

## Isopropyl Alcohol

## MATERIAL SAFETY DATA SHEET

## SECTION 1. CHEMICAL PRODUCT &amp; COMPANY IDENTIFICATION

COMPANY IDENTITY: Cumberland Products, Inc.  
COMPANY ADDRESS: 50 Commerce Parkway  
Hodgenville, KY 42748  
COMPANY PHONE: 1-800-223-1918  
CHEMTREC PHONE: 1-800-424-9300  
PRODUCT NAME: IPA - anhydrous  
CHEMICAL NAME: 2-Propanol CAS 67-63-0  
CHEMICAL FAMILY: Aliphatic Alcohol  
PRODUCT DESCRIPTION: Clear, colorless liquid.

## SECTION 2. COMPOSITION / INFORMATION ON INGREDIENTS

This product is hazardous as defined in 29 CFR1910.1200. based on the following compositional information:

OSHA HAZARD  
Flammable  
PEL; TLV  
Eye Irritant

## SECTION 3. HAZARDS IDENTIFICATION

## POTENTIAL HEALTH EFFECTS

## EYE CONTACT

Irritating, and will injure eye tissue if not removed promptly.

## SKIN CONTACT

Frequent or prolonged contact may irritate and cause dermatitis.  
Low order of toxicity.

## INHALATION

Vapor concentrations above recommended exposure levels are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anesthetic and may have other central nervous system effects.  
Negligible hazard at ambient temperature (-18 to 38 Deg C; 0 to 100 Deg F).

## INGESTION

Low order of toxicity. Small amounts of this product aspirated into the respiratory system during ingestion or from vomiting, may cause bronchiopneumonia or pulmonary edema.

## CHRONIC EFFECTS

Minimal toxicity. Small amounts of the liquid aspirated into the respiratory system during ingestion, or from vomiting, may cause bronchiopneumonia or pulmonary edema.

## SECTION 4. FIRST AID MEASURES

## EYE CONTACT

Immediately flush eyes with large amounts of water for at least 15 minutes. Get prompt medical attention.

#### SKIN CONTACT

Immediately flush with large amounts of water; use soap if available. Remove grossly contaminated clothing, including shoes, after flushing has begun.

#### INHALATION

Using proper respiratory protection, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Call for prompt medical attention.

#### INGESTION

If swallowed, DO NOT induce vomiting. Keep at rest. Get prompt medical attention.

### SECTION 5. FIRE FIGHTING MEASURES

FLASHPOINT:	54 Deg F.	METHOD:	TCC
FLAMMABLE LIMITS:	LEL: 2.0	UEL:	12.7 @ 77 Deg F.
AUTOIGNITION TEMPERATURE:	> 662 Deg F.		

#### GENERAL HAZARD

Flammable liquid, can release vapors that form flammable mixtures at temperatures at or above the flashpoint. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or properly disposed of.

#### FIRE FIGHTING

Use water spray to cool fire-exposed surfaces and to protect personnel. Shut off "fuel" to fire. If a leak or spill has not ignited, use water spray to disperse the vapors. Either allow fire to burn under controlled conditions or extinguish with alcohol type foam or dry chemical. Try to cover liquid spills with foam.

#### DECOMPOSITION PRODUCTS UNDER FIRE CONDITIONS

No unusual.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

#### LAND SPILL

Eliminate sources of ignition. Prevent additional discharge of material, if possible to do so without hazard. For small spills implement cleanup procedures; for large spills implement cleanup procedures and, if in public area, keep public away and advise authorities. Also, if this product is subject to CERCLA reporting (see Section 15 REGULATORY INFORMATION) notify the National Response Center. Prevent liquid from entering sewers, water courses, or low areas. Contain spilled liquid with sand or earth. Do not use combustible materials such as sawdust. Recover by pumping (use an explosion proof or hand pump) or with a suitable absorbent. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

#### WATER SPILL

Eliminate sources of ignition. Warn occupants and shipping in surrounding and downwind areas of fire and explosion hazard and request all to stay clear. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

## SECTION 7. HANDLING AND STORAGE

### ELECTROSTATIC ACCUMULATION HAZARD

No, but use proper grounding procedure.

STORAGE TEMPERATURE F: ambient

LOADING/UNLOADING TEMPERATURE F: ambient

STORAGE/TRANSPORT PRESSURE, mmHg: atmospheric

LOADING/UNLOADING VISCOSITY, cst: 2.7

### STORAGE AND HANDLING

Keep container closed. Handle open containers with care. Store in a cool, well-ventilated place away from incompatible materials. Do NOT handle or store near an open flame, heat or other sources of ignition. Protect material from direct sunlight. This material is not a static accumulator, but use proper grounding procedures. Do NOT pressurize, cut, heat, or weld containers. Empty product containers may contain product residue. Do NOT reuse empty containers without commercial cleaning or reconditioning.

## SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE CONTROLS

The use of mechanical dilution ventilation is recommended whenever this product is used in a confined space, is heated above ambient temperatures, or is agitated. Use explosion-proof ventilation equipment.

### PERSONAL PROTECTION

For open systems where contact is likely, wear long sleeves, chemical resistant gloves, and chemical goggles. Where contact may occur, wear safety glasses with side shields. Where concentrations in air may exceed the limits given in this Section and engineering, work practice or other means of exposure reduction are not adequate. NIOSH/MSHA approved respirators may be necessary to prevent overexposure by inhalation.

### WORKPLACE EXPOSURE GUIDELINES

OSHA REGULATION 29CFR1910.1000 REQUIRES THE FOLLOWING PERMISSIBLE EXPOSURE LIMITS

A TWA of 400 ppm (980 mg/m<sup>3</sup>) and a STEL of 500 ppm (1225 mg/m<sup>3</sup>) for Isopropyl Alcohol.

The recommended permissible exposure levels indicated above reflect the levels revised by OSHA in 1989 or in subsequent regulatory activity. Although the 1989 levels have since been vacated by the 11<sup>th</sup> Circuit Court of Appeals, Exxon Chemical recommends that the lower exposure levels be observed as reasonable worker protection.

### THE ACGIH RECOMMENDS THE FOLLOWING THRESHOLD LIMIT VALUES

A TWA of 400 ppm (983 mg/m<sup>3</sup>) and a STEL of 500 ppm (1230 mg/m<sup>3</sup>) for Isopropyl Alcohol.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

SPECIFIC GRAVITY AT F:	0.79 at 68
VAPOR PRESSURE, mmHg at F:	96 at 100, 230 at 131
SOLUBILITY IN WATER, wt. % at F:	100.00 at 68
VISCOSITY OF LIQUID, cst at F:	2.7 at 68
SP. GRAV. OF VAPOR, at 1 atm (Air = 1):	Greater than 1.00
FREEZING/MELTING POINT:	-128
EVAPORATION RATE (n-butyl acetate = 1):	2.3

## SECTION 10. REACTIVITY DATA

### STABILITY

Stable.

### CONDITIONS TO AVOID INSTABILITY

Moderate risk of peroxide formation.  
Moderate peroxide hazard on storage and concentration.  
Inhibitor not been added to mitigate peroxide hazard.

### HAZARDOUS POLYMERIZATION

Will not occur.

### CONDITIONS TO AVOID HAZARDOUS POLYMERIZATION

Not applicable

### MATERIALS AND CONDITIONS TO AVOID INCOMPATIBILITY

Caustics, amines, alkanolamines, aldehydes, strong oxidizing agents, and chlorinated compounds.

### HAZARDOUS DECOMPOSITION PRODUCTS

None

## SECTION 11. TOXICOLOGICAL INFORMATION

Please refer to Section 3 for available information on potential health effects.

## SECTION 12. ECOLOGICAL INFORMATION

No specific ecological data are available for this product. Please refer to Section 6 for information regarding accidental releases and Section 15 for regulatory reporting information.

## SECTION 13. DISPOSAL CONSIDERATIONS

Please refer to Sections 5, 6, and 15 for disposal and regulatory information.

## SECTION 14. TRANSPORT INFORMATION

### DEPARTMENT OF TRANSPORTATION (DOT)

DOT SHIPPING DESCRIPTION: Isopropanol, 3, UN 1219, II

## SECTION 15. REGULATORY INFORMATION

### TSCA

This product is listed on the TSCA Inventory at CAS Registry Number 67-63-0.

### CERCLA

If this product is accidentally spilled, it is not subject to any special reporting under the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). We recommend you contact local authorities to determine if there may be other local reporting requirements.

### SARA TITLE III

Under the provisions of Title III, Sections 311, 312 of the Superfund Amendments and Reauthorization Act, this product is classified into the following hazard categories: immediate health, delayed health, fire. This information may be subject to the provisions of the Community Right-to-Know Reporting Requirements (40 CFR 370) if threshold quantity criteria are met.

## SECTION 16. OTHER INFORMATION

### HAZARD RATING SYSTEMS

This information is for people trained in:

National Paint & Coatings Association's (NPCA)

Hazardous Materials Identification System (HMIS)

National Fire Protection Association (NFPA 704)

Identification of the Fire Hazards of Materials

	NPCA-HMIS	NFPA 704	KEY
Health	2	1	4 = Severe
Flammability	3	3	3 = Serious
Reactivity	1	1	2 = Moderate
			1 = Slight
			0 = Minimal

### REVISION SUMMARY

Since August 15, 1997 this MSDS has been revised in Section(s): 10, 16

REFERENCE NUMBER: HDHA-C-00021

SUPERSEDES ISSUE DATE: August 15, 1997

This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information nor do we offer warranty against patent infringement.