

Issue Date: 2-Nov-20

Revision Date: 16-Aug-20Wersion 1

1. IDENTIFICATION

Product identifier Product Name	Isopropanol
Other means of identification SDS/PART #	ISODRUM
UN/ID No	UN1219
Recommended use of the chemical Recommended Use	and restrictions on use Gas line anti-freeze.
Details of the supplier of the safety Manufacturer Address FMP 1380 Corporate Center Curve, Suite 2 Eagan, MN 55121 Phone: 888-784-0802	
Emergency telephone number Emergency Telephone	INFOTRAC 1-352-323-3500 (International) 1-800-535-5053 (North America)
	2. HAZARDS IDENTIFICATION

Appearance Clear, colorless liquid

Physical state Liquid

Odor Alcohol-like

Classification

Acute toxicity - Oral	Category 4
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable Liquids	Category 2

<u>Signal Word</u> Danger

Hazard statements

Harmful if swallowed Causes serious eye irritation May cause drowsiness or dizziness Highly flammable liquid and vapor



Precautionary Statements - Prevention

Wear protective gloves/protective clothing/eye protection/face protection Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area Keep away from heat/sparks/open flames/hot surfaces. — No smoking Keep container tightly closed Ground/bond container and receiving equipment Use explosion-proof equipment Use only non-sparking tools Take precautionary measures against static discharge Keep cool

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower IF INHALED: Remove person to fresh air and keep comfortable for breathing IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell Rinse mouth IN CASE OF FIRE: Use CO2, dry chemical, or foam to extinguish

Precautionary Statements - Storage

Store locked up Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Weight-%
Isopropyl Alcohol	67-63-0	90-100

**If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret. **

4. FIRST AID MEASURES

Description of first aid measures

Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin Contact	Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

Inhalation	Remove person to fresh air and keep comfortable for breathing.
Ingestion	Call a poison center or doctor/physician if you feel unwell. Rinse mouth.

Most important symptoms and effects, both acute and delayed

SymptomsMay be harmful in contact with skin. May be harmful if inhaled. Harmful if swallowed.
Causes serious eye irritation. May cause drowsiness or dizziness.

Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
notee te i nyelelan	mode of mptomationity.

·····	· · - ··· - J · ··· - ···· J ·	
	5. FIRE-FIGHTING MEASURES	

Suitable Extinguishing Media

Alcohol resistant foam. Carbon dioxide (CO2). Dry chemical.

Unsuitable Extinguishing Media High volume water jet.

Specific Hazards Arising from the Chemical

Highly flammable liquid and vapor. Do not allow run-off from fire-fighting to enter drains or water courses.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Use personal protective equipment as required. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating.
Environmental precautions	
Environmental precautions	See Section 12 for additional Ecological Information. Prevent product from entering drains.
Methods and material for containme	ent and cleaning up
Methods for Containment	Prevent further leakage or spillage if safe to do so.
Methods for Clean-Up	Contain spill using noncombustible material such as vermiculite, sand or earth.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Wear protective gloves/protective clothing and eye/face protection. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion proof equipment. Use only non-sparking tools. Take precautionary measures against static discharges. Keep cool.

Conditions for safe storage, including any incompatibilities

Storage Conditions	Store locked up.	Store in a well-ventilated place	ce. Keep container tightly	v closed. Keep cool.
				,

Incompatible Materials

Aldehydes. Chlorine. Ethylene oxide. Halogens. Isocyanates. Strong acids. Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Isopropyl Alcohol	STEL: 400 ppm	TWA: 400 ppm	IDLH: 2000 ppm
67-63-0	TWA: 200 ppm	TWA: 980 mg/m ³	TWA: 400 ppm
		(vacated) TWA: 400 ppm	TWA: 980 mg/m ³
		(vacated) TWA: 980 mg/m ³	STEL: 500 ppm
		(vacated) STEL: 500 ppm	STEL: 1225 mg/m ³
		(vacated) STEL: 1225 mg/m ³	-

Appropriate engineering controls

Engineering Controls	Showers. Eyewash stations. Ventilation systems.
----------------------	---

Individual protection measures, such as personal protective equipment

Eye/Face Protection	Eye wash bottle. Tightly sealed goggles. Wear face shield and protective suit for abnormal processing problems.
Skin and Body Protection	Impermeable clothing. Impervious protective gloves.
Respiratory Protection	No personal respiratory protective equipment normally required. In the case of vapor formation use a respirator with an approved filter.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Appearance Color	Liquid Clear, colorless liquid Colorless	Odor Odor Threshold	Alcohol-like 200 ppm
<u>Property</u> pH Melting point / freezing point Boiling point / boiling range Flash point	<u>Values</u> No data available -88 °C / -126 °F 82 °C / 180 °F 12 °C / 54 °F	<u>Remarks • Method</u>	
Evaporation Rate Flammability (Solid, Gas) Flammability Limit in Air	1.2 Liquid-Not applicable	N-butyl acetate	
Upper flammability or explosive limits	12.7% (V)		
Lower flammability or explosive limits	2%(V)		
Vapor Pressure	32 mmHg @20°C/68		

	0.00000/000505	(
Vapor Density	2 @20°C/68DEGF	(Air=1)
Relative Density	0.79 g/cm3 @20°C/68°F	(Water=1)
Water Solubility	Soluble in water	
Solubility in other solvents	no data available	
Partition Coefficient	log Pow: 0.05 @25°C/77°F	
Autoignition temperature	399 °C / 750.2 °F	
Decomposition temperature	Not determined	
Kinematic Viscosity	2.6 mm2/s	(@25°C/77°F)
Dynamic Viscosity	2.4 mPa s	(@20°C/68°F)
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Vapors may form explosive mixture with air.

Conditions to Avoid

Incompatible Materials. Heat, flames and sparks.

Incompatible materials

Aldehydes. Chlorine. Ethylene oxide. Halogens. Isocyanates. Strong acids. Strong oxidizing agents.

Hazardous decomposition products

Carbon monoxide. Carbon dioxide (CO2). Unburned hydrocarbons (smoke).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	
Eye Contact	Avoid contact with eyes.
Skin Contact	May be harmful in contact with skin.
Inhalation	May be harmful if inhaled.
Ingestion	Harmful if swallowed.

Component Information

l	Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
	Isopropyl Alcohol 67-63-0	= 1870 mg/kg (Rat)	= 4059 mg/kg (Rabbit)	= 72600 mg/m³ (Rat) 4 h

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms

Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Serious eye damage/eye	Causes serious eye irritation.
irritation	

Carcinogenicity

Group 3 IARC components are "not classifiable as human carcinogens".

Chemical name	ACGIH	IARC	NTP	OSHA
Isopropyl Alcohol		Group 3		Х
67-63-0				

Legend

IARC (International Agency for Research on Cancer)

Group 3 IARC components are "not classifiable as human carcinogens"

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

STOT - single exposure

May cause drowsiness or dizziness.

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document.

ATEmix (oral)	1,870.00 mg/kg
ATEmix (dermal)	4,059.00 mg/kg
ATEmix (inhalation-dust/mist)	72.60 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Component Information

Chemical name	Algae/aquatic plants	Fish	Crustacea
Isopropyl Alcohol	1000: 96 h Desmodesmus	11130: 96 h Pimephales promelas	13299: 48 h Daphnia magna mg/L
67-63-0	subspicatus mg/L EC50 1000: 72 h	mg/L LC50 static 9640: 96 h	EC50
	Desmodesmus subspicatus mg/L	Pimephales promelas mg/L LC50	
	EC50	flow-through 1400000: 96 h	
		Lepomis macrochirus µg/L LC50	

Persistence/Degradability

Not determined.

Bioaccumulation

There is no data for this product.

<u>Mobility</u>

Chemical name	Partition coefficient
Isopropyl Alcohol	0.05
67-63-0	

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated Packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status

Chemical name	California Hazardous Waste Status
Isopropyl Alcohol	Toxic
67-63-0	Ignitable

14. TRANSPORT INFORMATION

<u>Note</u>	Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.
<u>DOT</u>	<u>55 Gallon Drum</u>
UN/ID No	UN1219
Proper Shipping Name	Isopropanol
Hazard class	3
Packing Group	II
<u>IATA</u>	<u>55 Gallon Drum</u>
UN number	FORBIDDEN
Proper Shipping Name	FORBIDDEN
Transport hazard class(es)	FORBIDDEN
Packing Group	FORBIDDEN
IMDG	<u>55 Gallon Drum</u>
UN number	UN1219
Proper Shipping Name	Isopropanol
Transport hazard class(es)	3
Packing Group	II

15. REGULATORY INFORMATION

International Inventories

Chemical name	TSCA	DSL/NDSL	EINECS/E LINCS	ENCS	IECSC	KECL	PICCS	AICS
Isopropyl Alcohol	Х	Х	Х	Х	Х	Х	Х	Х

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No

Reactive Hazard

SARA 313

Chemical name	CAS No.	Weight-%	SARA 313 - Threshold Values %
Isopropyl Alcohol - 67-63-0	67-63-0	90-100	1.0

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Isopropyl Alcohol	Х	Х	Х
67-63-0			

16. OTHER INFORMATION					
<u>NFPA</u>	Health Hazards 2	Flammability 3	Instability 0	Special Hazards Not determined	
HMIS	Health Hazards	Flammability	Physical hazards	Personal Protection	
	2*	3	0	Not determined	
Chronic Hazard Star Lege	end * = Chron	nic Health Hazard			
Issue Date: Revision Date: Revision Note:	14-Aug-2018 2-Nov-20 Updated Section 14				

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet