

SAFETY DATA SHEET (SDS)

Complies with OSHA's Hazard Communication Standard 2012 and the Global Harmonized Standard (GHS).

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Section 1 : Identification

Product Identification: Isopropanol 99%

Item Number: 00098

Manufactured by:

EPR Industries LLC.
4576 Crescent Boulevard
Pennsauken, NJ 08109

Telephone: 1-856-488-1120

Emergency: Info-Trac 1-800-535-5053

Recommended use: Typical uses for isopropanol.

Section 2 : Hazard(s)

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 2), H225

Eye irritation (Category 2A), H319

Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336

GHS Label elements, including precautionary statements

Pictogram



Signal word, **Danger**

Hazard statement(s)

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces.

P233 Keep container tightly closed.

P243 Take precautionary measures against static discharge.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/protective clothing/ eye protection/face protection.

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P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol - resistant foam for extinction.

P403 + P233 Store in a well - ventilated place. Keep container tightly closed.

P403 + P235 Store in a well - ventilated place. Keep cool.

Section 3 : Composition / information on Ingredients

Hazardous Ingredient(s)	CAS #	Exposure PEL, TLV, TWA	%
Isopropyl Alcohol (2-propanol)	[67-63-0]	OSHA 400 ppm TWA; 980 mg/m3 TWA ACGIH 200 ppm TWA; 400 ppm STEL	99

Section 4 : First-aid measures

EMERGENCY FIRST AID PROCEDURES

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.

Inhalation: In case of Inhalation, remove to fresh air. In not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Ingestion: Give large amounts of water to drink. Never give anything by mouth to an unconscious person. Get medical attention.

Skin Contact: Immediately flush skin with plenty of water for at least 15 minutes. Call a physician if irritation develops.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

Section 5: Fire-Fighting Measures

Flammability of the Product: Flammable.

Auto-Ignition Temperature: 399°C (750.2°F)

Flash Points: 12 °C (53.6°F)

Flammable Limits: LOWER: 2% UPPER: 12.7%

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

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Fire Extinguishing Spray: Water spray, dry chemical, alcohol foam, or carbon dioxide. Water spray may be used to keep fire exposed containers cool, dilute spills and nonflammable mixtures, protect personnel attempting to stop leak and disperse vapors.

Explosion: Above flash point, vapor air mixtures are explosive within flammable limits noted above. Contact with strong oxidizers may cause fire or explosion. Vapors can flow along surfaces to distant ignition source and flash back. Sensitive to static discharge.

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.

Section 6 : Accidental release measures

Personal precautions: Use personal protection per Section 8.

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

Large Spill: Flammable liquid. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7 : Handling and storage

Handling: Use in well ventilated areas. Avoid contact with eyes.

Advice on protection against fire and explosion: Product is flammable. Keep away from all potential ignition sources.

Storage: Store in well ventilated, cool, dry place. Prevent ignition sources. Empty containers may contain explosive vapors. Prevent static electric build up. Bond and ground transfer equipment and containers.

Advice on common storage: Do not store next to strong oxidizers and acids.

Section 8 : Exposure control / personal protection

Engineering Measures: Provide normal room ventilation.

Personal Precautions: Use protective clothing as specified below.

Eye Protection: Use safety goggles or approved safety glasses.

Hand Protection: Use protective gloves and discard after contact with product.

Skin and body protection: Pants, long sleeves, clinical jacket.

Respiratory protection: Use NIOSH approved respirator or if adequate room ventilation is present a clinical mask can be used during routine clinical use of this product.

Hygiene measures: Wash hands after using. **Emergency eye wash station must be available.**

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Section 9 : Physical chemical properties

Physical state and appearance: Liquid

Odor: Rubbing alcohol. Pleasant. Odor resembling that of a mixture of ethanol and acetone.

Taste: Bitter (Slight)

Molecular Weight: 60.1 g/mole

Color: Clear, Colorless

Boiling Point: 82.5°C (180.5°F) *Melting Point:* -88.5°C (-127.3°F) *Critical Temperature:* 235°C (455°F)

Specific Gravity: 0.78505 (Water = 1) *Vapor Pressure:* 4.4 kPa (@ 20°C) *Vapor Density:* 2.07 (Air = 1)

Volatile by Volume: 100% @ 21 ° C

Odor Threshold: 22 ppm (Sittig, 1991) 700 ppm for unadapted panelists (Verschuren, 1983).

Water/Oil Dist. Coeff.: The product is equally soluble in oil and water; $\log(\text{oil/water}) = 0.1$

Dispersion Properties: See solubility in water, methanol, diethyl ether, n-octanol, acetone.

Solubility: Easily soluble in cold water, hot water, methanol, diethyl ether, n-octanol, acetone. Insoluble in salt solution. Soluble in benzene. Miscible with most organic solvents including alcohol, ethyl alcohol, chloroform.

Section 10 : Stability and reactivity

Stability: The product is stable.

Conditions of Instability: Heat, Ignition sources, incompatible materials

Incompatibility with various substances: Reactive with oxidizing agents, acids, alkalis.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Reacts violently with hydrogen + palladium combination, nitroform, oleum, COCl₂, aluminum triisopropoxide, oxidants

Incompatible with acetaldehyde, chlorine, ethylene oxide, isocyanates, acids, alkaline earth, alkali metals, caustics, amines, crotonaldehyde, phosgene, ammonia. Isopropyl alcohol reacts with metallic aluminum at high temperatures. Isopropyl alcohol attacks some plastics, rubber, and coatings. Vigorous reaction with sodium dichromate + sulfuric acid.

Special Remarks on Corrosivity: May attack some forms of plastic, rubber and coating

Section 11 : Toxicological information

Acute oral toxicity:

CAS# 67-63-0:

Inhalation, mouse: LC50 = 53000 mg/m³; Inhalation, rat: LC50 = 16000 ppm/8H;

Inhalation, rat: LC50 = 72600 mg/m³;

Oral, mouse: LD50 = 3600 mg/kg; Oral, mouse: LD50 = 3600 mg/kg; Oral, rabbit: LD50 = 6410 mg/kg;

Oral, rat: LD50 = 5045 mg/kg; Oral, rat: LD50 = 5000 mg/kg;

Skin, rabbit: LD50 = 12800

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Reproductive Toxicity: Isopropanol has been linked to birth defects in humans.

Carcinogenicity: CAS# 67-63-0: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Teratogenicity: A rat & rabbit developmental toxicity study showed no teratogenic effects at doses that were clearly maternally toxic. In a separate rat study, no evidence of developmental neurotoxicity was associated with gestational exposures to IPA up to 1200 mg/kg/d.

Section 12 : Ecological information

Ecotoxicity: Ecotoxicity in water (LC50): 100000 mg/l 96 hours [Fathead Minnow]. 64000 mg/l 96 hours [Fathead Minnow].

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.

Section 13 : Disposal consideration

Waste/Disposal Information: Observe all Federal, State, and Local Environmental Regulations when disposing of this product.

Use and or alterations to this product such as mixing with other materials/chemicals may significantly change the characteristics of the material and alter product hazard classifications and the proper disposal method.

Local disposal regulations Not available.

Waste from residues / unused products

Dispose of in accordance with local regulations.

Section 14 : Transport information

Product is classified as a Hazardous Material:

Proper Shipping Name: Isopropanol

Hazard Class: 3

UN/NA: UN 1219

Packing Group: II

Shipping information regarding limited quantity exception: 32 Ounce containers meet limited quantity exception under CFR 49 when shipped as ORM-D.

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Section 15 : Regulatory information

SARA 302 Components: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components: The following components are subject to reporting levels established by SARA Title III, Section 313: 2-Propanol CAS-No.67-63-0 Revision Date 1987-01-01

SARA 311/312 Hazards: Fire Hazard, Acute Health Hazard, Chronic Health Hazard

Section 16 : Other information

HMIS Rating

Health hazard: 2

Chronic Health Hazard: *

Flammability: 3

Physical Hazard 0

NFPA Rating

Health hazard: 2

Fire Hazard: 3

Reactivity Hazard: 0

Date prepared: February 2015

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Information contained herein is furnished without warranties of any kind. Users should consider these data only as supplements to other information obtained by them and must make independent determinations of completeness and suitability of information from all sources to ensure proper disposal and use of materials for the safety and health of both employees and customers.