

SECTION 1: Identification**1.1. Identification**

Product name : KC-610
Product code : 20333
EPA Registration # : 63838-1-63679

1.2. Recommended use

Use of the substance/mixture : Antimicrobial Solution
Uses advised against : This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). These requirements differ from the classification criteria and hazard information required for safety data sheets of non-pesticide chemicals. Please see Section 15 for FIFRA labeling information.

1.3. Supplier

Safe Foods Chemical Innovations
1501 East 8th Street
North Little Rock, AR, 72114
T 501-758-8500 - F 501-663-8952

1.4. Emergency telephone number

Emergency number : Chemtrec 1-800-424-9300

SECTION 2: Hazard(s) identification**2.1. Classification of the substance or mixture****GHS US classification**

Skin Corrosion - Category 1
Serious Eye Damage - Category 1
Oxidizing Liquids - Category 2
Corrosive to Metals - Category 1
Organic Peroxides – Type F
Acute Toxicity - Oral Category 4
Acute Toxicity - Dermal Category 5
Hazardous to the Aquatic Environment, Acute Toxicity Category 2

2.2. GHS Label elements, including precautionary statements**GHS US labeling**

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger
Hazard statements (GHS US) : Causes severe skin burns and eye damage
May intensify fire; oxidizer
May be corrosive to metals
Harmful if swallowed

Precautionary statements (GHS US)

May be harmful in contact with skin
 Toxic to aquatic life
 : Wear protective gloves/protective clothing/eye protection/face protection.
 Wash hands thoroughly after handling
 Keep away from heat/sparks/open flames/hot surfaces - No smoking.
 Keep/Store away from clothing/combustible materials.
 Do not eat, drink or smoke when using this product.
 Keep only in original container.
 Take any precaution to avoid mixing with combustibles.
 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.
 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 INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
 For specific treatment see Section 4 First Aid.
 Wash contaminated clothing before reuse.
 In case of fire: Use water for extinction.
 Absorb spillage to prevent material damage.
 Store locked up.
 Store in a corrosive resistant container with a resistant inner liner.
 Dispose of contents/container in accordance with local regulations.

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3: Composition/Information on ingredients

| Name | Product identifier | % |
|-------------------|--------------------|-----------|
| Hydrogen peroxide | CAS-No.: 7722-84-1 | 25 – 27.4 |
| Acetic acid | CAS-No.: 64-19-7 | 3 – 8 |
| Peracetic acid | CAS-No.: 79-21-0 | 5 – 5.9 |

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Have the product container, label, or SDS with you when calling a poison control center or doctor, or going for treatment. Causes severe skin burns and eye damage, burning of the mouth, throat, and Esophagus.

First-aid measures after inhalation : Remove source of exposure or move person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by the POISON CENTER/doctor. 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."

First-aid measures after skin contact : Take off immediately contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Rinse skin with lukewarm, gently flowing water/shower with a flushing duration of 30 minutes. Immediately call POISON CENTER/doctor. Wash contaminated clothing before re-use.

First-aid measures after eye contact : Remove source of exposure or move person to fresh air. 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. Ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. If vomiting occurs naturally, lie on your side, in the recovery position.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. If vomiting occurs naturally, lie on your side, in the recovery position.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Use water spray, powder, foam, carbon dioxide.

5.2. Specific hazards arising from the chemical

Fire hazard : Non flammable.

Hazardous decomposition products in case of fire : Non combustible. May give off irritating or toxic fumes (or gases) in a fire. May cause fire and explosions when in contact with incompatible materials.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

General measures : Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

Methods and material for containment and cleaning up

Methods for cleaning up : Collect spills in plastic containers only. Prevent from entering sewers, waterways, or low areas. 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.

Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wear at least chemical resistant gloves and eye protection, face shield, and chemical resistant garments when handling, moving or using this product. Do not contaminate water, food, or feed by storage or disposal.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a cool, dry, well ventilated place away from direct sunlight. Keep container closed when not in use.

KC-610

Safety Data Sheet

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Name | USA - ACGIH - TLV | USA - OSHA - Permissible Exposure Limit (PEL) | TWA |
|-------------------------------|----------------------------|---|--------|
| Hydrogen peroxide (7722-84-1) | TWA: 1 ppm | 1 ppm/N/A (CalOSHA) | 1 ppm |
| Acetic acid (64-19-7) | TWA: 10ppm STEL: 15 ppm | 15 ppm/40 ppm (CalOSHA) | 10 ppm |
| Peracetic acid (79-21-0) | STEL: 0.4 ppm | - | - |

8.2. Appropriate engineering controls

Appropriate engineering controls : Forced air, local exhaust, or open air is adequate.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

| | |
|------------------------------|--|
| Hand protection: | Wear chemical-resistant, impervious gloves. |
| Eye protection: | Wear chemical goggles; also wear a face shield if splashing hazard exists. |
| Skin and body protection: | Wear chemical resistant gloves and chemical resistant garments when handling, wash garments before re-use. |
| Respiratory protection: | In case of confined spaces or high levels encountered in the air, wear self contained breathing apparatus. |
| Hygiene Measures: | Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use. Handle in accordance with good industry hygiene and safety practice. |
| Other Protective Equipment: | Eye wash facility and emergency shower should be in close proximity. |
| Handling of Diluted Product: | Ventilation and engineering measures: No special equipment needed. Respiratory Protection: No respiratory personal protective equipment (PPE) required. Skin Protection: No personal protective equipment (PPE) required. Eye/Face Protection: No personal protective equipment (PPE) required. Other Protective Equipment: No special protective equipment required. General Hygiene Conditions: Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Colorless Liquid
Color : Colorless
Odor : Vinegar odor
Odor threshold : No data available
pH : 1.5 – 1.9 (1:10)
Melting point : No data available
Freezing point : No data available
Boiling point : No data available

KC-610

Safety Data Sheet

| | |
|---|---------------------------|
| Flash point | : >200° F / >93 ° C |
| Relative evaporation rate (butyl acetate=1) | : No data available |
| Flammability (solid, gas) | : Not applicable. |
| Vapor pressure | : 22 mm Hg |
| Relative vapor density at 20°C | : No data available |
| Relative density | : No data available |
| Solubility | : No data available |
| Partition coefficient n-octanol/water (Log Pow) | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : 5-15 cSt at 20°C / 68°F |
| Explosion limits | : No data available |
| Explosive properties | : No data available |
| Oxidizing properties | : No data available |

9.2. Other information

VOC content : 0 %

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactive with bases, metals, reducing agents and combustible materials

10.2. Chemical stability

Stable for up to 1 year when stored under normal conditions.

10.3. Possibility of hazardous reactions

May react with incompatible materials

10.4. Conditions to avoid

Incompatible materials and high temperatures

10.6. Hazardous decomposition products

Oxygen which supports combustion.

SECTION 11: Toxicological information

Information on likely routes of exposure:

Routes of entry - inhalation: YES

Routes of entry - skin & eye: YES

Routes of entry - ingestion: YES

Routes of entry - skin absorption: NO

Potential Health Effects:

Signs and symptoms of short term (acute) exposure:

Inhalation: Inhalation of the mist may produce severe irritation of respiratory tract, characterized by coughing, choking, shortness of breath, headaches, dizziness, nausea, weakness and/or drowsiness.

Ingestion: Corrosive! Swallowing causes severe burns of mouth, throat, and stomach. Severe scarring of tissue, corrosion, permanent tissue destruction

and death may result. Symptoms may include severe pain, nausea, vomiting, diarrhea, shock, hemorrhaging and/or fall in blood pressure. Damage may appear days after exposure.

Skin: Corrosive! Contact with skin causes irritation or severe burns and scarring with greater exposures.

Eye: Corrosive! Causes irritation of eyes, and with greater exposures it can cause burns that may result in permanent impairment of vision, even blindness.

Potential Chronic Health Effects:

KC-610

Safety Data Sheet

Mutagenicity: No known mutagenic effects.

Carcinogenicity: No components are listed as carcinogens by ACGIH, IARC, OSHA, or NTP.

Reproductive effects: No known reproductive effects.

Sensitization to material: No expected to cause sensitization.

Specific target organ effects: No information available.

Medical conditions aggravated by overexposure: No information available.

Toxicological data: The calculated ATE values for this mixture are:

ATE oral = 668 mg/kg

ATE dermal = 4808 mg/kg

ATE inhalation = >20 mg/L or >20,000 ppm

SECTION 12: Ecological information

Ecotoxicity: May be harmful to aquatic life.

Persistence and degradability: Not expected to persist. Expected to readily biodegrade.

Bioaccumulation potential: Not expected to bio accumulate.

Mobility in soil: No information available.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste handling and disposal : Do not contaminate water, food, or feed by storage and/or disposal. When handling refer to protective measures listed in sections 7 and 8. Empty residue from containers, rinse container well. Dispose of in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules. If product becomes a waste, it does meet the criteria of a hazardous waste as defined by the US EPA, because of: Corrosivity D002.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

| DOT |
|--|
| 14.1. UN number |
| 3109 |
| 14.2. Proper Shipping Name |
| Organic Peroxide Type F, Liquid (Peracetic Acid, Type F, Stabilized) |
| 14.3. Transport hazard class(es) |
| 5.2 (8) |
| 14.4. Packing group |
| II |
| 14.5. Environmental hazards |
| Dangerous for the environment: No |

SECTION 15: Regulatory information

FIFRA Classification/Typical Hazard Labeling, as outlined in EPA Label Review Manual

Hazard Data

Signal Word DANGER

Acute Toxicity, oral Category III: Harmful if swallowed

Acute Toxicity, dermal Category III: Harmful if absorbed through skin

KC-610

Safety Data Sheet

Acute Toxicity, inhalation Category II: May be fatal if inhaled
Skin irritation/corrosion Category I: Corrosive. Causes skin burns
Serious eye damage Category I: Corrosive, Causes irreversible eye damage
Sensitization Not Classified (NC)
Environmental (aquatic) toxicity This pesticide is toxic to fish and other aquatic organisms.

US Federal Information:

TSCA information: All components are listed on the TSCA inventory.

US CERCLA Reportable quantity (Hazardous substance RQ): Acetic acid has a RQ of approximately 70000 lbs. of as is chemical.

US EPCRA Reportable quantity (Extremely hazardous substance RQ): Peracetic acid has a RQ of approximately 8900 lbs. of as is chemical.

Clean Air Act Section 112(r) Threshold Quantity (TQ): Peracetic acid has a TQ of approximately 178000 lbs. of as is chemical.

SARA Title III Hazard Categories: Reactivity Hazard, Acute Health Hazard

California Prop. 65: This product does not contain any chemicals listed.

International Information: WHMIS: Class C: Oxidizing material. Class E: Corrosive material

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations. SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Version : 2.0
Issue date : 04/09/2014
Revision date : 07/15/2025
Supersedes : 01/23/2023

NFPA health hazard : 3
NFPA fire hazard : 1
NFPA reactivity : 1
NFPA Special Hazards : OX, COR

Hazard Rating
Health : 3
Flammability : 1
Physical : 1
Personal protection : C

Safety Data Sheet (SDS), USA - SFCI

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.