, RAT)=366 MG/KG, (SKN, RBT)=850
MG/KG. SPILL PROC: FLUSH AREA WITH WATER. J T BAKER SOLUSORB SOLVENT
ADSORBENT IS RECOMMENDED FOR SPILLS.

Transportation Data

DOT PSN Code: CJP	IATA PSN Code: EEL
DOT Proper Shipping Name: N- BUTYLAMINE *	IATA UN ID Number: 1125
DOT Class: 3	IATA Proper Shipping Name: N- BUTYLAMINE *
DOT ID Number: UN1125	IATA UN Class: 3
DOT Pack Group: II	IATA Subsidiary Risk Class: 8 *
DOT Label: FLAMMABLE LIQUID, CORROSIVE *	IATA Label: FLAMMABLE LIQUID & CORROSIVE *
IMO PSN Code: CRZ	AFI PSN Code: EEL
IMO Proper Shipping Name: NORMAL-BUTYLAMINE *	AFI Prop. Shipping Name: N- BUTYLAMINE *
IMO Regulations Page Number: 3192	AFI Class: 3
IMO UN Number: 1125	AFI ID Number: UN1125
IMO UN Class: 3.2	AFI Pack Group: II
IMO Subsidiary Risk Label: CORROSIVE	AFI Label: FLAMMABLE LIQUID
	AFI Basic Pac Ref: 7-7

Disposal Data

Refer to applicable regional, state and federal codes.

Label Data

Common Name: BUTYLAMINE, D727
Chronic Hazard: YES
Signal Word: DANGER!
Acute Health Hazard-Moderate: X
Contact Hazard-Moderate: X
Fire Hazard-Severe: X
Reactivity Hazard-Slight: X
Special Hazard Precautions: EXTREMELY FLAMMABLE LIQUID AND VAPOR. VAPOR
MAY CAUSE FLASH FIRE. KEEP AWAY FROM HEAT, SPARKS AND FLAME. KEEP CONTAINER
CLOSED. USE WITH ADEQUATE VENTILATION. ACUTE: HARMFUL IF SWALLOWED. WASH
THOROUGHLY AFTER HANDLING. HARMFUL IF INHALED. AVOID BREATHING VAPOR.
CAUSES RESPIRATORY SYSTEM, SKIN, AND EYE IRRITATION. AVOID CONTACT WITH
EYES, SKIN AND CLOTHING. CHRONIC: MAY CAUSE ALLERGIC RESPIRATORY, SKIN
SENSITIZATION.
Protect Eye: Y
Protect Skin: Y
Protect Respiratory: Y

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.