SAFETY DATA SHEET

Revision Date 27-Feb-2023 **Version** 1

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

Product identifier

Product Name **CC-622**

Other means of identification

Product Code 30364

Recommended use of the chemical and restrictions on use

Recommended Use Antimicrobial 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

Initial supplier identifier

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

Emergency telephone number

Initial supplier phone number 1-501-758-8500

Emergency Telephone Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

Serious eye damage/eye irritation	Category 1
Skin corrosion/irritation	Category 1
Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Organic peroxides	Type F
Oxidizing liquids	Category 2
Corrosive to metals	Category 1

Label elements

DANGER

Hazard statements

Causes severe skin burns and eye damage
Harmful if swallowed
Harmful in contact with skin
Harmful if inhaled
May intensify fire; oxidizer
Heating may cause a fire
May be corrosive to metals

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
Do not breathe dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
Keep away from clothing and other combustible materials
Keep only in original container
Keep cool
Ground and bond container and receiving equipment

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor
Specific treatment (see Section 4 on SDS)

Eyes
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor
Skin
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Call a poison center or doctor if you feel unwell. Wash contaminated clothing before reuse
Inhalation
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor
Ingestion
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor
Fire
In case of fire: Use CO2, dry chemical, or foam for extinction

Absorb spillage to prevent material damage

Precautionary Statements - Storage
Store at temperatures not exceeding 30°C / 86°F. Keep cool. Store away from other materials. Protect from sunlight. Store in a well-ventilated place. Store locked up. Store in corrosion resistant container with a resistant inner liner
Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant
Other Information
Unknown acute toxicity See Section 11 for additional Toxicological Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical Name	CAS No.	Weight-%
Acetic acid	64-19-7	40-50
Peroxyacetic acid	79-21-0	21.8-22.8
Water	7732-18-5	20-30
Hydrogen peroxide	7722-84-1	4.7-5.2
1-Hydroxyethane-1, 1-diphosphonic acid	2809-21-4	< 1
Sulfuric acid	7664-93-9	0.07

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

4. FIRST AID MEASURES

First aid measures

Inhalation Remove to fresh air. Call a physician immediately. Administer oxygen if breathing is difficult. Symptoms of pulmonary edema can be delayed up to 48 hours after exposure. If direct contact during rescue breathing poses a threat to the first aid provider, "Avoid mouth-to-mouth contact by using a barrier device."

Eye contact Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for 30 minutes. Take care not to rinse contaminated water into the unaffected eye or into the face. Immediately call a poison center/doctor.

Skin contact Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. For severe burns, immediate medical attention is required. Wash contaminated clothing before reuse.

Ingestion Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Call a physician immediately.

Most important symptoms and effects, both acute and delayed

Symptoms See Section 11 for additional Toxicological Information.

Indication of any immediate medical attention and special treatment needed

Note to physicians Probable mucosal damage may contraindicate the use of gastric lavage.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Water spray or fog. Carbon dioxide (CO2). Foam.
Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.
Specific hazards arising from the chemical Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.
Hazardous combustion products Oxygen which supports combustion. Acetic acid.
Explosion data
Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.
Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. 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 protective equipment as required. Ensure adequate ventilation.

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. Collect spills in plastic containers only.

Methods for cleaning up SMALL SPILLS (less than 1 gallon): Neutralize with soda ash or cover with dry earth, sand or other non combustible material, place into loosely covered plastic containers for later disposal. If neutralized, material can be diluted into drain. LARGE SPILL: Restrict access to area until completion of clean up. Prevent liquid from entering sewers or waterways. Stop or reduce leak if safe to do so. Dike with inert material (sand, earth, etc.). Collect into plastic containers for disposal. Ensure adequate decontamination of tools and equipment following clean up.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Avoid breathing vapors or mists. Wash thoroughly after handling. Handle in accordance with good industrial hygiene and safety practice. Do not contaminate water, food, or feed by storage or disposal.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Containers must be vented. Keep from freezing. Keep away from open flames, hot surfaces and sources of ignition. Do not double stack. Use first in, first out storage system. Product is shelf-stable for up to 1 year when stored in a closed container at room temperature and not in direct sunlight. Temperatures above 86°F (30°C) will degrade product, accelerate decomposition and reduce shelf life. Store in accordance with local regulations.

Incompatible materials Avoid strong reducing agents, soft metals, heat and bases (unless product has been diluted to less than 1000 ppm, then bases may be used to gradually adjust to a pH of less then 9). Combustible material.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

Chemical Name	Alberta	British Columbia	Ontario TWA	Quebec
Acetic acid 64-19-7	TWA: 10 ppm, 25 mg/m^3 STEL: 15 ppm, 37 mg/m^3	TWA: 10 ppm STEL: 15 ppm	TWA: 10 ppm STEL: 15 ppm	TWA: 10 ppm, 25 mg/m^3 STEL: 15 ppm, 37 mg/m^3
Peroxyacetic acid 79-21-0			STEL: 0.4 ppm	
Hydrogen peroxide 7722-84-1	TWA: 1 ppm, 1.4 mg/m^3	TWA: 1 ppm	TWA: 1 ppm	TWA: 1 ppm, 1.4 mg/m^3

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)
STEL	STEL (Short Term Exposure Limit)
Ceiling (CEV)	Maximum limit value
*	Skin designation

Appropriate engineering controls

Engineering controls Showers, eyewash stations, and ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles. Face protection shield.

Skin and body protection If there is a risk of contact: Chemical resistant gloves, suit and boots.

Respiratory protection When workers are facing concentrations above the exposure limit, they must use appropriate certified respirators.

General hygiene considerations Do not eat, drink or smoke when using this product. Wash face, hands and any exposed skin thoroughly after handling. Take off contaminated clothing and wash it before reuse. 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 Aqueous solution

Color Clear, Colorless

Odor Pungent vinegar-like odor

Odor threshold No information available

Property	Values	Remarks • Method
pH	0.5	±0.5 @ 21°C (10% solution)
Melting point / freezing point	< -8 °C / < 17 °F	
Boiling point / boiling range	No information available	
Flash point	> 93.3 °C / > 200 °F	CC (closed cup)
Evaporation rate	No information available	
Flammability (solid, gas)	Not flammable	
Flammability Limit in Air		
Upper flammability limit:	No data available	
Lower flammability limit:	No data available	
Vapor pressure	46.8 mm Hg @25°C	
Vapor density	No data available	
Relative density	1.11 g/cc	
Water solubility	Soluble in water	
Solubility in other solvents	No data available	
Partition coefficient	No data available	
Autoignition temperature	270 °C / 518 °F	
Decomposition temperature	No data available	
Kinematic viscosity	5-15 cSt @ 20°C	
Dynamic viscosity	No data available	
Explosive properties	No information available.	
Oxidizing properties	No information available.	
VOC Content (%)	40-50%	

10. STABILITY AND REACTIVITY

Reactivity Reactive with bases, metals, reducing agents and combustible materials.

Chemical stability Stable for up to 1 year when stored under normal conditions. This product will gradually lose some of its oxidizing power over time. Elevated temperatures and contaminants can rapidly accelerate decomposition, possible leading to a hazardous condition.

Possibility of Hazardous Reactions None under normal processing.

Conditions to avoid Incompatible materials and high temperatures.

Incompatible materials Avoid strong reducing agents, soft metals, heat and bases (unless product has been diluted to less than 1000 ppm, then bases may be used to gradually adjust to a pH of less then 9). Combustible material.

Hazardous Decomposition Products Oxygen which supports combustion. Acetic acid.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation Inhalation of peracetic acid vapors causes lacrimation and irritation of the mucous membranes, eyes and nasal passages.

Eye contact Corrosive to the eyes and may cause severe damage including blindness.

Skin contact Contact causes severe skin irritation and possible burns.

Ingestion Corrosive. Can burn mouth, throat, and stomach. Swallowing can result in nausea, vomiting, diarrhea, abdominal pain and chemical burns to the gastrointestinal tract.

Information on toxicological effects

Symptoms No information available.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Acetic acid 64-19-7	= 3310 mg/kg (Rat)	= 1060 mg/kg (Rabbit)	= 11.4 mg/L (Rat) 4 h
Peroxyacetic acid 79-21-0	= 1540 mg/kg (Rat)	= 1410 µL/kg (Rabbit)	= 476 mg/m^3 (Rat) 1 h
Water 7732-18-5	> 90 mL/kg (Rat)	-	-
Hydrogen peroxide 7722-84-1	= 376 mg/kg (Rat)	= 9200 mg/kg (Rabbit)	= 2000 mg/m^3 (Rat) 4 h
1-Hydroxyethane-1, 1-diphosphonic acid 2809-21-4	= 3130 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	-
Sulfuric acid 7664-93-9	= 2140 mg/kg (Rat)	-	85 - 103 mg/m^3 (Rat) 1 h

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

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.
Germ cell mutagenicity No information available.
Carcinogenicity Based on available data, the classification criteria are not met.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Hydrogen peroxide 7722-84-1	A3	Group 3	-	-

ACGIH (American Conference of Governmental Industrial Hygienists)
A3 - Animal Carcinogen
IARC (International Agency for Research on Cancer)
Group 3 - "not classifiable as human carcinogens"

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

Acute toxicity

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

ATEmix (oral) 2,270.00
ATEmix (dermal) 1,561.00
ATEmix (inhalation-dust/mist) 5.00

Unknown acute toxicity 79 % of the mixture consists of ingredient(s) of unknown toxicity
0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
79 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
79 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
1 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

12. ECOLOGICAL INFORMATION

Ecotoxicity The environmental impact of this product has not been fully investigated.

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Acetic acid 64-19-7	-	75: 96 h Lepomis macrochirus mg/L LC50 static 79: 96 h Pimephales promelas mg/L LC50 static	65: 48 h Daphnia magna mg/L EC50 Static 47: 24 h Daphnia magna mg/L EC50
Hydrogen peroxide 7722-84-1	2.5: 72 h Chlorella vulgaris mg/L EC50	16.4: 96 h Pimephales promelas mg/L LC50 10.0-32.0: 96 h Oncorhynchus mykiss mg/L LC50 static 18-56: 96 h Lepomis macrochirus mg/L LC50 static	7.7: 24 h Daphnia magna mg/L EC50 18-32: 48 h Daphnia magna mg/L EC50 Static
1-Hydroxyethane-1, 1-diphosphonic acid 2809-21-4	-	868: 96 h Lepomis macrochirus mg/L LC50 static 360: 96 h Oncorhynchus mykiss mg/L LC50 static	527: 48 h Daphnia magna mg/L EC50
Sulfuric acid 7664-93-9	-	500: 96 h Brachydanio rerio mg/L LC50 static	29: 24 h Daphnia magna mg/L EC50

Persistence and degradability Not expected to persist.
Bioaccumulation Not expected to bioaccumulate.

Chemical Name	Partition coefficient
Acetic acid - 64-19-7	-0.31
1-Hydroxyethane-1, 1-diphosphonic acid - 2809-21-4	3.49

Mobility Soluble in water.
Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging Empty containers must be triple rinsed prior to disposal. Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

TDG

UN/ID No. 3109
Proper shipping name Organic peroxide, type F liquid (Peroxyacetic Acid)
Hazard Class 5.2
Subsidiary class 8
Packing Group II

15. REGULATORY INFORMATION

Regulatory information

International Regulations

Ozone-depleting substances (ODS)	Not applicable
Persistent Organic Pollutants	Not applicable
The Rotterdam Convention	Not applicable

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

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

Prepared By	Technical Department.
Issue Date	29-Jul-2019
Revision Date	27-Feb-2023
Version	1
Revision Note	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