

MATERIAL SAFETY DATA SHEET - ISOPROPYL ALCOHOL 70%

SECTION 1 - PRODUCT IDENTITY

PRODUCT NAME-IDENTITY: Isopropyl Alcohol 70%

CHEMICAL FAMILY: Isopropanol-Alcohol

D.O.T. HAZARD CLASSIFICATION: UN 1219 Flammable

EXCEMPTION: 173.118

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SECTION 2 - HAZARDOUS INGREDIENT INDENTITY INFORMATION

HAZARDOUS COMPONENTS (SPECIFIC CHEMICAL IDENTITY, COMMON NAMES):

Isopropyl Alcohol (Cas # 67-63-0); 70% Threshold Lmt. 400 ppm, Water 30%

SECTION 3 - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT: 190°F

VAPOR PRESSURE (mm Hg): 25 @ 66°F

VAPOR DENSITY (Air =1): 1.6

SOLUBILITY IN WATER: Complete

PH: 6 - 8

SPECIFIC GRAVITY: 0.85 - (H₂O = 1)

MELTING POINT: NA

EVAPORATION RATE (Butyl Acetate = 1): 0.7

APPEARANCE AND ODOR: Colorless, clear liquid with alcoholic odor

SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED): Approximate 77°F - TCC

FLAMMABLE LIMIT: Percent Volume in Air: Lower: 2; Upper: 12

EXTINGUISHING MEDIA: Water fog, "alcohol foam", dry chemical or CO₂

SPECIAL FIREFIGHTING PROCEDURE: Warning flammable. Evacuate personnel, full bunker gear required including helmet with face shield, bunker coats, gloves, and rubber boots and a positive pressure NIOSH approved self-contained breathing apparatus. Cool fire exposed containers with water.

UNUSUAL FIRE & EXPLOSION HAZARDS: Containers exposed to intense heat should be cooled with water to prevent vapor pressure build-up, which could result in container rupture.

Containers exposed to direct flames should be cooled with large quantities of water to prevent weakening of container structure.

SECTION 5 - REACTIVITY DATA

STABILITY: Stable

CONDITIONS TO AVOID: Sparks, heat, flames and contact with strong oxidizing agents.

HAZARDOUS DECOMPOSITION OF BYPRODUCTS: Carbon monoxide and unidentifiable organic compounds may be found during combustion.

INCOMPATIBILITY (Materials to Avoid): Contact with strong oxidizing agents. Do not store or handle in aluminum equipment at temperatures above 120°F.

HAZARDOUS POLYMERIZATION: Will not occur

CONDITIONS TO AVOID: Do not store or handle in aluminum equipment at temperatures above 120°F.

SECTION 6 - HEALTH HAZARD DATA

ROUTES OF ENTRY: SKIN/EYES? Yes; HEALTH HAZARD (ACUTE & CHRONIC): Mildly irritating to tissue.

INHALATION? Yes; HEALTH HAZARD (ACUTE & CHRONIC): Mildly irritating to nose, throat and respiratory tract

INGESTION? ; Chronic irritating to gastro intestinal tract causing vomiting and abdominal pain.

CARCINOGENICITY: No

TOXICITY: Acute oral 5840 mg/kg (rat), acute dermal LD 50 13,000 mg/kg (rabbit), acute inhalation LD 50 12,000 ppm (rat) 8 hours.

SIGNS & SYMPTOMS OF EXPOSURE: May cause mild irritation to the nose, throat and respiratory tracts. May result in central nervous system (CNS) depression which is evidenced by headache, dizziness, nausea, and in extreme cases, unconsciousness.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Pre-existing skin, eye and respiratory disorders may be aggravated by exposure. Impaired liver function from preexisting disorders may be aggravated by exposure to this product.

EMERGENCY & FIRST AID PROCEDURE: Flush eyes or skin with water and obtain medical attention. If breathing is difficult, remove victim to fresh air and provide oxygen and medical attention. If ingested, give victim water and induce vomiting by giving 2 tablespoons of syrup of Ipecac.

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Contain leak. Soap up residue with absorbent clay or sand and place in non-leaking containers. Eliminate all ignition sources.

WASTE DISPOSAL METHOD: Follow local, state and federal disposal requirements.

PRECAUTIONS TO BE TAKEN IN HANDLING & STORAGE: Keep containers closed when not in use. Use with adequate ventilation. Avoid prolonged or repeated contact with skin. OTHER PRECAUTIONS: Precautions for repair and maintenance of contaminated equipment: wear protective clothing, safety goggles, NIOSH approved respirator and gloves. Thoroughly clean equipment with detergent and water to remove product before starting repairs. Do not store or handle in aluminum equipment above 120°F. Handling equipment must be grounded to prevent sparking. Keep liquid and vapors away from heat, sparks and flames, including pilot lights. Vapors may accumulate and travel to ignition sources distant from point of use resulting in flash fires. Do not cut, drill, grind, or weld near or on containers as they can contain explosive vapors. Do not pressurize drum containers to empty them. Bond and ground transfer containers and equipment.

SECTION 8 - CONTROL & SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:

VENTILATION: LOCAL EXHAUST: Yes; SPECIAL: If large quantities stored or handled, use explosion proof ventilation to control vapor concentrations. MECHANICAL:

PROTECTIVE GLOVES: Rubber or Neoprene

EYE PROTECTION: Safety goggles.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: For respiratory protection, use an atmosphere-supplying respirator or NIOSH approved respirator. Eye wash fountains or safety showers should be available for emergency use.

WORK/HYGENIC PRACTICES: Wash with soap and water before eating, drinking, smoking or using toilet facilities. Launder contaminated clothing before re-use.

The above information is believed to be accurate and represents the best information available to us at the time this Material Safety Data Sheet was prepared. The information is provided to our customers in good faith; however, no warranty, expressed or implied, is made.