



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

# MATERIAL SAFETY DATA SHEETS

Part Number/Trade Name: Tetrahydrofuran, Stabilized  
This MSDS is valid for all grades and catalog numbers of stabilized THF

## General Information

Company's Name: PHARMCO PRODUCTS, INC.	Date MSDS Revised: Nishant-8/23/99
Company's Street: 58 VALE RD.	Safety Data Review Date: 8/23/99
Company's City: BROOKFIELD	Preparer's Company: PHARMCO PRODUCTS, 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: TETRAHYDROFURAN (SARA III)	OSHA PEL: 200 PPM/250 STEL
Ingredient Sequence Number: 01	ACGIH TLV: 200 PPM/250STEL;9293
Percent: 100	Other Recommended Limit: NONE
NIOSH (RTECS) Number: LU5950000	RECOMMENDED
CAS Number: 109-99-9	

## Physical/Chemical Characteristics

Appearance And Odor: LIQUID,MOBILE;COLORLESS;ETHER-LIKE ODOR	Specific Gravity: 0.88
Boiling Point: 151F,66C	Evaporation Rate And Ref: 14.5
Vapor Pressure (MM Hg/70 F): 114MM 259F	Solubility In Water: MISCIBLE
Vapor Density (Air=1): 2.5	Percent Volatiles By Volume: 100
	Autoignition Temperature: 610F

## Fire and Explosion Hazard Data

Flash Point: 6F,-14C  
Flash Point Method: COC  
Lower Explosive Limit: 1.8  
Upper Explosive Limit: 11.8

Extinguishing Media: DRY CHEMICAL,FOAM OR CARBON DIOXIDE.WATER SPRAY CAN BE USED TO COOL FIRE EXPOSED CONTAINERS.  
Special Fire Fighting Proc: USE FULL PROTECTIVE CLOTHING AND A SCBA IN POSITIVE PRESSURE MODE.USE WATER SPRAY TO COOL FIRE EXPOSED CONTAINERS.  
Unusual Fire And Expl Hazrds: EXPLOSIVE ORGANIC PEROXIDES FORM FROM AGING OR LIGHT.VAPOR CAN TRAVEL DISTANCES ALONG THE FLOOR AND FLASH BACK TO THE IGNITION SOURCE.

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Reactivity Data

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Stability: YES  
Cond To Avoid (Stability): LIGHT.KEEP CONTAINERS CLOSED;CONCENTRATION OF PEROXIDES (BY DISTILLATION,EVAPORATION) CREATES EXPLOSION HAZARD.  
Materials To Avoid: OXYGEN.  
Hazardous Decomp Products: IRRITATING AND TOXIC FUMES(EG. CARBON MONOXIDE).  
Hazardous Poly Occur: NO  
Conditions To Avoid (Poly): NONE.

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Health Hazard Data

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LD50-LC50 Mixture: LDLO ORAL RAT=3000MG/KG;PEL=200PPM(TWA)  
Route Of Entry - Inhalation: YES  
Route Of Entry - Skin: YES  
Route Of Entry - Ingestion: YES  
Health Haz Acute And Chronic: INHAL:ANETHETIC,IRRITANT.INGEST:IRRITATING IRRITANT. CHRONIC-NO DATA.  
Carcinogenicity - NTP: NO  
Carcinogenicity - IARC: NO  
Carcinogenicity - OSHA: NO  
Explanation Carcinogenicity: RTECS(92-3) CITES MUTAGENIC STUDIES.  
Signs/Symptoms Of Overexp: INHAL:HEADACHE,IRRITATION OF THE NOSE AND THROAT,DIZZINESS.INGEST:SORE THROAT AND ABDOMINAL PAIN.SKIN:REDENSS AND PAIN.  
Med Cond Aggravated By Exp: PRE-EXISTING SKIN OR EYE PROBLEMS,IMPAIRED LIVER OR KIDNEY FUNCTIONS.  
Emergency/First Aid Proc: INHAL:REMOVE TO FRESH AIR.RESTORE OR ASSIST BREATHING IF NEEDED.CALL PHYSICIAN.INGEST:GET IMMEDIATE MEDICAL HELP.IF NOT AVAILABLE(AND CONSCIOUS),GIVE 2 GLASSES OF WATER,INDUCE VOMITING WITH FINGER DOWN THOAT(KEEP HEAD LOWER THAN HIPS).SKIN:REMOVE CONTAMINATED CLOTHING.FLUSH WITH WATER FOR 15 MINUTES.EYES:FLUSH WITH WATER,HOLDING LIDS OPENED.GET IMMEDIATE MEDICAL HELP.

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Precautions for Safe Handling and Use

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Steps If Matl Released/Spill: VENTILATE AREA.REMOVE SOURCES OF IGNITION. USE PROTECTIVE CLOTHING AND RESPIRATOR.USE NON-SPARKING EQUIPMENT.ADBSORB LIQUID WITH VERMICULITE,DRY SAND...PLACE IN AN APPROPRIATE CONTAINER FOR DISPOSAL.  
Neutralizing Agent: NOT APPLICABLE.

Waste Disposal Method: COLLECT AS HAZARDOUS WASTE, LABEL AND DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

Precautions-Handling/Storing: KEEP CONTAINER CLOSED, AWAY FROM LIGHT, HEAT AND OXIDIZERS.

Other Precautions: NONE.

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Control Measures  
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Respiratory Protection: 1-FULL FACEPIECE WITH CHEMICAL CARTRIDGE RESPIRATOR. 2-SCBA WITH FULL FACEPIECE OR AIR-LINED HOOD.  
Ventilation: LOCAL (PREFERRED, BECAUSE IT CAN CONTROL THE EMISSION OF CONTAMINANTS) AND/OR GENERAL (MECHANICAL) EXHAUST.  
Protective Gloves: RUBBER OR NEOPRENE  
Eye Protection: SAFETY GOGGLES AND/OR SPLASH SHIELD  
Other Protective Equipment: IMPERVIOUS BOOTS, APRON, COVERALLS. EYE WASH STATION AND QUICK DRENCH SHOWER SHOULD BE AVAILABLE.  
Work Hygienic Practices: DO NOT WEAR CONTACT LENSES. WASH HANDS. KEEP FOOD OUT OF THE WORK AREA. USE PRUDENT HYGIENIC AND SANITARY PRACTICES.  
Suppl. Safety & Health Data: NONE.  
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Transportation Data  
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DOT PSN Code: OAJ  
DOT Proper Shipping Name: TETRAHYDROFURAN  
DOT Class: 3  
DOT ID Number: UN2056  
DOT Pack Group: II  
DOT Label: FLAMMABLE LIQUID \*  
IMO PSN Code: OLO  
IMO Proper Shipping Name: TETRAHYDROFURAN  
IMO Regulations Page Number: 3282  
IMO UN Number: 2056  
IMO UN Class: 3.2  
IMO Subsidiary Risk Label: -  
IATA PSN Code: XSI  
IATA UN ID Number: 2056  
IATA Proper Shipping Name: TETRAHYDROFURAN  
IATA UN Class: 3  
IATA Label: FLAMMABLE LIQUID  
AFI PSN Code: XSI  
AFI Prop. Shipping Name: TETRAHYDROFURAN  
AFI Class: 3  
AFI ID Number: UN2056  
AFI Pack Group: II  
AFI Label: FLAMMABLE LIQUID  
AFI Basic Pac Ref: 7-7  
Additional Trans Data: REPORTABLE QUANTITY=1000 LBS.  
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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: TETRAHYDROFURAN  
Chronic Hazard: NO  
Signal Word: DANGER!  
Acute Health Hazard-Moderate: X  
Contact Hazard-Moderate: X  
Fire Hazard-Severe: X

Reactivity Hazard-Slight: X

Special Hazard Precautions: INHAL:ANESTHETIC,IRRITANT.INGEST:IRRITATING TO IRRITANT. CHRONIC-NO DATA. KEEP CONTAINER CLOSED,AWAY FROM LIGHT,HEAT AND OXIDIZERS. FIRST AID: INHAL:REMOVE TO FRESH AIR.RESTORE OR ASSIST BREATHING IF NEEDED.CALL PHYSICIAN.INGEST:GET IMMEDIATE MEDICAL HELP.IF NOT AVAILABLE(AND CONSCIOUS),GIVE 2 GLASSES OF WATER,INDUCE VOMITING WITH FINGER DOWN THOAT(KEEP HEAD LOWER THAN HIPS).SKIN:REMOVE CONTAMINATED CLOTHING.FLUSH WITH WATER FOR 15 MINUTES.EYES:FLUSH WITH WATER,HOLDING LIDS

OPENED.GET IMMEDIATE MEDICAL HELP.

Protect Eye: Y

Protect Skin: Y

Protect Respiratory: Y

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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.