

Ashland

ISOPROPANOL 99%

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PRODUCT NAME: Isopropanol 99%
 CAS NUMBER: 67-63-0
 DATA SHEET NO.: 0001444-007.001
 PREPARED: 03/24/94
 SUPERSEDES: 03/01/94

NFPA CODES:
 HEALTH: 1
 FLAMMABILITY: 3
 REACTIVITY: 0

SECTION V - HEALTH HAZARD DATA

PERMISSIBLE EXPOSURE LEVEL: 400 ppm
 THRESHOLD LIMIT VALUE: 400 ppm
 EFFECTS OF ACUTE OVEREXPOSURE:
 EYES: Exposure to liquid or vapor causes eye irritation. Symptoms may include stinging, tearing, redness, and swelling.
 SKIN: Exposure may cause mild skin irritation. Prolonged or repeated exposure may dry the skin. Symptoms may include redness, burning, drying and cracking, and skin burns.
 Skin absorption is possible, but harmful effects are not expected from this route of exposure under normal conditions of handling and use.
 BREATHING: Exposure to vapor or mist is possible. Short-term inhalation toxicity is low. Breathing small amounts during normal handling is not likely to cause harmful effects; breathing large amounts may be harmful. Symptoms are more typically seen at air concentrations exceeding the recommended exposure limits. Symptoms of exposure may include: Irritation (nose, throat, respiratory tract); impaired coordination; confusion; central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness); low blood pressure; coma
 SWALLOWING: Single dose oral toxicity is low. Swallowing small amounts during normal handling is not likely to cause harmful effects; swallowing large amounts may be harmful.
 SYMPTOMS MAY INCLUDE: Gastrointestinal irritation (nausea, vomiting, diarrhea); impaired coordination; central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness); respiratory depression; low blood pressure; effects on heart rate; mild, reversible liver effects; pulmonary edema (swelling and collection of fluid in the lung); kidney damage; coma
 FIRST AID:
 IF ON SKIN: Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.
 IF IN EYES: If symptoms develop, move individual away from exposure and into fresh air. Flush eyes with water for at least 15 minutes while holding eyelids apart. If symptoms persist, seek medical attention.
 IF SWALLOWED: If swallowed, seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. If individual is conscious and alert, induce vomiting by giving Syrup of Ipecac or by gently placing two fingers at the back of the throat. If possible, do not leave individual unattended.
 IF BREATHED: If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.
 PRIMARY ROUT(S) OF ENTRY: Inhalation, skin absorption, skin contact, eye contact

SECTION I - PRODUCT IDENTIFICATION

GENERAL OR GENERIC ID: Alcohol
 DOT HAZARD CLASSIFICATION: 3 (Flammable Liquid)

SECTION II - COMPONENTS

If present, IARC, NTP and OSHA carcinogens and chemicals subject to the reporting requirements of SARA Title III Section 313 are identified in this section.

INGREDIENT	Percent	PEL	TLV	NOTE
Isopropanol	>99	400 ppm	400 ppm	(1)
CAS #: 67-63-0				

NOTES:

(1) OSHA/ACGIH Short Term Exposure Limit (STEL) for Isopropyl Alcohol is 500 ppm. NIOSH recommends a limit of 400 ppm, 8-hour TWA; 800 ppm, Ceiling.

SECTION III - PHYSICAL DATA

BOILING POINT FOR PRODUCT: 180.00 Deg F (82.22 Deg C) @ 760.00 mm Hg
 VAPOR PRESSURE FOR PRODUCT: 33.00 mm Hg @ 68.00 Deg F (20.00 Deg C)
 SPECIFIC VAPOR DENSITY AIR = 1: 2.07
 SPECIFIC GRAVITY: .789 @ 60.00 Deg F (15.55 Deg C)
 PERCENT VOLATILES: 100.00%
 EVAPORATION RATE (ETHYL ETHER = 1): 7.70

SECTION IV - FIRE AND EXPLOSION INFORMATION

FLASH POINT (TCC): 53.0 Deg F (11.7 Deg C)
 EXPLOSIVE LIMIT (PRODUCT):
 LOWER: 2.0%
 UPPER: 12.0%
 EXTINGUISHING MEDIA: Alcohol foam or carbon dioxide or dry chemical
 HAZARDOUS DECOMPOSITION PRODUCTS: May form toxic materials: Carbon dioxide and carbon monoxide, etc.
 FIREFIGHTING PROCEDURES: Wear self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode when fighting fires. Water may not be effective for fighting fires. Water may be used to keep fire-exposed containers cool until fire is out.
 SPECIAL FIRE & EXPLOSION HAZARDS: Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. All five gallon pails and larger metal containers including tank cars and tank trucks should be grounded and/or bonded when material is transferred. Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point.

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EFFECTS OF CHRONIC OVEREXPOSURE: This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain. Overexposure to this material (or its components) has apparently been found to cause the following effects in laboratory animals: Mild, reversible liver effects

SECTION VI - REACTIVITY DATA

HAZARDOUS POLYMERIZATION: Cannot occur
 STABILITY: Stable
 INCOMPATIBILITY: Do not use with aluminum equipment at temperatures above 120 deg F.
 Avoid contact with: Strong oxidizing agents, acids, chlorine, acetaldehyde, ethylene oxide, isocyanates

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

SMALL SPILL: Absorb liquid on vermiculite, floor absorbent or other absorbent material.
 LARGE SPILL: Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal.
 Per good environmental management practices, prevent run-off to sewers, streams and other bodies of water. Stop spill at the source. Cover sewer grates and dike the spill. Absorb spilled material on to absorbents. Shovel materials into container. Close container tightly and dispose of properly.

WASTE DISPOSAL METHOD:
 SMALL SPILL: Dispose of in accordance with all local, State and Federal regulations.
 LARGE SPILL: Dispose of in accordance with all applicable local, State and Federal regulations.

SECTION VIII - PROTECTIVE EQUIPMENT TO BE USED

RESPIRATORY PROTECTION: If workplace exposure limit(s) of product or any component is exceeded (See Section II), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.
 VENTILATION: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s).
 PROTECTIVE GLOVES: Wear resistant gloves (consult your safety equipment supplier).
 EYE PROTECTION: Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.
 OTHER PROTECTIVE EQUIPMENT: To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

SECTION IX - SPECIAL PRECAUTIONS OR OTHER COMMENTS

Containers of this material may be hazardous when emptied, since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in this datasheet must be observed.
 WARNING!!! Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources, published "Autoignition" or "Ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions.

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 COMPAS Code: 12230370
