



SAFETY DATA SHEET

Revision Date 16-September-2015

Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name F-2326 Heat Exchange Kleener

Product Code F-2326

Recommended Use of the Chemical and Restrictions on Use

Recommended Use Cleaning agent.

Details of the Supplier of the Safety Data Sheet

Supplier Address

Delta Foremost Chemical Corporation
3915 Air Park St.
Memphis, Tennessee 38118

Emergency Telephone Number

Company Phone Number (901) 363-4340

Emergency Telephone INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Classification

Eye Irritation

Category 2B

Signal Word

WARNING

Hazard Statements

Causes eye irritation

Appearance Clear colorless liquid

Physical State Liquid

Odor Odorless

Precautionary Statements - Prevention

Wear protective gloves/protective clothing/eye protection/face protection

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 ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other Hazards

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Citric acid	77-92-9	Proprietary

Product contains a proprietary mixture of ingredients.

4. FIRST AID MEASURES**First Aid Measures**

General Advice	Provide this SDS to medical personnel for treatment.
Eye Contact	Flush with plenty of water for at least 15 minutes. See physician if irritation persists.
Skin Contact	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
Inhalation	Remove to fresh air.
Ingestion	Do NOT induce vomiting. Drink promptly a large quantity of milk, egg whites, gelatin solution; or if they are not available, drink large quantities of water. Avoid alcohol.

Most Important Symptoms and Effects, both Acute and Delayed

Symptoms	Burning and/or irritation to eyes.
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Indication of any Immediate Medical Attention and Special Treatment Needed

Note to Physicians	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Foam, carbon dioxide or dry chemical extinguisher, or water.

Unsuitable Extinguishing Media Not determined.**Specific Hazards Arising from the Chemical**

Product is not flammable.

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	Wear protective clothing as described in Section 8 of this safety data sheet.
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Environmental Precautions 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 absorb with suitable absorbent for disposal.

Methods for Cleaning Up Soak up with inert absorbent material. Reclaim spilled material into approved container for proper disposal. Remaining material may be neutralized. For waste disposal, see section 13 of the SDS. Neutralize with a lime or soda ash and flush area with large amounts of water.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling Use personal protection recommended in Section 8. Wash face, hands, and any exposed skin thoroughly after handling. Do not breathe vapors or spray mist.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up.

Incompatible Materials Bases, Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Appropriate Engineering Controls

Engineering Controls Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the SDS.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection Goggles or face shield.

Skin and Body Protection Wear protective Neoprene™ gloves, Rubber gloves.

Respiratory Protection Ensure adequate ventilation, especially in confined areas.

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	Odor	Odorless
Appearance	Clear Liquid	Odor Threshold	Not determined
Color	Colorless		
Property	Values	Remarks • Method	
pH	2.0 – 3.0		
Melting Point/Freezing Point	Not available		
Boiling Point/Boiling Range	100 °C / 212 °F		
Flash Point	Not available		
Evaporation Rate	Not available		

Flammability (Solid, Gas)	Not determined	
Upper Flammability Limits	Not available	
Lower Flammability Limit	Not available	
Vapor Pressure	Same as water	
Vapor Density	Same as water	
Specific Gravity	1.120	(1=Water)
Water Solubility	Soluble in water	
Solubility in Other Solvents	Not determined	
Partition Coefficient	Not determined	
Autoignition Temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions. Will react with incompatible materials.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to Avoid

Keep out of reach of children.

Incompatible Materials

Bases, Strong reducing agents.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information

Eye Contact	Causes eye irritation.
Skin Contact	No irritation expected.
Inhalation	No irritation expected.
Ingestion	May be harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Citric acid 77-92-9	= 5,400 mg/kg (Rat)	= >2,000 mg/kg (Rat)	-

Information on Physical, Chemical and Toxicological Effects**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**Carcinogenicity**

This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical Measures of Toxicity

Not determined

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Citric acid 77-92-9		440: 48 h Leuciscus melanotus mg/L LC50 mortality		1,535: 24 h Daphnia magna mg/L EC50 Static

Persistence and Degradability

Not determined

Bioaccumulation

Not determined

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.

14. TRANSPORT INFORMATION**Note**

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

Not regulated.

IATA

Not regulated.

IMD

Not regulated.

15. REGULATORY INFORMATION

International Inventories

Not Determined

Legend:

*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDL - 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*

US Federal Regulations

CERCLA

SARA 313

Not determined

CWA (Clean Water Act)

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Citric acid 77-92-9	X		X

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards	Flammability	Instability	Special Hazards
	1	0	0	Not determined
<u>HMIS</u>	Health Hazards	Flammability	Physical Hazards	Personal Protection
	1	0	0	Not determined

Revision Date 16-September-2015

Revision Note New format

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