



your partner in food safety

SDS

Safety Data Sheet

1) Product Identification

Product Name: Freeze Kleen

Product Code: I00057

Recommended Use: Cleaner for freezers and coolers.

Producer: Birko Corporation
9152 Yosemite Street
Henderson, CO 80640-8027

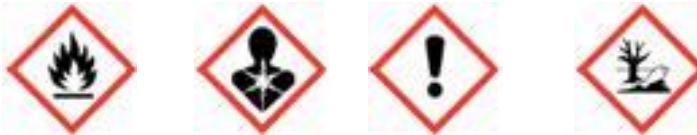
Contact Information: (303) 289-1090 or 1-800-525-0476

Emergency Number: CHEMTREC 1-800-424-9300

2) Hazard(s) Identification

Health	Environmental	Physical
Acute Toxicity Cat. 5 Skin Corrosion Cat. 2 Eye Effects Cat. 2B	Aquatic Toxicity Acute Cat. 3	Flammable Liquid Cat. 1

Labeling:



Symbol:

Signal Word: Danger

Flammable, Target Organ Toxicity, Irritant, Aquatic Toxicity

Hazard Statement(s): May causes irreversible eye damage. Harmful or fatal if swallowed. Do not get into eyes, on skin, or on clothing. Corrosive to certain types of metals.

Precautionary Statement(s): Use rubber gloves, protective splash-proof goggles, and protective clothing. Remove contaminated clothing and wash before re-use. Do not contaminate food, feed, or water. Keep container closed when not in use.

3) Composition/ Information on Ingredients

Name(s)	Synonym(s)	CAS Number	Weight %
Ethanol	Ethyl alcohol	64-17-5	< 80%
Isopropanol	2-propanol	67-63-0	< 10%
Methyl Isobutyl Ketone	Isopropylacetone	108-10-1	< 5%

4) First-Aid Measures

Inhalation	Skin Contact	Eye Contact	Ingestion
Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.	Wash with soap and water. Get medical attention if irritation develops or persists.	Flush eyes with water for 15 minutes. Get medical attention.	Do not induce vomiting. Give milk or water. Get immediate medical attention. Careful evacuation of stomach by medical personnel imperative.

5) Firefighting Measures

Suitable Extinguishing Media: Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.

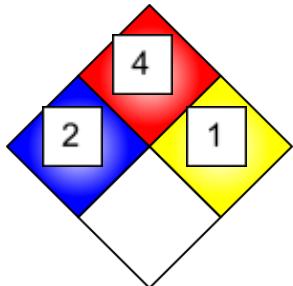
Unsuitable Extinguishing Media: N/A

Flashpoint and Method: ~(57°F) ASTM D56

Flammable Limits: 3.3 to 19.0

Specific Hazards: Always wear self-contained breathing apparatus when fighting a chemical fire.

Special Protective Actions for Fire-Fighters: Flammable liquid and vapor.



6) Accidental Release Measures

Personal Precautions: Be sure to use all necessary Personal Protective Equipment

Environmental Precautions: Keep material out of storm sewers and ditches which lead to waterways.

Land spill: Spills and releases may have to be reported to Federal and/or local authorities. Air spill: Control or stop the loss of volatile materials to the atmosphere.

Methods and Materials for Containment and Clean-Up: For small spills: Absorb liquid and place in sealed container for disposal. Vapors can travel to an ignition source. Large Spills: Absorb liquid and place in sealed container for disposal. Vapors can travel to an ignition source. Avoid runoff into storm sewers and ditches which lead to water ways. Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. If this material is released into a work area, evacuate the area immediately.

7) Handling and Storage

Precautions for Safe Handling: Use with sufficient ventilation to keep employee exposure below recommended limits. Provide adequate ventilation for storage, handling and use, especially for enclosed or low spaces. Avoid contact of liquid with eyes and prolonged skin exposure. Do not allow product to contact open flame or electrical heating elements.

Conditions for Safe Storage: Keep container closed when not in use. Store in a cool, dry location. Keep away from sources of ignition.

8) Exposure Controls and Personal Protection

Appropriate Engineering Controls: Use only in a well ventilated area. Use explosion-proof ventilation equipment.

Exposure Limits:

Name (CAS-No.)	PEL	TLV
Ethanol (64-17-5)	OHSA 1900 mg/m ³	ACGIH 1880 mg/m ³
Isopropanol (67-63-0)	OHSA 400 ppm	ACGIH 400 ppm
Methyl Isobutyl Ketone (108-10-1)	OSHA 100 ppm	ACGIH 50 ppm

Personal Protective Equipment

Eye/Face	Gloves
	

Eye/Face: Safety glasses

Skin: Wear appropriate body covering clothing.

Gloves: Wear appropriate chemical resistant gloves.

Protective Material Types: Neoprene, butyl rubber, or vinyl gloves.

9) Physical and Chemical Properties

Physical Form: Liquid

Appearance: Blue

Odor: Alcohol

pH: NA

Melting Point: Not available

Freezing Point: - 130°F

Boiling Point: 80°F

Flash Point: Not established

Evaporation Rate: > 1

Flammability: Flammable

Upper/Lower Flammability or explosive limits: 3.3 on 19.0

Vapor Pressure: 40mm @ 68°F

Vapor Density: 1.59

Relative Density: Not established

Specific Gravity: 0.81

Solubility: 100%

Partition coefficient: Not available

Auto-Ignition Temperature: Not established

Decomposition Temperature: Not available

10) Stability and Reactivity

Chemical Stability: Stable at normal temperatures and pressure.

Possibility of Hazardous Reactions: This product does not polymerize.

Conditions to Avoid: Heat, flame, other sources of ignition.

Materials to Avoid: Strong oxidizers

Hazardous Decomposition Products: Carbon monoxide and Carbon dioxide.

11) Toxicological Information

Toxicity: Acute

Test	Results	Basis
NONE	NONE	NONE

Toxicity: Chronic

Chemical Name	CAS #	Mutagen	Teratogen
Ethanol	64-17-5	Yes	Suspected
Isopropanol	67-63-0	No	Yes
Methyl Isobutyl Ketone	108-10-1	No	Yes

Summary Comments: **Acute:** Mildly irritating to eyes, and may be absorbed through the skin in harmful amounts. **Chronic:** May cause reproductive and fetal effects. Laboratory experiments have resulted in mutagenic effects. Prolonged exposure may cause liver, kidney, and heart damage.

12) Ecological Information

Toxicity:

Test	Results
NONE	NONE

Persistence and Degradability: No data

Bioaccumulative Potential: No data

Mobility in Soil: Not available

Other Adverse Effects: Not available

13) Disposal Considerations

Disposal Method: Re-use or reprocess if possible. Dispose in accordance with all applicable regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): D002

14) Transport Information

UN Number: UN1170

UN Proper Shipping Name: Ethanol solutions

Transport Hazard Class (es): 3

Packing Group: II

Environmental Hazard(s): N/A

Special Precautions for User: N/A

15) Regulatory Information

US Regulations:

CERCLA Sections 102a/103 Hazardous substances (40 CFR 302.4):

Methanol: 5000 lbs. RQ 100% active basis

SARA Title III SARA Sections 311/312 Hazardous Categories (40 CFR 370.21): Fire Hazard

Acute: Yes

Chronic: No

Fire: Yes

Reactive: No

Sudden Release: No

State Regulations:

California Proposition 65: This product may contain ingredient know to be listed

California Hazardous Substance List:

64-17-5 Ethanol

108-10-1 Methyl Isobutyl Ketone

New Jersey Right to Know Hazardous Substance List:

64-17-5 Ethanol

67-63-0 Isopropanol

108-10-1 Methyl Isobutyl Ketone

Pennsylvania Right to Know: Hazardous Substance List:

64-17-5 Ethanol

Rhodes Island Hazardous Substance List:

108-10-1 Methyl Isobutyl Ketone

Canadian Regulations:

Controlled Products Regulations (CPR): This product has been classified in accordance with the criteria of the Controlled Products Regulations and the MSDS contains all of the information required by the CPR.

WHMIS Classification: B

National Inventory Status: U.S. Inventory (TSCA): All the components of this substance are listed on or exempt from the inventory.

Canada Inventory (DSL/NDSL): All components of this product are listed on the DSL

16) Other Information

HMIS

4	FLAMMABILITY
2	HEALTH
1	REACTIVITY
B	Personal Protection

4-Severe

3-Serious

2-Moderate

1-Slight

0-Minimal

Hazard Index

Personal Protective Index

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Preparer: Ramsey Johnson

Approved By: Terry L. McAninch

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