

MATERIAL SAFETY DATA SHEET

Revision #: 01

Section 1 - Product Identification & Use

Product Name: **Isopropyl Alcohol 99%**
Product Use: Cleaning solvent
WHMIS Classification: Class B2, Flammable and combustible material;
Class D2, Hazardous material.
TDG Classification: UN 1219, Isopropanol, Class 3
Supplier: Advance Chemicals Ltd.
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Section 2 - Hazardous Ingredients

| Hazardous Components | %(w/w) | C.A.S. No. | LD ₅₀ & LC ₅₀ |
|----------------------|--------|------------|---|
| Isopropyl Alcohol | 60-100 | 67-63-0 | (Rat, oral) 4,420mg/kg (Rat, Inhalation) 16,970 |

Section 3 - Physical Properties

Physical State: liquid
Boiling point: 82.1°C
Vapor pressure: N/A
pH: N/A
Appearance: Colorless liquid with typical rubbing alcohol odor.
Specific Gravity: 0.876 kg/l @ 20°C
Freezing point: -26.7°C
Water solubility: 100%

Section 4 - Fire or Explosion Hazard

Flammability: 21°C Tag closed cup, ASTM-56.
Extinguishing media: Use alcohol-type or all-purpose-type foams by manufacturers recommended techniques for large fires. Use carbon dioxide or dry chemical media for small fires. Water is generally unsuitable and may help to spread fire.
Hazardous Combustion Products: Burning can produce carbon monoxide and/or carbon dioxide and/or formaldehyde.

Section 5 - Reactivity Data

Stability: Stable under normal ambient conditions.
Incompatible substances: Oxidizing materials.
Polymerization: Will not occur.
Hazardous Reactions/Decomposition: See above descriptions of stability, incompatible substances and polymerization.

Section 6 - Toxicological Properties

Skin contact: Mild irritant. Repeated or prolonged exposures may lead to drying and cracking.
Eye contact: Sever eye irritant. Isopropanol vapors can irritate eyes beginning at approx. 400ppm. Eye damage from contact of 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.
Ingestion: Ingestion of isopropanol may cause drowsiness, gastrointestinal pain, cramps, nausea, vomiting, and diarrhea; unconsciousness may follow massive exposures.
Carcinogenicity: no data found
Mutagenicity: no data found

Section 7 - Preventative Measures

Personal Protective Equipment: Avoid contact with skin and eyes. Wear chemical protective gloves, goggles and face shield, rubber apron and boots. Eye wash fountains and safety shower facilities should be provided nearby for emergency use.
Respiratory protection: Use an NIOSH respirator approved for up to 1000 ppm organic vapor cartridge. Do not exceed the limits of the respirator.
Ventilation Requirements: Use grounded, non-sparking local exhaust ventilation or other means to control vapor.
Special Handling Procedures: Wash thoroughly after handling product.
Storage Requirements: Store product in a cool, dry location, away from food and drink. Personnel should wear approved vapor respirator. Avoid breathing vapors. Wear chemical protective clothing as necessary, eye protective goggles, and rubber or neoprene gloves.

Action to take for spills & leaks: Wear chemical protective clothing, rubber gloves and suitable respiratory protection. Small spills should be wiped up and disposed of in government approved waste containers. Flush spill area with large volumes of water. Run-off should be collected and properly disposed of. Keep product out of sewers, storm drains, surface run-off water and soil. Restrict access to non-protected personnel. Comply with all government regulations on spill reporting, handling and disposal of waste.

Disposal methods: Dispose of contaminated product and materials used in cleaning up spills or leaks in a manner approved for this material. Consult appropriate federal, provincial and local regulatory agencies to ascertain proper disposal procedures.

Note: empty containers can have residues, gasses and mists, and are subject to proper waste disposal as mentioned above.

Repair and Maintenance Precautions: Do not cut, grind, weld or drill in, on or near this container.

Section 8 - First Aid Measures

If inhaled: Remove victim to fresh air. Give artificial respiration if not breathing. Get immediate emergency medical attention.

In case of eye contact: Immediately flush eyes with clean water for at least fifteen (15) minutes, lifting the upper and lower eyelids occasionally. Get immediate emergency medical attention.

In case of skin contact: Immediately flush skin with plenty of clean running water and soap for at least fifteen (15) minutes. Remove contaminated clothing and shoes. If irritation persists after washing, get immediate medical attention. Wash and launder clothes before re-use.

In case of ingestion or swallowing: If victim is conscious and medical attention is not immediately available, dilute stomach contents by giving several glasses of water, then INDUCE VOMITING. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS VICTIM. If vomiting occurs, clear and rinse patient's mouth with water and have the patient drink more water. GET IMMEDIATE EMERGENCY MEDICAL ATTENTION.

Section 9 - Preparation Information

Advance Chemicals Limited expressly disclaims all expressed or implied warranties of merchantability and fitness for a particular purpose with respect to the product provided. The information contained herein is offered only as a guide to the handling of this specific product, and has been prepared in good faith by technically knowledgeable personnel. This M.S.D.S. is not intended to be all-inclusive, and the manner and conditions of use may involve other and additional considerations.

Prepared: 17 January 2007

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