

Material Safety Data Sheet Isopropyl Alcohol

PRODUCT & COMPANY IDENTIFICATION

In case of Emergency call CHEMTREC 1-800-424-9300

Supplier	Simchem Corporation, 311 Sarasota Center Blvd., P.O. Box 697, Osprey, Florida, 34229-0697 (941) 377-9935 Fax (941) 377-9539
CAS Number	67-63-0
Synonyms	isopropanol; sec-propyl alcohol; sec-propanol; dimethylcarbinol
Formula	$(\text{CH}_3)_2\text{CHOH}$

TRANSPORTATION DATA

US Department of Transportation – 49 CFR	
Proper Shipping Name	isopropanol
UN Number	UN1219
Hazard Class	3
Packing Group	II
Labels	Flammable Liquid

PHYSICAL/CHEMICAL DATA

Appearance	Clear, colorless liquid
Odor	Rubbing alcohol
Boiling Point	82° C
Melting Point	-89° C
Vapor Pressure	44 @ 25° C (mm Hg)
Vapor Density (Air = 1)	2.1
Specific Gravity	0.79 @ 20° C / 4° C
Solubility in Water	Miscible in water
Volatile by Volume	100% @ 21° C
Evaporation Rate	2.83 (BuAc = 1)

REACTIVITY DATA

Stability	Stable
Incompatibility	Heat, flame, strong oxidizers, acetaldehyde, acids, chlorine, ethylene oxide, isocyanates.
Hazardous Decomposition Products	Carbon dioxide and carbon monoxide may form when heated to decomposition.
Conditions to Avoid	Heat, flame, ignition sources and incompatibles.
Hazardous Polymerization	Will not occur.

FIRE AND EXPLOSION HAZARD DATA

Flash Point	12° C
Auto Ignition Temperature	399° C
Flammable Limits	LEL: 2.0 UEL: 12.7
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.
Special Information	In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand for other positive pressure mode.

PRECAUTIONS FOR SAFE HANDLING & USE

to be Taken in Case Material is Spilled or Released	Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified on section 5. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer! If a leak or spill has not ignited, use water spray to disperse the vapors, to protect personnel attempting to stop leak, and to flush spills away from exposures.
Disposal Method	Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved incinerator or disposed in a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.
Handling and Storage	Protect against physical damage. Store in a cool, dry well-ventilated location, away from any area where the fire hazard may be acute. Outside or detached storage is preferred. Separate from incompatibles. Containers should be bonded and grounded for transfers to avoid static sparks. Storage and use areas should be No Smoking areas. Use non-sparking type tools and equipment, including explosion proof ventilation. Containers of this material may be hazardous when empty since they retain product residues.

HEALTH HAZARD DATA

Potential Health Effects:

Inhalation	Inhalation of vapors irritates the respiratory tract. Exposure to high concentrations has a narcotic effect, producing symptoms of dizziness, drowsiness, headache, staggering, unconsciousness and possibly death.
Ingestion	Ingestion can cause drowsiness, unconsciousness, and death. Gastrointestinal pain, cramps, nausea, vomiting, and diarrhea may also result. The single lethal dose for a human adult = about 250 mls (8 ounces).
Skin Contact	May cause skin irritation with redness and pain. May be absorbed through the skin with possible systemic effects.
Eye Contact	Vapors cause eye irritation. Splashes caused severe irritation, possible corneal burns and eye damage.

First Aid Measures:

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.

Personal Protective Equipment:

Skin Protection	Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Neoprene and nitrile rubber are recommended materials.
Eye Protection	Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

ADDITIONAL INFORMATION

Always comply with all applicable international, federal, state and local regulations regarding the transportation, storage, use and disposal of this chemical.

Due to the changing nature of regulatory requirements, the regulatory information listed in Section X this document should not be considered all-inclusive or authoritative. International, Federal, State Local regulations should be consulted to determine with all required reporting requirements.

The information in this MSDS was obtained from sources, which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, MSDS information may not be applicable.