

Revision Date 16-Feb-2021

Version 4

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

Product identifier

Product Name KC-610

Other means of identification

Product Code 20333

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

Manufacturer Address

PSSI Chemical Innovations
3729 Peddle Hollow Road
Kieler, WI 53812

Emergency telephone number

Company Phone Number 888-671-5366

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)

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Oxidizing liquids	Category 3

Label elements

Emergency Overview

Danger

Hazard statements

Causes severe skin burns and eye damage
May intensify fire; oxidizer



Appearance Aqueous solution

Physical state Liquid

Odor Strong vinegar

Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray
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/Store away from clothing/combustible materials
Take any precaution to avoid mixing with combustibles.

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician
Specific treatment (see Section 4 on SDS)
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/physician
IF ON SKIN (or hair): 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. Immediately call a POISON CENTER or doctor/physician
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting
In case of fire: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not Applicable

Other Information

- May be harmful if swallowed
- Toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	weight-%
Water	7732-18-5	56-65
Hydrogen peroxide	7722-84-1	25-28
Acetic acid	64-19-7	5-10
Peroxyacetic acid	79-21-0	5-6

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

4. FIRST AID MEASURES

First aid measures

General advice

QUESTIONS? 1-209-581-9576 Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

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. Call a poison control center or doctor for treatment advice.

Skin contact

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Inhalation

Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.

Ingestion

Call a poison control center or doctor for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

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

Probable mucosal damage may contraindicate the use of gastric lavage.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Water. Carbon dioxide (CO2). Foam.

Unsuitable extinguishing media

Chemical type extinguishers are not effective with peracetic acid or hydrogen peroxide, which are ingredients in this product.

Specific hazards arising from the chemical

No information available.

Hazardous combustion products

Oxygen that supports combustion and acetic acid.

Explosion data

Sensitivity to Mechanical Impact

None.

Sensitivity to Static Discharge

None.

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. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.

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.

Methods for cleaning up Always approach spills from upwind. Small spills may be flushed to an approved sewer line with generous amounts of water. For larger spills: dike well ahead of spill with non-reactive material such as sand. Spill may be neutralized with soda ash (sodium carbonate) broadcasted on surface. Use 1 to 1.5 lb. of soda ash for each gallon of spilled material. The resultant neutralized product will become carbon dioxide and water. Flush material with water and collect for disposal into plastic container. A flush to sewer may be allowed if approved by local authority. Dispose of in accordance with federal, state, or local laws. Combustible materials should be removed and/or rinsed with water to ensure all residual hydrogen peroxide is removed to the extent possible.

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. Use only in well-ventilated areas. Avoid breathing vapors or mists. Wash thoroughly after handling. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Do not store near reducing agents, fuels or other non-compatible materials. Store in a dry, cool, well-ventilated area. For quality purposes, avoid temperatures above 86°F. Do not store in direct sunlight, or near sources of ignition or heat. Do not double stack. Use first in, first out storage system. Containers must be vented. Expected shelf life – 1 year.

Incompatible materials Dirt. Alkali. Reducing agent. Oxidizers. Organics. Iron. Zinc. Yellow metals. May ignite combustibles (wood, paper, oil, clothing, etc.).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Hydrogen peroxide 7722-84-1	TWA: 1 ppm	TWA: 1 ppm TWA: 1.4 mg/m ³	IDLH: 75 ppm TWA: 1 ppm TWA: 1.4 mg/m ³
Acetic acid 64-19-7	STEL: 15 ppm TWA: 10 ppm	TWA: 10 ppm TWA: 25 mg/m ³	IDLH: 50 ppm TWA: 10 ppm TWA: 25 mg/m ³ STEL: 15 ppm, 37 mg/m ³
Peroxyacetic acid 79-21-0	STEL: 0.4 ppm inhalable fraction and vapor	-	-

Appropriate engineering controls

Engineering Controls Showers, eyewash stations, ventilation system.

Individual protection measures, such as personal protective equipment

- Eye/face protection** Splash proof chemical goggles and face shield.
- Skin and body protection** Wear protective Neoprene™ gloves or rubber gloves. Fire or flame resistant clothing is recommended. Rubber boots recommended.
- Respiratory protection** When handling concentrated product, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations Wash face, hands and any exposed skin thoroughly after handling. Wash contaminated clothing and shoes before reuse. Do not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	Odor	Strong vinegar
Appearance	Aqueous solution	Odor threshold	No information available
Color	Clear, Colorless	Remarks • Method	
Property	Values		
pH	1		±1 @ 21°C (10% solution)
Melting point/freezing point	-26 °C / -15 °F		
Boiling point / boiling range	99 °C / 210 °F		
Flash point	> 93.3 °C / > 200 °F		Closed cup
Evaporation rate	< 1		
Flammability (solid, gas)	No information available		
Flammability Limit in Air			
Upper flammability limit:	No information available		
Lower flammability limit:	No information available		
Vapor pressure	22		mm Hg @25°C
Vapor density	No information available		
Specific Gravity	1.12 g/cc		
Water solubility	Soluble in water		
Solubility in other solvents	No information available		

Partition coefficient	No information available
Autoignition temperature	270 °C / 518 °F
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 (%)	5-10%

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Product is shelf-stable for up to 1 year when stored in a closed container at room temperature and not in direct sunlight. Avoid open flames, elevated temperatures. Temperatures above 86°F will degrade product, accelerate decomposition and reduce shelf life.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight.

Incompatible materials

Dirt. Alkali. Reducing agent. Oxidizers. Organics. Iron. Zinc. Yellow metals. May ignite combustibles (wood, paper, oil, clothing, etc.).

Hazardous Decomposition Products

Oxygen that supports combustion and 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	Risk of serious damage to eyes. Corrosive to the eyes and may cause severe damage including blindness.
Skin Contact	Corrosive. Contact causes severe skin irritation and possible burns.
Ingestion	Harmful if swallowed. Can burn mouth, throat, and stomach. Ingestion causes burns of the upper digestive and respiratory tracts.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrogen peroxide 7722-84-1	= 1518 mg/kg (Rat)	= 2000 mg/kg (Rabbit) = 4060 mg/kg (Rat)	= 2 g/m ³ (Rat) 4 h
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)	-

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.

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 - Product Information

Unknown Acute Toxicity 0% 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	4,293.00 mg/kg
Dermal LD50	9,101.00 mg/kg
Mist	6.00 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

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

Chemical Name	Algae/aquatic plants	Fish	Crustacea
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	18 - 32: 48 h Daphnia magna mg/L EC50 Static 7.7: 24 h Daphnia magna mg/L EC50
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

Persistence and degradability

No information available.

Bioaccumulation

Chemical Name	Partition coefficient
Acetic acid - 64-19-7	-0.31

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			
Hydrogen peroxide - 7722-84-1	Toxic	Corrosive	Ignitable	Reactive
Acetic acid - 64-19-7	Toxic	Corrosive	Ignitable	
Peroxyacetic acid - 79-21-0	Toxic	Corrosive	Ignitable	Reactive

14. TRANSPORT INFORMATION

DOT

UNID No. 3098
Proper shipping name Oxidizing liquid, corrosive, n.o.s. (contains hydrogen peroxide and peroxyacetic acid mixture, stabilized)
Hazard Class 5.1
Subsidiary class 8
Packing Group II
Emergency Response Guide Number 140

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 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 %
Peroxyacetic acid - 79-21-0	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 contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Acetic acid 64-19-7	5000 lb	-	-	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Hydrogen peroxide 7722-84-1	-	1000 lb	-
Acetic acid 64-19-7	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Peroxyacetic acid 79-21-0	-	500 lb	-

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
Hydrogen peroxide 7722-84-1	X	X	X
Acetic acid 64-19-7	X	X	X
Peroxyacetic acid 79-21-0	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number 63838-1-63679

16. OTHER INFORMATION

NFPA	Health hazards 3	Flammability 1	Instability 1	Physical and Chemical Properties Oxidizer, Corrosive Personal protection H (splash goggles, gloves, synthetic apron, vapor respirator)
HMIS	Health hazards 3	Flammability 1	Physical hazards 1	

Prepared By Technical Department
 Issue Date 09-Apr-2014
 Revision Date 15-Feb-2021
 Version 4

Revision Note

SDS Section(s) updated: 9

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