

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name **KC-199 ANTI-FOG**

Other means of identification

Product Code 20199

Recommended use of the chemical and restrictions on use

Recommended Use Anti-fog lens cleaning solution

Uses advised against Follow the directions for use on the label when applying this product

Details of the supplier of the safety data sheet

Manufacturer Address

Safe Foods Chemical Innovations
1501 E. 8th Street
North Little Rock, AR 72114

Emergency telephone number

Company Phone Number 501-758-8500
Emergency Telephone Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

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

NOTE: Warnings below are for exposure to large quantities of the product. Intended use should not create a serious health hazard.

Serious eye damage/eye irritation	Category 2A
Flammable liquids	Category 3

Label elements

Emergency Overview

Warning

Hazard statements

Causes serious eye irritation
Flammable liquid and vapor



Appearance Aqueous solution **Physical state** Liquid **Odor** Slightly alcoholic

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Keep away from heat/sparks/open flames/hot surfaces. No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Use explosion-proof electrical/ventilating/lighting/equipment

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
In case of fire: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%
Water	7732-18-5	82-90
Isopropyl alcohol	67-63-0	11-14
Trade Secret	Proprietary	1-2
Ethyl alcohol	64-17-5	< 0.15

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

Eye contact Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. If eye irritation persists: Get medical advice/attention.

Skin contact Get medical attention if irritation develops and persists. Wash contaminated clothing and shoes before reuse. Rinse skin with water.

Inhalation Remove to fresh air. None under normal use conditions.

Ingestion Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a doctor if you feel unwell.

Most important symptoms and effects, both acute and delayed

Symptoms See Section 11 for symptom information.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Dry chemical. Water spray (fog). Carbon dioxide (CO2). Foam.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Flammable. This product will release vapors when heated above the flash point temperature and can ignite when exposed to a source of ignition.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge Refer to "Specific hazards arising from the chemical" in this section.

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. Cool containers with flooding quantities of water until well after fire is out.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protection recommended in Section 8. Ensure adequate ventilation, especially in confined areas.

For emergency responders Isolate area. Keep unnecessary personnel away.

Environmental precautions

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas. See section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

Methods for cleaning up Soak up with inert absorbent material. Collect spillage. Sweep up and shovel into suitable containers for disposal. Following product recovery, flush area with water. Refer to Section 7 "Advice on safe handling".

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling This product will release vapors when heated above the flash point temperature and can ignite when exposed to a source of ignition. Do not eat, drink or smoke when using this product. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep from freezing.

Incompatible materials Heat, sparks, open flame, other ignition sources. Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

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/m ³ (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m ³	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m ³ STEL: 500 ppm STEL: 1225 mg/m ³
Ethyl alcohol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m ³

Appropriate engineering controls

Engineering Controls Showers, eyewash stations, ventilation system.

Individual protection measures, such as personal protective equipment

- Eye/face protection** Safety glasses when the possibility of splashing exists.
- Skin and body protection** For spills or prolonged and frequent use of this product rubber gloves are recommended.
- 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

Do not eat, drink or smoke when using this product. Wash contaminated clothing and shoes before reuse. Avoid prolonged or repeated contact with skin.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	Odor	Slightly alcoholic
Appearance	Aqueous solution	Odor threshold	No information available
Color	Clear, Colorless	Remarks • Method	
Property	Values		
pH	7.5		±1 @ 21°C
Melting point / freezing point	-3 °C / 26.6 °F		
Boiling point / boiling range	No information available		
Flash point	36 °C / 96.8 °F		
Evaporation rate	No information available		
Flammability (solid, gas)	No information available		
Flammability Limit in Air			
Upper flammability limit:	No information available		
Lower flammability limit:	No information available		
Vapor pressure	No information available		
Vapor density	No information available		
Specific Gravity	0.98 g/cc		
Water solubility	Soluble in water		
Solubility in other solvents	No information available		
Partition coefficient	No information available		
Autoignition temperature	No information available		
Decomposition temperature	No information available		
Kinematic viscosity	No information available		
Dynamic viscosity	No information available		
Explosive properties	No information available		
Oxidizing properties	No information available		
VOC Content (%)	10.15% (0.829 lbs/gal)		

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

None known.

Incompatible materials

Heat, sparks, open flame, other ignition sources. Strong oxidizing agents.

Hazardous Decomposition Products

Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	Not an expected route of exposure.
Eye contact	Direct eye contact causes eye irritation and redness of eye tissues.
Skin Contact	Repeated exposure may cause skin dryness or cracking.
Ingestion	May be harmful if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Water 7732-18-5	> 90 mL/kg (Rat)	-	-
Isopropyl alcohol 67-63-0	= 1870 mg/kg (Rat)	= 4059 mg/kg (Rabbit)	= 72600 mg/m ³ (Rat) 4 h
Trade Secret	= 1900 mg/kg (Rat)	= 10000 mg/kg (Rabbit)	-
Ethyl alcohol 64-17-5	= 7060 mg/kg (Rat)	-	= 124.7 mg/L (Rat) 4 h

Information on toxicological effects

Symptoms	No information available.
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. Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage.

Chemical Name	ACGIH	IARC	NTP	OSHA
Isopropyl alcohol 67-63-0	-	Group 3	-	X
Ethyl alcohol 64-17-5	A3	-	Known	X

ACGIH (American Conference of Governmental Industrial Hygienists)
 A3 - Animal Carcinogen
IARC (International Agency for Research on Cancer)
 Group 3 - "not classifiable as human carcinogens"
NTP (National Toxicology Program)
 Known - Known Carcinogen
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
 X - Present

Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity	13.9 % of the mixture consists of ingredient(s) of unknown toxicity
The following values are calculated based on chapter 3.1 of the GHS document	
Oral LD50	13,475.00 mg/kg
Dermal LD50	31,060.00 mg/kg
Mist	580.80 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

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	1400000: 96 h Lepomis macrochirus µg/L LC50 9640: 96 h Pimephales promelas mg/L LC50 flow-through 11130: 96 h Pimephales promelas mg/L LC50 static	13299: 48 h Daphnia magna mg/L EC50
Trade Secret	-	20 - 40: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 24: 96 h Oncorhynchus mykiss mg/L LC50 static 37: 96 h Lepomis macrochirus mg/L LC50 static	36: 48 h Daphnia magna mg/L EC50
Ethyl alcohol 64-17-5	-	12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through	9268 - 14221: 48 h Daphnia magna mg/L LC50 2: 48 h Daphnia magna mg/L EC50 Static 10800: 24 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

Chemical Name	Partition coefficient
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Isopropyl alcohol - 67-63-0	0.05
Ethyl alcohol - 64-17-5	-0.32

Mobility

Soluble in water.

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 Dispose of in accordance with federal, state and local regulations.

Chemical Name	California Hazardous Waste Status	
Isopropyl alcohol - 67-63-0	Toxic	Ignitable
Ethyl alcohol - 64-17-5	Toxic	Ignitable

14. TRANSPORT INFORMATION

Note: Limited quantity (LQ). This flammable material is exempt from labeling and placarding requirements so long as the material is not offered for transport by aircraft as per 49 CFR §173.150 and when the product meets the packaging requirements of 49 CFR §173.150 (b)(3) [inner packaging not over 5.0 L (1.3 gallons) net capacity each for liquid]. Each limited quantity package of this product may not exceed 30 kilograms (66 pounds) gross weight.

DOT

UN/ID No. 1993
Proper shipping name Flammable liquids, n.o.s. (contains isopropanol)
Hazard Class 3
Packing Group III
Emergency Response Guide Number 128

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL/NDSL Complies
EINECS/ELINCS Complies

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

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Note: Isopropyl alcohol only needs to be reported if it is being manufactured by the strong acid process. Facilities that process or otherwise use isopropyl alcohol are **NOT** covered and should **NOT** file a report.

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 No
Fire hazard Yes
Sudden release of pressure hazard No
Reactive Hazard No

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)

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

Ethyl alcohol is only a considered a Proposition 65 developmental hazard when it is ingested as an alcoholic beverage

Chemical Name	California Proposition 65	
Ethyl alcohol - 64-17-5	Carcinogen	Developmental

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania

Isopropyl alcohol - 67-63-0	X	X	X
Ethyl alcohol - 64-17-5	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

NFPA	Health hazards	1	Flammability	3	Instability	0	Physical and Chemical Properties
							None
HMIS	Health hazards	1	Flammability	3	Physical hazards	0	Personal protection
							None

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Company Name Update

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 health hazards given on this SDS apply to this product in its concentrated form (as supplied) and may differ significantly at use dilution. The signs and symptoms of exposure apply only to negligence in handling or misuse of the concentrated product and not to the routine exposure of the diluted product under conditions of ordinary use.

End of Safety Data Sheet