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Page 3

Humco Holding Group, Inc.
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Texarkana, TX 75501
903-831-7808

Item #0395-1249
Isopropyl Rubbing Alcohol 70%

Date Prepared: 07/09/97

SECTION 1 PRODUCT IDENTIFICATION & EMERGENCY INFORMATION

Product Name: Isopropyl Rubbing Alcohol 70% USP
Chemical Name: 2-Propanol Water
Product Description: Clear colorless liquid.

Emergency Telephone Numbers:

Humco Holding Group, Inc. 800-662-3435
Chemtrec 800-424-9300

SECTION 2 HAZARDOUS INGREDIENT INFORMATION

This product is hazardous as defined in 29 CFR1910.1200.

OSHA HAZARD

Flammable
PEL; TLV
Eye irritant

For additional information see Health Information & Protection.

SECTION 3 HEALTH INFORMATION & PROTECTION

NATURE OF HAZARD

EYE CONTACT: Irritating, and will injure eye tissue if not removed promptly.

SKIN CONTACT: Frequent or prolonged contact may irritate and cause dermatitis. Low order of toxicity.

INHALATION: High vapor concentrations are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anesthetic and may have other central nervous system effects.

INGESTION: Minimal toxicity. Small amounts of the liquid aspirated into the respiratory system during ingestion, or from vomiting, may cause bronchiopneumonia or pulmonary edema.

Isopropyl Rubbing Alcohol 70%

Page 4

SECTION 3 HEALTH INFORMATION & PROTECTION Cont'd**FIRST AID**

EYE CONTACT: Immediately flush eyes with large amounts of water for at least 15 minutes. Get prompt medical attention.

SKIN CONTACT: Immediately flush with large amounts of water; use soap if available. Remove contaminated clothing, including shoes, after flushing has begun.

INHALATION: Using proper respiratory protection, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Call for prompt medical attention.

INGESTION: If swallowed. **DO NOT** induce vomiting. Keep at rest. Get prompt medical attention.

WORKPLACE EXPOSURE LIMITS

OSHA regulation 29CFR1910.1000 requires the following permissible exposure limits: A TWA of 400 ppm (980 mg/m³) and a STEL of 500 ppm (1225 mg/m³) for Isopropyl Alcohol.

The ACGIH recommends the following threshold limit values: A TWA of 400 ppm (983 mg/m³) and a STEL of 500 ppm (1230 mg/m³) for Isopropyl Alcohol.

PRECAUTIONS

PERSONAL PROTECTION: For open systems where contact is likely, wear long sleeves, chemical resistant gloves, and chemical goggles. Where contact may occur, wear safety glasses with side shields. Where concentrations in air may exceed the limits given in this Section and engineering, work practice or other means of exposure reduction are not adequate, NIOSH/MSHA approved respirators may be necessary to prevent overexposure by inhalation.

VENTILATION: The use of mechanical dilution ventilation is recommended whenever this product is used in a confined space, is heated above ambient temperatures, or is agitated. Use explosion-proof ventilation equipment.

CHRONIC EFFECTS: In developmental toxicity studies conducted by the Chemical manufacturers Association, unexpected acute toxicity was found when Isopropanol was administered to pregnant rabbits by gavage. There were no unexpected toxic effects in pregnant rats exposed in the same study. In rats there were some relatively mild developmental toxicity in the rats at levels which did not also produce maternal toxicity. There were no indications of developmental toxicity in the rabbits at any exposure level. Preliminary findings from a multigeneration reproduction study indicate that infant and immature rats are more sensitive than their parents to the acute oral toxicity induced by high (1000 mg/kg/day) doses of Isopropanol. The effect levels for rats and rabbits were at several times the maximum exposure that would occur at the TLV. This information has been reported to the U.S. EPA under the provisions of Section 8(e) of TSCA.

Isopropyl Rubbing Alcohol 70%

PAGE 5

SECTION 4**FIRE & EXPLOSION HAZARD****FLASHPOINT:** 68°F**METHOD:** ICC**FLAMMABLE LIMITS:** LEL: 2.0 UEL: 12.0 @ 77°F (Isopropanol)**AUTOIGNITION TEMPERATURE:** 662°F **NOTE:** Minimum

GENERAL HAZARD: Flammable Liquid, can release vapors that form flammable mixtures at or above the flashpoint. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. **DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.** Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or properly disposed of.

FIRE FIGHTING: Use water spray to cool fire exposed surfaces and to protect personnel. Shut off "fuel" to fire. If a leak or spill has not ignited, use water spray to disperse the vapors. Either allow fire to burn under controlled conditions or extinguish with alcohol type foam and dry chemical. Try to cover liquid spills with foam.

HAZARDOUS COMBUSTION PRODUCTS: None**SECTION 5****SPILL CONTROL PROCEDURE**

LAND SPILL: Eliminate sources of ignition. Prevent additional discharge of material, if possible to do so without hazard. For small spills implement cleanup procedures; for large spills implement cleanup procedures and, if in public area, keep public away and advise authorities. Also, if this product is subject to CERCLA reporting (see Section 7) notify the National Response Center. Vapors/dust can be harmful/fatal. Warn occupants of downwind areas. Prevent liquid from entering sewers, watercourses, or low areas. Contain spilled liquid with sand or earth. Do not use combustible materials such as sawdust. Recover by pumping (use an explosion proof or hand pump) or with a suitable absorbent. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

WATER SPILL: Eliminate sources of ignition. Vapors/dust can be harmful/fatal. Warn occupants and shipping in downwind areas. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

Isopropyl Rubbing Alcohol 70%**SECTION 6****NOTES**

HAZARD RATING SYSTEMS: This information is for people trained in: National Fire Protection Association (NFPA 704) Identification of the Fire Hazards of Materials

	NFPA 704	KEY	4 = Severe
Health	1		3 = Serious
Flammability	3		2 = Moderate
Reactivity	0		1 = Slight

SECTION 7**REGULATORY INFORMATION**

DEPARTMENT OF TRANSPORTATION (DOT):

DOT PROPER SHIPPING NAME: Flammable Liquid Isopropanol Solution

DOT HAZARD CLASS: Flammable Liquid

DOT IDENTIFICATION: UN 1219

NAME: Isopropanol (Isopropyl Alcohol)

TSCA: This product is listed on the TSCA Inventory at CAS Registry Number 67-63-0

CERCLA: If this product is accidentally spilled, it is not subject to any special reporting under the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). We recommend you contact local authorities to determine if there may be other local reporting requirements.

SARA TITLE III: Under the provisions of Title III, Sections 311/312 of the Superfund Amendments and Reauthorization Act, this product is classified into the following hazard categories: Immediate health, Delayed health, Fire.

SECTION 8**TYPICAL PHYSICAL & CHEMICAL PROPERTIES**

SPECIFIC GRAVITY: 0.878 at 68°F

SOLUBILITY IN WATER, WT. % AT °F: 100.00 at 68

EVAPORATION RATE, n-Bu Acetate=1: 1.7

BOILING POINT, °F: 170°

SECTION 9**REACTIVITY DATA**

STABILITY: Stable

CONDITIONS TO AVOID INSTABILITY: Not applicable.

HAZARDOUS POLYMERIZATION: Will not occur.

MATERIALS AND CONDITIONS TO AVOID INCOMPATIBILITY: Caustics, amines, alkanolamines, aldehydes, strong oxidizing agents, and chlorinated compounds.

HAZARDOUS DECOMPOSITION PRODUCTS: None

Isopropyl Rubbing Alcohol 70%

Page 3

SECTION 10

STORAGE AND HANDLING

ELECTROSTATIC ACCUMULATION HAZARD: No, but use proper grounding procedure

STORAGE TEMPERATURE, °F: Ambient

STORAGE/TRANSPORT PRESSURE, mmHg: Atmospheric

LOADING/UNLOADING TEMPERATURE, °F: Ambient

