

SECTION 1: IDENTIFICATION

Product Identifier

Isopropyl Alcohol 70% Vol

Common name /Synonym 2-propanol, dimethyl carbinol, isopropanol, IPA**Other Means of Identification**

AMD Medicom Item Code(s): 30070

Company AddressAMD Medicom Inc.
2555 Chemin de l'Aviation
Pointe-Claire, Montréal, Québec, H9P 2Z2**Telephone Number (Canada):** 514-636-6262**Emergency Telephone Number:** 1-800-361-2862

SECTION 2: HAZARD IDENTIFICATION

GHS label elements, including precautionary statements

**Signal Word** DANGER!**Hazard Statement**

H225 Highly flammable liquid and vapor.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Precautionary Statement

P501 Dispose of contents and container to an approved waste disposal plant.

P240 Ground/bond container and receiving equipment.

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

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

P304 + P330 If INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P303 + P361 + P353 IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water.

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

P210 Keep away from heat, sparks, open flames, and hot surfaces. No smoking.

P233 Keep container tightly closed.

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

P243 Take precautionary measures against static discharge.

P241 Use explosion-proof electrical, ventilating, and lighting equipment.

P242 Use only non-sparking tools.

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves and eye and face protection.

GHS Classification(s)

Eye irritation (Category 2)

Flammable Liquids (Category 2)

Skin irritation (Category 2)

Specific target organ toxicity - single exposure (Category 3)

Potential Health Hazards**Eyes contact**

Severe eye irritant: isopropanol vapors can irritate eyes beginning at approx. 400 ppm. Eye damage from contact with liquid is reversible and proper treatment will result in healing within a few days. Damage is usually mild to moderate conjunctivitis, seen mainly as redness of the conjunctiva.

Skin Absorption:

No adverse effects with normal skin. However, potentially harmful amounts of material may be absorbed across markedly abraded skin when contact is sustained, particularly in children.

Skin Contact:

Mild irritant. Repeated or prolonged exposure may lead to drying and cracking.

Ingestion:

May cause drowsiness, gastrointestinal pain, cramps, nausea, vomiting and diarrhea; unconsciousness and death may follow massive exposures.

Inhalation:

Mild irritation of the upper respiratory tract may begin at approx. 400 ppm. High concentrations may cause drowsiness, lack of coordination, and deep narcosis.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**Composition:**

Isopropanol, water

Isopropanol

CAS #67-62-0

EINECS #200-661-7

Water

CAS #7732-18-5

EINECS #231-791-2

SECTION 4: FIRST AID MEASURES**Eye Contact:**

Immediately flush eyes with water for at least 20 minutes, holding the eyelids open. Seek medical attention immediately.

Skin Contact:

Flush contaminated area with water for at least 20 minutes. Remove contaminated clothing under running water. Completely decontaminate clothing before re-use, or discard. If irritation occurs seek medical attention.

Ingestion

Never give anything by mouth if victim is rapidly losing consciousness or is unconscious or convulsing. DO NOT INDUCE VOMITING. Have victim drink about 250ml (8fl. oz.) of water to dilute material in stomach. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Seek medical assistance.

Inhalation

Remove victim to fresh air. Artificial respiration should be given if breathing has stopped and cardiopulmonary resuscitation if heart has stopped. Oxygen may be given if necessary. See medical attention immediately.

Advice to Physician:

No specific advice.

SECTION 5: FIRE FIGHTING MEASURES**Extinguishing Media:**

Alcohol-type or all-purpose-type foams by manufacturer's recommended techniques for large fires. Carbon dioxide or dry chemical media for small fires. Water is unsuitable and may help spread the fire.

Unusual Fire/ Explosion Hazards:

Vapors from this product may travel or be moved by air currents and ignited by pilot lights, other flames, sparks, heaters, electrical equipment, static discharges, or other ignition sources at locations distant from handling point.

Fire Fighting Procedures and Personal Protection: Use water spray to cool fire-exposed containers and structures & to disperse vapors (reignition is possible); use self-contained breathing apparatus and protective clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Spill	Contain spilled material. Provide adequate ventilation. Provide adequate personnel protective equipment for responders. Remove sources of heat, sparks, or flames. Spill should be collected in suitable containers or absorbed on a suitable absorbent material for subsequent disposal. Such containers used to contain spilled material and absorbent should be sealed off, otherwise the collected alcohol will evaporate from them.
Waste Disposal	Waste material should be disposed of in an approved incinerator or in a designated landfill site, in compliance with all federal, provincial, and local government regulations.

SECTION 7: HANDLING AND STORAGE

Handling & Storage:	Keep away from heat, sparks, and flames. Keep container closed when not in use. Use with adequate ventilation. Avoid breathing vapors. Avoid contact with eyes and skin. Wash exposed skin thoroughly after handling. Take precautions to prevent static electricity build-up when transferring contents.
Other Precautions:	Good personal hygiene practices are suggested, such as abstaining from eating, drinking, and smoking in the workplace.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Equipment:	Up to 1000ppm: use an approved organic vapor cartridge respirator. >1000ppm: an air-supplying respirator is recommended. The user should consult a respirator guide i.e. the Canadian Standards Association's guide Z94.4-M1982.
Ventilation:	Local ventilation is recommended when handling. The ventilation system should be non-sparking, grounded, and separate from other exhaust ventilation systems.
Protective Gloves:	Neoprene, butyl, or natural rubber.
Eye Protection:	Chemical resistant monogoggles when handling.
Other Protective Equipment:	Eye bath, safety shower, and other protective equipment as required.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Color/ Appearance	Colorless liquid
Odor	Typical ethanol/lower alcohol odor
Odor threshold	Approx. 40 – 220 ppm (as per Canadian Center for Occupational Health and Safety)
pH	N/A
Boiling point	81.3-83°C
Melting/Freezing point	Approx. -89°C
Flash point	21°C
Evaporation rate	2.3 (butyl acetate = 1), for 100% Isopropyl Alcohol
Lower flammability limit	2.5% V/V, for 100% Isopropyl Alcohol
Upper flammability limit	12% V/V, for 100% Isopropyl Alcohol
Vapor pressure	4.4 KPA @20°C, for 100% Isopropyl Alcohol
Vapor density	2.07 (air = 1), for 100% Isopropyl Alcohol
Relative density (liquid)	0.876 @20°C
Solubility in water	Complete

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (cont'd)

Solubility in oil-coefficient of water/oil distribution Separate from oil

Auto-ignition temperature Approx. 399°C, for 100% Isopropyl Alcohol

% volatiles by volume 100

Chemical formula Isopropanol: CH₃-CHOH-CH₃ Molecular weight: 60.09

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability: Stable

Conditions to avoid: Sources of ignition

Incompatibility with Other Material: Oxidizing materials

Hazardous Decomposition Products: Carbon dioxide and/or carbon monoxide

Hazardous Polymerization: e.g. Will not occur

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicology:

INGREDIENT	% V/V	TLV, ppm	LC50, ppm/4h. RAT, INHAL.	LD50, mg/kg RAT, ORAL	LD50, mg/kg RABBIT, SKIN
(Isopropanol)	70 approx.	400	16,970	4,420	13,000
Water	balance				

References: ACGIH (1988-1989), RTECS (1983)

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity (aquatic and terrestrial, where available):

Acute Fish Toxicity (ISOPROPANOL) LC50/96 hours *Pimephales promelas*: 9,640 mg/L

Toxicity to Aquatic Plants (ISOPROPANOL) EC50/72 hours *Scenedesmus subspicatus* > 1,000 mg/L

Toxicity to Microorganisms (ISOPROPANOL) EC50/3 hours Activated sludge > 1,000 mg/L

Persistence and degradability Readily biodegradable (77% degraded in 10 days). Expected to be hydrolytically stable, but rapidly degraded following atmospheric releases.

Bioaccumulative potential Bioconcentration factor (BCF) of 3.16. (Predicted bioconcentration factor). Significant bioaccumulation is not expected based on predicted BCF of 3.16.

SECTION 13: DISPOSAL CONSIDERATIONS

Spill Contain spilled material. Provide adequate ventilation. Provide adequate personnel protective equipment for responders. Remove sources of heat, sparks, or flames. Spill should be collected in suitable containers or absorbed on a suitable absorbent material for subsequent disposal.

Waste Disposal Waste material should be disposed of in an approved incinerator or in a designated landfill site, in compliance with all federal, provincial, and local government regulations.

SECTION 14: TRANSPORT AND STORAGE

Canada

UN Number: 1219

UN Shipping Name: ISOPROPANOL

Transport Hazard Class(es): Primary Class 3 Subsidiary Class: NONE

Packing Group (if applicable): II

IMDG

UN-Number: UN 1219 Class: 3 Packing Group: II

EMS-No: F-E, S-D

Proper Shipping Name: ISOPROPANOL

Marine Pollutant: No

IATA

UN-Number: 1219 Class: 3 Packing Group: II

Proper shipping name: ISOPROPANOL

SECTION 15: REGULATORY INFORMATION

All ingredients are on the following inventories or are exempted from listing:

Country Notification

Australia	AICS
Canada	DSL
China	IECS
European Union	EINECS
Japan	ENCS/ISHL
Korea	ECL
New Zealand	NZIoC
Philippines	PICCS
USA	TSCA

California Prop 65 Components

Not applicable

SECTION 16: OTHER INFORMATION**Legal disclaimer:**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. AMD Medicom Inc. shall not be held liable for any damage resulting from handling or from contact with the product(s) listed.