MATERIAL SAFETY DATA SHEET 4-1172, 4-1175 ISOPROPYL ALCOHOL 99% Revision Date:1/1/06 Section I - Product Identification Manufacturer's Name |Emergency Phone Number (24 Hours) Presstek |CHEMTREC @ (800)424-9300 -----| MSDS Request Phone Number: Street Address 11-603-595-7000 55 Executive Drive -----|For MSDS via Fax: 1-800-995-0088 City, State, Zip Code Hudson, NH 03051 |Date Prepared: February 2, 1995 Product Use: OFFSET PRINTING. |Prepared By: Kenneth W. Pinter Chemical Name, Trade Name, Synonyms: ISOPROPANOL, 2-PROPANOL. HMIS RATING 3 - Flammability 0 - Reactivity B - Personal Protection 2 - Health Section II - Hazardous Ingredients Exposure Limits | CAS NO. | % WT. | OSHA PEL ACGIH TLV OTHER Components ISOPROPYL ALCOHOL | 67-63-0 | 100 | 400 PPM. 400 PPM. Section III - Physical Data Boiling POINT(F): 180 |pH: N.A. Vapor Pressure(mm Hg): 33 |Freezing Point(F): N.A. Vapor Density (AIR = 1): 2.1 |V0C: 6.58 LBS/GAL Specific Gravity (H2O=1): 0.789 | Color And Odor: COLORLESS / ALCOHOL ______ Odor Threshold: 7.5 PPM |Physical State: LIQUID. Evaporation Rate (Butyl Acetate = 1): 1.4 Solubility in Water: COMPLETE. Section IV - Fire and Explosion Hazard Data FLASH POINT (METHOD USED): 53 (F) T.C.C. |Flammable Limits: |LEL: 2.0% |UEL: 12.0% Auto-ignition Temperature: N.D. Extinguishing Media: WATER FOG / ALCOHOL FOAM / ${\tt CO2}$ / DRY CHEMICAL. Special Fire Fighting Procedures: USE APPROVED RESPIRATORS. WATER MAY BE INEFFECTIVE IN ADVANCED FIRES, BUT CAN BE USED TO KEEP FIRE EXPOSED CONTAINERS AND FIREFIGHTERS COOL. WATER WILL DILUTE SMALL SPILLS TO A NON-FLAMMABLE MIXTURE. _____ Unusual Fire And Explosion Hazards: LOW FLASH POINT.

Section V - Reactivity Data

Stability

Unstable : Stable : X

|Conditions to Avoid: OPEN FLAMES AND ELECTRICAL | SPARKS. KEEP CONTAINER CLOSED WHEN NOT IN USE, DO NOT SMOKE WHILE USING.

MATERIAL SAFETY DATA SHEET 4-1172, 4-1175 ISOPROPYL ALCOHOL 99% Revision Date:1/1/06 ______ Incompatibility (Materials to Avoid): STRONG OXIDIZING MATERIAL. Hazardous Decomposition Products: POSSIBLY CARBON MONOXIDEAND AND UNIDENTIFIED ORGANIC COMPOUNDS. Hazardous | May Occur: |Conditions to Avoid: HEAT, SPARKS AND Polymerization | Will Not Occur: X | OPEN FLAME. _____ Section VI - Health Hazard Data (Acute and Chronic) Primary Route(s) of Entry: DERMAL, INHALATION. Oral Ingestion: MAY CAUSE MARKED AND PERSISTENT NAUSEA, VOMITING AND ABDOMINAL PAIN. IF VOMITING OCCUR FOLLOWING INGESTION, ASPIRATION OF VOMITUS INTO THE LUNGS CAN CAUSE BROCHOPNEUMONIA OR PULMONARY EDEMA. Eye Contact: LIQUID OR VAPOR CONTACT CAN CAUSE IRRITATION. Skin Contact: PROLONGED AND REPEATED CONTACT CAN CAUSE DRYNESS AND IRRITATION. Inhalation: HIGH CONCENTRATIONS OF VAPORS CAN IRRITATE RESPIRATORY TRACT AND MAY RESULT IN CENTRAL NERVOUS SYSTEM (CNS) DEPRESSION. Effects of Overexposure: HIGH CONCENTRATION OF VAPOR CAN HEADACHES, DIZZINESS NAUSEA, INCOORDINATION, DROWSINESS AND LOSS OF CONSCIONSNESS. Medical Conditions Generally | PREEXISTING SKIN, EYE AND RESPIRATORY DISORDERS. Aggravated by Exposure Carcinogenicity: NOT KNOWN TO BE CARCINOGENIC.PRESENT. Mutagenicity: NOT KNOWN TO BE MUTAGENIC. Teratogenicity: NOT KNOWN TO BE TERATOGENIC. Reproductive Toxicity: NOT KNOWN TO HAVE REPRODUCTIVE TOXICITY. FIRST AID PROCEDURES Ingestion: GIVE NO MORE THAN 2 GLASSES OF WATER AND INDUCE VOMITING BY GIVING 2 TABLE SPOONS SYRUP OF IPECAC. GET MEDICAL ATTENTION IMMEDIATELY. Eye: FLUSH WITH WATER FOR 15 MINUTES. GET MEDICAL ATTENTION. Skin: WASH WITH SOAP AND WATER. IF IRRITATION PERSISTS, GET MEDICAL ATTENTION. Inhalation: REMOVE VICTIM TO FRESH AIR AND PROVIDE OXYGEN IF BREATHING IS DIFFICULT. GET MEDICAL ATTENTION. **Section VII - Toxicology Information** LCSU LD50 (RATS) LD50 (RABBITS) 12,000PPM(8HRS) 5840 mg/KG 13,000 mc/r Ingredient

13,000 mg/KG

Section VIII - Spill or Leak Procedure

ISOPROPYL ALCOHOL

Steps to be taken in case material is released or spilled: ELIMINATE SOURCES OF IGNITION. FLUSH AREA WITH LARGE AMOUNT WATER TO DILUTE SPILL TO NON-COMBUSTIBLE MIXTURE. FOR SMALL SPILLS, USE ABSORBENT MATERIAL FOR

MATERIAL SAFETY DATA SHEET

4-1172, 4-1175 ISOPROPYL ALCOHOL 99% IMMEDIATE INCINERATION.

Revision Date:1/1/06

Disposal Method: INCINERATION OR ACCORDING TO LOCAL AND STATE REGULATIONS FOR

FLAMMABLES, WATER SOLUBLE MATERIALS.

Section IX - Special Protection Information

Ventilation

Local Exhaust: MAINTAIN MODERATE VENTILATION. SPECIAL: N.A.

Mechanical (General): ACCEPTABLE. Other: N.A.

Respiratory Protection: NONE NEEDE WHEN USED AS INTENDED.

Protective Clothing: WEAR IMPERVIOUS GLOVES TO PREVENT PROLONGED OR REPEATED SKIN CONTACT.

Eye Protection: CHEMICAL WORKERS GOGGLES.

Other Dust other Emigrant, MANE MEDDED MUEN MOED AC IMPENDED

Other Protective Equipment: NONE NEEDED WHEN USED AS INTENDED.

Section X - Special Precautions

Precautions to be taken in Handling and Storing: WARNING! FLAMMABLE. KEEP AWAY FROM HEAT, SPARKS OR OPEN FLAME. KEEP CONTAINER CLOSED. AVOID REPEATED EYE AND SKIN CONTACT. AVOID INHALATION OF HIGH CONCENTRATIONS OF VAPOR. USE WITH VENTILATION TO MAINTAIN VAPOR CONCENTRATIONS BELOW THE TLV OF 400 PPM.

Other Precautions: KEEP OUT OF REACH OF CHILDREN.

Section XI - Transportation Information

Hazard Class: 3 Label: Flammable Liquid DOT Proper Shipping Name: ISOPROPANOL, 3, UN1219, II

Section XII - Regulatory Information

CERCLA/SUPERFUND, 40 CFR 117,302: THIS PRODUCT DOES NOT CONTAIN ANY REPORTABLE QUANTITY (RQ) SUBSTANCE.

SARA(TITLE III) - Sections 302, 311, 312, and 313:

Section 302 Extremely Hazardous Substances (40 CFR 355): THIS PRODUCT DOES NOT CONTAIN ANY INGREDIENTS LISTED AS AN EXTREMELY HAZARDOUS SUBSTANCE.

Section 311 and 312 MSDS Submission and Inventory Reporting (40 CFR 370): THIS PRODUCT CONTAINS ISOPROPYL ALCOHOL WHICH REQUIRES REPORTING UNDER 311 AND 312 IF STORED IN LARGE ENOUGH QUANTITIES.

Section 313 Toxic Chemical Release Reporting (40 CFR 372): THIS PRODUCT DOES NOT CONTAIN ANY INGREDIENTS THAT ARE ON THE LIST OF TOXIC CHEMICALS.

TOXIC SUBSTANCES CONTROL ACT (TSCA):

This product complies with rules and regulations of TSCA.

California Proposition 65: THIS PRODUCT DOES NOT CONTAIN ANY MATERIAL, THAT ARE CURRENTLY LISTED BY THE STATE OF CALIFORNIA UNDER PROPOSITION 65.

Section XIII - Addition Information

NONE

N.D. = No Data N.A. = Not Applicable The information herein given in good faith but no warranty, express or implied, is made.