

Material Safety Data Sheet

Section 1. Product and Company Identification

Effective Date 3/3/2003

Product Name Isopropyl Alcohol
Manufacturer EMD Chemicals Inc.
P.O. Box 70
480 Democrat Road
Gibbstown, NJ 08027

For More Information Call In Case of Emergency Call

856-423-6300 Technical Service Monday-Friday: 8:00 AM - 5:00 PM

800-424-9300 CHEMTREC (USA) 613-996-6666 CANUTEC (Canada)
24 Hours/Day: 7 Days/Week

Synonym ISOPROPANOL; 2-PROPANOL **Material Uses** Analytical reagent.

Chemical Family Alcohol. (Solvent.)

Section 2. Composition and Information on Ingredients

Component CAS # % byWeight
ISOPROPYL ALCOHOL 67-63-0 100

Section 3. Hazards Identification

Physical State and Appearance

Liquid. (Colorless.)

Emergency Overview

WARNING! FLAMMABLE LIQUID AND VAPOR. VAPOR MAY CAUSE FLASH FIRE.
HARMFUL IF INHALED OR SWALLOWED. CAUSES SEVERE EYE IRRITATION. CAUSES DAMAGE TO THE FOLLOWING ORGANS: RESPIRATORY TRACT, SKIN, CENTRAL NERVOUS SYSTEM, EYE, LENS OR CORNEA. MAY CAUSE SKIN IRRITATION.

Routes of Entry Absorbed through skin. Eye contact. Inhalation. Ingestion.

Potential Acute Health Effects

Eyes Extremely hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering, and itching.

Skin May be hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering. Non-permeator by skin.

Inhalation Hazardous in case of inhalation.

Ingestion Hazardous in case of ingestion.

Potential Chronic Health Effects

Carcinogenic Effects

This material is not known to cause cancer in animals or humans. Additional information See Toxicological Information (section 11)

Medical Conditions Aggravated by Overexposure:

Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Section 4. First Aid Measures

Eye Contact Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Get medical attention immediately.

Skin Contact In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Section 5. Fire Fighting Measures

Flammability of the Product Product will burn.

Auto-ignition Temperature 399.05°C (750.3°F)

Flash Points Open cup: 11.9°C (53.4°F).

Flammable Limits Not available.

Products of Combustion These products are carbon oxides (CO, CO₂).

Fire Hazards in Presence of Various Substances

Highly flammable in presence of open flames, sparks and static discharge, of shocks, of heat, of oxidizing materials.

Explosion Hazards in Presence of Various Substances

Risks of explosion of the product in presence of static discharge:

Highly flammable in presence of open flames, sparks and static discharge.

Highly explosive in presence of open flames, sparks and static discharge.

Risks of explosion of the product in presence of mechanical impact:

Highly flammable in presence of shocks. Highly explosive in presence of shocks.

Fire Fighting Media and Instructions

Flammable liquid, soluble or dispersed in water. SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use alcohol foam, water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.

Protective Clothing (Fire) Be sure to use an approved/certified respirator or equivalent.

Special Remarks on Fire Hazards

Vapor may travel considerable distance to source of ignition and flash back.

Special Remarks on Explosion Hazards Not available.

Section 6. Accidental Release Measures

Small Spill and Leak

Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

Large Spill and Leak Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Cover with DRY earth, DRY sand or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Spill Kit Information

The following EMD Chemicals Inc. SpillSolv[®] absorbent is recommended for this product: SX1330 Solvent Treatment Kit

Section 7. Handling and Storage

Handling Keep away from heat, sparks and flame. Keep container closed. Do not get in eyes, on skin, or on clothing. Do not ingest. Do not breathe gas/fumes/ vapor/spray.

Storage Keep container in a cool, well-ventilated area.

Section 8. Exposure Controls/Personal Protection

Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection

Eyes Splash goggles.

Body Lab coat.

Respiratory Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

Hands Gloves.

Feet Not applicable.

Personal Protection in Case of a Large Spill

Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Product Name Exposure Limits

ISOPROPYL ALCOHOL EH40-OES (United Kingdom (UK), 1997).

STEL: 1250 mg/m³

STEL: 500 ppm

MEL: 999 mg/m³

MEL: 400 ppm

ACGIH (United States, 1994).

STEL: 1230 mg/m³

STEL: 500 ppm

TWA: 983 mg/m³

TWA: 400 ppm

NIOSH REL (United States, 1994).

STEL: 1225 mg/m³

STEL: 500 ppm

TWA: 980 mg/m³ Period: 10 hour(s).

TWA: 400 ppm Period: 10 hour(s).

OSHA Final Rule (United States, 1989).

STEL: 1225 mg/m³

STEL: 500 ppm

TWA: 980 mg/m³

TWA: 400 ppm

Section 9. Physical and Chemical Properties

Odor Characteristic.

Color Colorless.

Physical State and Appearance Liquid. (Colorless.)

Molecular Weight 60.11 g/mole

Molecular Formula C₃-H₈-O

pH Not available.

Boiling/Condensation Point 82.55°C (180.6°F)

Melting/Freezing Point -88.83°C (-127.9°F)

Specific Gravity 0.785 (Water = 1)

Vapor Pressure Not available.

Vapor Density 2.07 (Air = 1)

Odor Threshold Not available.

Evaporation Rate 1.7 compared to (n-BUTYL ACETATE=1)

LogKow Not available.

Solubility Soluble in water.

Section 10. Stability and Reactivity

Stability and Reactivity The product is stable.

Conditions of Instability Not available.

Incompatibility with Various Substances Highly reactive with oxidizing agents.

Rem/Incompatibility Not available.

Hazardous Decomposition Products Not available.

Hazardous Polymerization Will not occur.

Section 11. Toxicological Information

RTECS Number:

iso-Propyl Alcohol NT8050000

Toxicity Acute oral toxicity (LD50): 3600 mg/kg [Mouse].

Acute dermal toxicity (LD50): 12800 mg/kg [Rabbit].

Chronic Effects on Humans Not available.

Acute Effects on Humans

Extremely hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering, and itching. May be hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering. Non-permeator by skin. Hazardous in case of inhalation. Hazardous in case of ingestion.

Synergetic Products (Toxicologically) Not available.

Irritancy Draize Test (Rabbit): Eyes: 100 mg/24h. Reaction: Moderate.

Sensitization Not available.

Carcinogenic Effects This material is not known to cause cancer in animals or humans.

Toxicity to Reproductive System

Tests on laboratory animals for reproductive effects are cited in Registry of Toxic Effects on Chemical Substances (RTECS).

Teratogenic Effects Not available.

Mutagenic Effects Tests on laboratory animals for mutagenic effects are cited in Registry of Toxic Effects of Chemical Substances (RTECS).

Section 12. Ecological Information

Ecotoxicity Not available.

BOD5 and COD Not available.

Toxicity of the Products of Biodegradation

The products of degradation are less toxic than the product itself.

Section 13. Disposal Considerations

Treatment Incineration, fuels blending or recycle. Contact your local permitted waste disposal site (TSD) for permissible treatment sites. Always contact a permitted waste disposal (TSD) to assure compliance with all current local, provincial, and Federal Regulations.

Section 14. Transport Information

TDG Classification 3

WHMIS (Canada) CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).

Class D-2B: Material causing other toxic effects (TOXIC).

CEPA DSL: ISOPROPYL ALCOHOL

This product has been classified in accordance with the hazard criteria of the Controlled Product Regulations and the MSDS contains all required information.

Notice to Reader

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