

1. PRODUCT NAME: Isopropyl Alcohol 99%
2. CHEMICAL NAME: Mixture
3. SYNONYMS: IPA 99%
4. CAS NUMBER: Mixture
5. COMPOSITION: Isopropyl alcohol (67-63-0)- 99%

IN CASE OF
TRANSPORT EMERGENCY
CONTACT CHEMTREC
USA: 1-800-424-9300
INTERNATIONAL: 1-703-527-3887

6. PROPERTIES: ODOR & APPEARANCE: clear, colorless liquid with strong alcoholic (rubbing alcohol) odor
ODOR THRESHOLD: 3ppm – 600ppm (range); geometric mean = 43ppm – this range is usually wide
VAPOUR PRESSURE: 33mmHg/4.4kPa (20 c)
EVAPORATION RATE (butyl Acetate=1): 2.9
VAPOR DENSITY (air=1): 2.1
BOILING RANGE: 82 c
FREEZING POINT: -89 c
SPECIFIC GRAVITY: 0.786 (20/20 c)
WATER SOLUBILITY: complete
IN OTHER SOLVENTS: soluble in most organic solvents
VISCOSITY: 2.4 centipoise (20 c)

7. HAZARDS: MATERIAL USE: solvent, cleaner, disinfectant, reagent

8. FIRE FIGHTING INFORMATION: FLASH POINT: 18 c (closed cup)
AUTOIGNITION TEMPERATURE: 399 c
FLAMMABLE LIMITS: 2% - 12.7%
COMBUSTION PRODUCTS: carbon monoxide, nitrogen oxides, smoke, part oxidized hydrocarbon fragments
FIREFIGHTING PRECAUTIONS: foam, dry chemical, water fog, water spray only to cool & dilute, product floats on water – water jet spreads flames; firefighters must wear SCBA
STATIC DISCHARGE: will not accumulate a static charge
MECHANICAL IMPACT: not sensitive
CHEMICAL STABILITY: stable; will not polymerize
REACTIVE WITH: strong oxidizing agents
DECOMPOSITION PRODUCTS: none apart from Hazardous Combustion Products

9. PERSONAL PROTECTION MEASURES: HANDS: butyl rubber or nitrile rubber gloves – other types may also be suitable; ask your supplier
EYES: safety glasses with side shields
VENTILATION: not required if ventilation is adequate, or use organic vapor cartridge
CLOTHING: impermeable (hands, above) apron, boots, long sleeves if splashing is anticipated

10. FIRST AID PROCEDURES: SKIN: Wash with soap and plenty of water. Remove contaminated clothing and do not reuse until thoroughly cleaned or laundered.
EYES: Wash eyes with plenty of water, holding eyelids open. Seek medical assistance promptly if there is irritation.
INHALATION: Remove from contaminated area promptly. CAUTION: Rescuer must not endanger himself! If breathing stops, administer artificial respiration and seek medical aid promptly.
INGESTION: Give plenty of water to dilute product. Do not induce vomiting (NOTE below). Keep victim quiet. If vomiting occurs, lower victim's head below hips to prevent inhalation of vomited material.



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Seek medical help promptly.

NOTE: Inadvertent inhalation of vomited material may seriously damage the lungs. The risk and danger of this is greater than the risk of poisoning through absorption of this relatively low-toxicity product. The stomach should only be emptied under medical supervision, after the installation of an airway to protect the lungs.

11. EXPOSURE TWAEV ppm: 400ppm
LIMITS: LD50 ORAL: 3600
SKIN (mg/kg): 12,800
LC50ppm INHALATION: 16,000

12. TOXICOLOGICAL EFFECTS ACUTE EXPOSURE
INFORMATION: SKIN CONTACT: drying, may irritate
SKIN ABSORPTION: toxic effects unlikely by this route
EYE CONTACT: severely irritating, may damage eyes
INHALATION: headache, dizziness, drowsiness, intoxication, respiratory depression
INGESTION: headache, dizziness, drowsiness, intoxication, respiratory depression & collapse
EFFECTS OF CHRONIC EXPOSURE
GENERAL: prolonged exposure may cause skin cracking and dermatitis, repeated absorption may damage liver and kidneys
SENSITISING: not a sensitizer
REPRODUCTIVE EFFECT: experimental rodent reproductive toxin at 11,000ppm; no known effect on humans
SYNERGISTIC WITH: existing liver disease; alcohol consumption
ESTIMATED LD50: 3600mg/kg (oral, mouse); 5050mg/kg (oral, rat); 6410mg/kg (oral, rabbit); 12,800mg/kg (skin, rabbit)
ESTIMATED LC50: 16,000ppm (inhalation, rat)
ECOLOGY
ENVIROINFO: this product cannot accumulate in living tissue – this product is readily and rapidly biodegradable in the presence of oxygen

13. ECOLOGICAL NE
INFORMATION:

14. DISPOSAL DO NOT FLUSH TO SEWER; may be incinerated in approved facility
CONSIDERATIONS:

15. CARCINOGENIC Not a tumorigen, not a carcinogen
PROPERTIES &
NOTIFICATIONS:

16. TRANSPORT USA 49 CFR
INFORMATION: Product identification number:
UN – 1219
Shipping name: isopropyl alcohol or isopropanol
Classification: Class 3; Packing group II
Class: B2, D2B

17. HANDLING & STORAGE: Store and use a cool dry environment, away from sources of ignition, heat and oxidizing agents. Use with adequate ventilation. Although this product is not a static accumulator, we recommend that you ground the container before handling to prevent static discharge. Take care to avoid sparks – use non-sparking tools



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and explosion-proof electrical equipment nearby. Do not cut, drill, weld or grind on or near this container. Avoid prolonged contact with skin and wash work clothes frequently. An eye bath and safety shower should be available near the workplace.

18. ACCIDENTAL LEAK PRECAUTION: dyke to control spillage and prevent environmental contamination. Fire potential: RELEASE blanket spill with foam as a precaution against accidental ignition. Take extreme care to avoid sparks – do not operate (turn on OR off) electrical appliances near spill, unless explosion proof. MEASURES: HANDLING SPILL: ventilate contaminated area; recover free liquid with explosion-proof pumps; absorb residue on an inert sorbent, pick up using non-sparking plastic or aluminium shovel, & store in closed containers for disposal.