SAFETY DATA SHEET

Revision Date 14-Oct-2015 **Version** 2

1. IDENTIFICATION

Product Name Isopropyl Alcohol, 70%

Product Code 7727
CAS No. 67-63-0
Chemical Formula $CH_3CHOHCH_3$

Recommended Use For laboratory, scientific, R&D or manufacturing use.

Company E K Industries, Inc.
1403 Herkimer St.
Joliet, IL 60432
Tel. (800) 283-4244
Emergency Telephone Call CHEMTREC 1-800-424-9300 (EKI CCN 7453)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

Label elements

Signal word
Danger

Hazard statements
Causes serious eye irritation. May cause drowsiness or dizziness.
Highly flammable liquid and vapor.



Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. 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 electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep cool.

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): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
In case of fire: Use CO2, dry chemical, or foam for extinction.

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

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	65-75
Water	7732-18-5	25-35

4. FIRST AID MEASURES

Description of first aid measures

Eye contact Immediately flush with plenty of water for at least 15 minutes, separating eyelids occasionally. Remove contact lenses if present. Get immediate medical attention.

Skin contact Wash thoroughly with soap and water while removing contaminated garments. Get medical attention if irritation develops.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

Ingestion Do NOT induce vomiting unless instructed to do so by medical personnel. If conscious, rinse mouth and give several glasses of water to drink. Never give anything by mouth to an unconscious person. Get immediate medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms If inhaled, may cause breathing difficulties. May cause CNS depression, dizziness, nausea, vomiting.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Water spray (fog), CO2, dry chemical, dry sand, alcohol-resistant foam

Specific hazards arising from the chemical
Vapors may spread long distances and ignite.

Hazardous combustion products
Carbon oxides.

Protective equipment and precautions for firefighters
Firefighters should wear self-contained breathing apparatus with full facepiece operated in pressure-demand or other positive pressure mode.

NFPA **Health hazards** 1 **Flammability** 3 **Instability** 0 **Physical and Chemical Properties** -

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes or clothing. Remove all sources of ignition. Take precautionary measures against static discharges.

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Absorb spill with inert material, scoop up and containerize for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling Use personal protective equipment as required
Handle in accordance with good industrial hygiene and safety practice.

Storage Conditions Store in an approved Flammable Liquids storage area. Store at 15C to 25C.

Incompatible materials Strong oxidizing agents. Strong acids. Aluminum.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Isopropyl alcohol 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m³ (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m³ (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m³	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m³ STEL: 500 ppm STEL: 1225 mg/m³

Appropriate engineering controls

Engineering Controls Emergency showers, eyewash stations, ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles.

Skin and body protection Wear protective gloves and protective clothing. Wear fire/flame resistant/retardant clothing.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

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 Liquid
Appearance Clear, colorless
Odor Odor of rubbing alcohol
Odor threshold No information available

pH	No information available	All data for Isopropyl Alcohol, 99%
Melting point / freezing point	-89 C	
Boiling point / boiling range	82 C	
Flash point	12 C	
Evaporation rate	2.83 (BuAc=1)	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	12.7%	
Lower flammability limit:	2.0%	
Vapor pressure	No information available	
Vapor density	No information available	
Relative density	.79	
Water solubility	Miscible with water	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	399 C	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	

10. STABILITY AND REACTIVITY

Stability Stable under recommended storage conditions.

Possibility of Hazardous Reactions None under normal processing.

Conditions to avoid Extremes of temperature and direct sunlight.

Incompatible materials Strong oxidizing agents. Strong acids. Aluminum.

Hazardous Decomposition Products Carbon monoxide. Carbon dioxide (CO2).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation No data available.

Eye contact Irritating to eyes.

Skin contact Irritating to skin.

Ingestion No data available.

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
Water 7732-18-5	> 90 mL/kg (Rat)	-	-

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

Sensitization No information available.
Germ cell mutagenicity No information available.
Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
Isopropyl alcohol 67-63-0	-	Group 3	-	X

IARC (International Agency for Research on Cancer)
Group 3 - Not classifiable as to carcinogenicity in humans

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

STOT - single exposure Respiratory system, Central nervous system,

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12. ECOLOGICAL INFORMATION

Ecotoxicity

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

Persistence and degradability
No information available.

Bioaccumulation
No information available.

Chemical Name	Partition coefficient
Isopropyl alcohol 67-63-0	0.05

Other adverse effects No information available

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 Do not reuse container. Emptied containers may contain residue. Continue to follow label warnings after container is emptied.

Chemical Name	California Hazardous Waste Status
Isopropyl alcohol 67-63-0	Toxic Ignitable

14. TRANSPORT INFORMATION

Transportation information is provided as a general reference only and may not be applicable in all situations. This information applies to non-bulk shipments only. Per 49 CFR §173.22, it is the shipper's responsibility to ensure that all materials are properly packaged, classified and labeled prior to shipment.

DOT

UN/ID no.	1219
Proper shipping name	Isopropanol
Hazard Class	3
Packing Group	II

IATA

UN/ID no.	1219
Proper shipping name	Isopropanol
Hazard Class	3
Packing Group	II

15. REGULATORY INFORMATION

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
Isopropyl alcohol - 67-63-0	1.0

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

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). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

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 67-63-0	X	X	X
Water 7732-18-5	-	-	X

16. OTHER INFORMATION

Prepared By EKI Regulatory Affairs (Email: reg@eki-chem.com)
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Disclaimer

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End of Safety Data Sheet