



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

MATERIAL SAFETY DATA SHEETS

Part Number/Trade Name: tert Butyl alcohol
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: TERT-BUTYL ALCOHOL (SARA III)
Ingredient Sequence Number: 01
Percent: >99
NIOSH (RTECS) Number: EO1925000

CAS Number: 75-65-0
OSHA PEL: 100 PPM
ACGIH TLV: 100PPM 9394
Other Recommended Limit: NOT ESTABLISHED

Physical/Chemical Characteristics

Appearance And Odor: COLORLESS, HYGROSCOPIC LIQUID OR CRYSTALS WITH CAMPOR ODOR
Boiling Point: 180F,82C
Melting Point: 78.0F,25.6C
Vapor Pressure (MM Hg/70 F): 31

Vapor Density (Air=1): 2.6
Specific Gravity: 0.80
Evaporation Rate And Ref: 1.05 (BUTYL ACETATE=1)
Solubility In Water: SOLUBLE
Autoignition Temperature: 896F

Fire and Explosion Hazard Data

Flash Point: 52.0F,11.1C
Flash Point Method: CC

Lower Explosive Limit: 2.4

Upper Explosive Limit: 8.0

Extinguishing Media: DRY CHEMICAL, CARBON DIOXIDE, HALON, WATER SPRAY OR ALCOHOL FOAM

Special Fire Fighting Proc: MOVE FROM FIRE AREA, IF POSSIBLE. USE FLOODING AMOUNTS OF WATER AS A FOG, SOLID STREAMS MAY BE INEFFECTIVE. AVOID BREATHING VAPORS, KEEP UPWIND.

Unusual Fire And Expl Hazrds: CONTAINERS MAY BURST WHEN EXPOSED TO HEAT OF FIRE.

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Reactivity Data

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Stability: YES

Cond To Avoid (Stability): STABLE IN CLOSED CONTAINERS UNDER NORMAL TEMPERATURES AND PRESSURES.

Materials To Avoid: ALKALI METALS, ALUMINUM, CHROMIUM TRIOXIDE, OXIDIZERS, PLASTICS, MINERAL ACIDS, HYDROCHLORIC ACID.

Hazardous Decomp Products: STRONG MINERAL ACIDS OR THERMAL-OXIDATIVE REACTIONS CAUSE DECOMPOSITION & MAY RELEASE CARBON MONOXIDE OR ISOBUTYLENE

GAS

Hazardous Poly Occur: NO

Conditions To Avoid (Poly): NOT APPLICABLE

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Health Hazard Data

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LD50-LC50 Mixture: LD50 (ORAL RAT) IS 3500 MG/KG

Route Of Entry - Inhalation: YES

Route Of Entry - Skin: YES

Route Of Entry - Ingestion: YES

Health Haz Acute And Chronic: ACUTES: INHALE- SHORTNESS OF BREATH, CNS DEPRESSION. SKIN-REDNESS, IRRITATION, ERYTHEMA, HYPEREMIA. EYE- IRRITATION, REDNESS, PAIN, BLURRED VISION. INGEST- ABDOMINAL PAIN, CNS DEPRESSION, LIVER DAMAGE. CHRONIC: EYE- CONJUNCTIVITIS. SKIN- DRYING AND CRACKING. INHALE- REVERSIBLE LIVER, KIDNEY, AND HEART.

Carcinogenicity - NTP: NO

Carcinogenicity - IARC: NO

Carcinogenicity - OSHA: NO

Explanation Carcinogenicity: NONE OF THE CHEMICALS IN THIS PRODUCT IS LISTED BY IARC, NTP OR OSHA AS A CARCINOGEN.

Signs/Symptoms Of Overexp: IRRITATION, COUGHING, SHORTNESS OF BREATH, DIZZINESS, DROWSINESS, VERTIGO, NAUSEA, VOMITING, FATIGUE, REDNESS OF THE SKIN AND EYE WITH PAIN AND BLURRED VISION.

Med Cond Aggravated By Exp: PERSONS WITH PRE-EXISTING SKIN, LIVER, KIDNEY, OR RESPIRATORY DISEASE MAY BE AT AN INCREASED RISK FROM EXPOSURE.

Emergency/First Aid Proc: INHALATION: REMOVE SUBJECT TO FRESH AIR, IF BREATHING STOPPED GIVE ARTIFICIAL RESPIRATION. EYE: FLUSH WITH PLENTY OF WATER FOR 15 MINUTES. GET IMMEDIATE MEDICAL ATTENTION. SKIN: WASH WITH SOAP AND WATER. INGESTION: INDUCE VOMITING BY PLACING FINGER AT THE BACK OF THE THROAT. GET IMMEDIATE MEDICAL ATTENTION.

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Precautions for Safe Handling and Use

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Steps If Matl Released/Spill: WIPE OR SOAK UP SMALL SPILLS WITH PAPER TOWEL OR INERT ABSORBANT. DIKE TO RETAIN LARGE SPILLS. REMOVE RESIDUE WITH INERT ABSORBANT. PLACE IN DISPOSAL CONTAINER. ISOLATE HAZARD AREA AND DENY ENTRY. NO SMOKING OR OPEN FLAMES IN THE AREA.
Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.
Waste Disposal Method: DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS.
Precautions-Handling/Storing: STORE IN COOL, DRY, WELL VENTILATED AREA. PROTECT FROM PHYSICAL DAMAGE, HEAT AND IGNITION SOURCES. KEEP CONTAINERS CLOSED.
Other Precautions: VAPOR HAZARD INDOORS, OUTDOORS OR IN SEWERS, RUN-OFF TO SEWER MAY CREATE FIRE OR EXPLOSION HAZARD.
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Control Measures
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Respiratory Protection: IF VENTILATION DOES NOT MAINTAIN INHALATION EXPOSURES BELOW PEL (TLV), USE NIOSH/MSHA APPROVED RESPIRATOR AS PER CURRENT 29 CFR 1910.134, INSTRUCTIONS/WARNINGS AND NIOSH-RESPIRATOR SELECTION.
Ventilation: MECHANICAL (GENERAL) VENTILATION IS REQUIRED. LOCAL EXHAUST MAY BE REQUIRED IF WORK AREA IS NOT VENTED.
Protective Gloves: RUBBER
Eye Protection: CHEMICAL SAFETY GOGGLES
Other Protective Equipment: SAFETY SHOWER AND EYE BATH. OTHER EQUIPMENT AS REQUIRED TO MINIMIZE EXPOSURE FROM PROLONGED OR REPEATED CONTACT.
Work Hygienic Practices: WASH THOROUGHLY AFTER HANDLING AND BEFORE EATING. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE.
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Transportation Data
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DOT Proper Shipping Name: FLAMMABLE LIQUIDS, N.O.S. IATA UN ID Number: 1993
DOT Class: 3 IATA Proper Shipping Name: FLAMMABLE LIQUID, N.O.S. * *
DOT ID Number: UN1993 IATA UN Class: 3
DOT Pack Group: II IATA Label: FLAMMABLE LIQUID
DOT Label: FLAMMABLE LIQUID AFI PSN Code: MBV
IMO PSN Code: HIM AFI Prop. Shipping Name: FLAMMABLE LIQUIDS, N.O.S. *
IMO Proper Shipping Name: FLAMMABLE LIQUID, N.O.S. * AFI Class: 3
IMO Regulations Page Number: 3126 AFI ID Number: UN1993
IMO UN Number: 1993 AFI Pack Group: II
IMO UN Class: 3.1 AFI Label: FLAMMABLE LIQUID
IATA PSN Code: MBV AFI Basic Pac Ref: 7-7
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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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Special Hazard Precautions: MAY BE POISONOUS IF INHALED OR ABSORBED
THROUGH SKIN. VAPORS MAY CAUSE DIZZINESS OR SUFFOCATION. CONTACT MAY
IRRITATE OR BURN SKIN AND EYES. FIRE MAY PRODUCE IRRITATING OR POISONOUS
GASES. RUNOFF FROM FIRE CONTROL OR DILUTION WATER MAY CAUSE POLLUTION.

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.