



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

MATERIAL SAFETY DATA SHEETS

Part Number/Trade Name: FORMALDEHYDE

This MSDS is valid for all grades and catalog numbers for Formaldehyde 37%

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

Proprietary: NO
Ingredient: FORMALDEHYDE (SARA III)
Ingredient Sequence Number: 01
Percent: 37 - 44
NIOSH (RTECS) Number: LP8925000

CAS Number: 50-00-0
OSHA PEL: SEE 1910.1048
ACGIH TLV: C 0.3 PPM; A2; 9293
Other Recommended Limit: NONE SPECIFIED

Physical/Chemical Characteristics

Appearance And Odor: CLEAR COLORLESS LIQUID,PUNGENT ODOR
Boiling Point: 205F,96C
Melting Point: UNKNOWN
Vapor Pressure (MM Hg/70 F): 67.0- 87.9
Vapor Density (Air=1): 1.03
Specific Gravity: 1.0749 - 1.2020

Decomposition Temperature: UNKNOWN
Evaporation Rate And Ref: UNKNOWN
Solubility In Water: INFINITE
Percent Volatiles By Volume: 100
Corrosion Rate (IPY): UNKNOWN
Autoignition Temperature: 858F

Fire and Explosion Hazard Data

Flash Point: 141F,61C
Flash Point Method: TCC
Lower Explosive Limit: 7.0

Upper Explosive Limit: 73
Extinguishing Media: DRY CHEMICAL,ALCOHOL FOAM OR CO2.WATER MAY BE INEFFECTIVE.BUT SHOULD BE USED TO COOL FIRE-EXPOSED CONTAINERS.
Special Fire Fighting Proc: NIOSH-APPROVED SELF-BREATHING APPARATUS WITH ORGANIC VAPORS FILTER & FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE MODE.WATER SPRAY WILL REDUCE FLAMES.
Unusual Fire And Expl Hazrds: GAS VAPORIZES READILY FROM SOLUTION AND IS FLAMMABLE IN AIR.ABOVE FLASH POINT,VAPOR-AIR MIXTURES ARE EXPLOSIVE WITHIN FLAMMABLE LIMITS NOTED ABOVE.

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Reactivity Data
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Stability: YES
Cond To Avoid (Stability): HIGH TEMPERATURES, OPEN FLAMES AND TEMPERATURES BELOW 68 DEG F.
Materials To Avoid: STRONG OXIDIZERS, CAUSTICS, STRONG ALKALIES, ISOCYANATES, ANHYDRIDES, OXIDES AND INORGANIC ACIDS
Hazardous Decomp Products: IF INVOLVED IN A FIRE,IRRITATING GASEOUS FORMALDEHYDE AND CARBON MONOXIDE & DIOXIDE MAY BE RELEASED.
Hazardous Poly Occur: YES
Conditions To Avoid (Poly): NONHAZARDOUS PARA FORMALDEHYDE AT LOW TEMP.

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Health Hazard Data
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Route Of Entry - Inhalation: YES
Route Of Entry - Skin: YES
Route Of Entry - Ingestion: YES
Health Haz Acute And Chronic: ACUTE-EYE:TEARING,SEVERE IRRITATION & BURN. SKIN:DRYING,CRACKING,DERMATITIS.INHALATION:HIGHLY IRRITATING TO UPPER RESPIRATORY TRACT.MAY CAUSE INFLAMMATION OF LINING OF NOSE,THROAT & LUNG WITH EDEMA POSSIBLE.INGESTION:POISONOUS.CAUSES SEVER STOMACH PAIN,SEVERE IRRITATION,UNCONSCIOUSNESS,DEATH.CHRONIC-IMPAIR VISION.
Carcinogenicity - NTP: YES
Carcinogenicity - IARC: YES
Carcinogenicity - OSHA: YES
Explanation Carcinogenicity: FORMALDEHYDE GAS
Signs/Symptoms Of Overexp: TEARING, SEVERE EYE IRRITATION & BURN. DRYING, CRACKING OF SKIN. HIGHLY IRRITATING TO UPPER RESPIRATORY TRACT. SEVERE STOMACH PAIN, SEVERE IRRITATION AND INFLAMMATION OF MOUTH, THROAT AND STOMACH. BLINDNESS OR DEATH MAY OCCUR.
Med Cond Aggravated By Exp: PERSONS WITH PRE-EXISTING SKIN DISORDERS OR EYE PROBLEMS,OR IMPAIRED LIVER ,KIDNEY OR RESPIRATORY FUNCTION MAY BE MORE SUSCEPTIBLE TO THE EFFECTS OF THE SUBSTANCE.AN ALLERGIC REACTION MAY OCCUR.
Emergency/First Aid Proc: IN ALL CASES,CALL A PHYSICIAN.INHALATION: REMOVE TO FRESH AIR.GIVE OXYGEN/CPR IF NEEDED.EYE:FLUSH WITH WATER FOR 15 MINUTES HOLDING EYELIDS APART.SKIN:IMMEDIATELY FLUSH FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES.INGESTION:IF CONSCIOUS,INDUCE VOMITING BY GIVING 2 GLASSES OF WATER & STICKING FINGER DOWN THROAT.

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Precautions for Safe Handling and Use

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Steps If Matl Released/Spill: VENTILATE AREA.REMOVE ALL SOURCES OF
IGNITION.WEAR PROTECTIVE CLOTHING & RESPIRATOR.DO NOT FLUSH TO SEWER OR
SURFACE WATER.CAN BE ABSORBED ON INERT MATERIAL AND DISPOSED AS
HAZARDOUS
WASTE.REPORTABLE QUANTITY FOR METHANOL 5000,FORMALDEHYDE 100 LBS.
Neutralizing Agent: AMMONIUM HYDROXIDE/SODIUM SULFITE
Waste Disposal Method: DISPOSE OF IN AN APPROPRIATE DISPOSAL FACILITY IN
COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS. IF SPILL IN EXCESS OF
EPA REPORTABLE QUANTITY IS MADE INTO THE ENVIRONMENT,NOTIFY THE NATIONAL
RESPONSE CENTER (800-424-8802).
Precautions-Handling/Storing: STORAGE-KEEP IN A STANDARD FLAMMABLE LIQUIDS
STORAGE CABINET/ROOM OR OUTSIDE,IN A TIGHTLY CLOSED CONTAINER & COOL BUT
NOT <68F.
Other Precautions: KEEP AWAY FROM HEAT,SPARKS & FLAMES.USE WITH ADEQUATE
VENTILATION.AVOID BREATHING VAPORS.AVOID PROLONGED/REPEATED SKIN CONTACT.
WASH THOROUGHLY WITH SOAP & WATER AFTER HANDLING.DO NOT ENTER STORAGE
AREA
UNLESS ADEQUATELY VENTILATED.

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Control Measures
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Respiratory Protection: IF THE PEL IS EXCEEDED,A FULL-FACEPIECE RESPIRATOR
WITH CARTRIDGES OR CANISTERS ESPECIALLY APPROVED FOR PROTECTION AGAINST
FORMALDEHYDE MAY BE WORN UP TO CONCENTRATIONS OF 10 PPM (10 X PEL).SEE
OSHA
STANDARD FOR ADDITIONAL INFORMATION.
Ventilation: A SYSTEM OF LOCAL AND/OR GENERAL EXHAUST IS RECOMMENDED TO
KEEP EMPLOYEE EXPOSURES BELOW THE AIRBORNE EXPOSURE LIMITS.
Protective Gloves: NEOPRENE OR RUBBER
Eye Protection: CHEMICAL SAFETY GOGGLES+FULL FACE SHIELD
Other Protective Equipment: EYEWASH STATION AND SAFETY SHOWER.WEAR
IMPERVIOUS CLOTHING,INCLUDING BOOTS,GLOVES,LAB COAT,APRON OR COVERALLS.
Work Hygienic Practices: OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND
RECOMMENDED PROCEDURES. DO NOT WEAR CONTAMINATED CLOTHING OR
FOOTWEAR.
Suppl. Safety & Health Data: THE PERCEPTION OF FORMALDEHYDE BY ODOR AND
EYE IRRITATION BECOMES LESS SENSITIVE WITH TIME AS ONE ADAPTS TO
FORMALDEHYDE.THIS CAN LEAD TO OVEREXPOSURE IF A WORKER IS RELYING ON
FORMALDEHYDE'S WARNING PROPERTIES TO ALERT HIM OR HER TO THE POTENTIAL
FOR
EXPOSURE.

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Transportation Data
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DOT PSN Code: GNF
DOT Proper Shipping Name:
FORMALDEHYDE, SOLUTIONS
DOT Class: 8 *
DOT ID Number: UN2209
DOT Pack Group: III
DOT Label: CORROSIVE *
IMO PSN Code: HLZ

IMO Proper Shipping Name:
FORMALDEHYDE SOLUTION, *
IMO Regulations Page Number: 8176-1 *
IMO UN Number: 2209
IMO UN Class: 8 *
IMO Subsidiary Risk Label: -
IATA PSN Code: MKH
IATA UN ID Number: 2209

IATA Proper Shipping Name:
FORMALDEHYDE SOLUTION *
IATA UN Class: 8
IATA Label: CORROSIVE
AFI PSN Code: MKH
AFI Prop. Shipping Name: FORMALDEHYDE,
SOLUTIONS
AFI Class: 8

AFI ID Number: UN2209
AFI Pack Group: III
AFI Label: CORROSIVE
AFI Basic Pac Ref: 12-5
N.O.S. Shipping Name: CONTAINS 12-15 %
METHANOL.
Additional Trans Data: SHIPPING NAME PER
MSDS.

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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: FORMALDEHYDE 37% IN 6.5-7.5% METHYL ALCOHOL
Signal Word: DANGER!
Acute Health Hazard-Severe: X
Contact Hazard-Severe: X
Fire Hazard-Moderate: X
Reactivity Hazard-None: X
Special Hazard Precautions: ACUTE-EYE:TEARING,SEVERE IRRITATION & BURN.
SKIN:DRYING,CRACKING,DERMATITIS.INHALATION:HIGHLY IRRITATING TO UPPER
RESPIRATORY TRACT.MAY CAUSE INFLAMMATION OF LINING OF NOSE,THROAT & LUNG
WITH EDEMA POSSIBLE.INGESTION:POISONOUS.CAUSES SEVER STOMACH PAIN,SEVERE
IRRITATION,UNCONSCIOUSNESS,DEATH.CHRONIC-IMPAIR VISION.STORAGE-KEEP IN A
STANDARD FLAMMABLE LIQUIDS STORAGE CABINET/ROOM OR OUTSIDE,COOL BUT NOT
<68F.FIRST AID-IN ALL CASES,CALL A PHYSICIAN.INHALATION:REMOVE TO FRESH
AIR.GIVE OXYGEN/CPR IF NEEDED.EYE/SKIN:IMMEDIATELY FLUSH WITH WATER FOR 15
MINUTES.HOLD EYELIDS APART.INGESTION:IF CONSCIOUS,INDUCE VOMITING.CONTACT
A
PHYSICIAN.
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.