

SECTION 1: Identification

1.1. Identification

Product name : KC-681 Acid Sanitizer
Product code : 20681
EPA Registration Number : 1839-51-63679

1.2. Recommended use

Use of the substance/mixture : Acid sanitizer and disinfectant
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

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

Corrosive to metals, Category 1	May be corrosive to metals.
Acute toxicity (oral), Category 4	Harmful if swallowed.
Acute toxicity (inhalation), Category 2	Fatal if inhaled.
Skin corrosion/irritation, Category 1	Causes severe skin burns and eye damage.
Serious eye damage/eye irritation, Category 1	Causes serious eye damage.
Specific target organ toxicity — Single exposure, Category 2	May cause damage to organs.
Hazardous to the aquatic environment — Acute Hazard, Category 1	Very toxic to aquatic life.
Hazardous to the aquatic environment — Chronic Hazard, Category 2	Toxic to aquatic life with long lasting effects.

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2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

May be corrosive to metals.
Harmful if swallowed.
Fatal if inhaled.
Causes severe skin burns and eye damage.
Causes serious eye damage.
May cause damage to organs.
Very toxic to aquatic life.
Toxic to aquatic life with long lasting effects.

Precautionary statements (GHS US) :

Do not breathe mist or vapor.
Use only outdoors or in a well-ventilated area.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/face protection. Wear respiratory protection.
Keep only in original packaging.
Collect spillage.
If swallowed: Rinse mouth. Do NOT induce vomiting.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
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/doctor. Specific treatment is urgent (see Section 4 on SDS).
Wash contaminated clothing before reuse.
Absorb spillage to prevent material damage.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Store in a corrosive resistant container with a resistant inner liner.
Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3. Other hazards which do not result in classification

No additional information available

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SECTION 3: Composition/Information on ingredients

Name	Product identifier	% w/w
Phosphoric acid	CAS-No.: 7664-38-2	27 - < 31
Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chloride	CAS-No.: 85409-23-0	5 - < 10
Alkyl dimethyl benzyl ammonium chloride (C12-18)	CAS-No.: 68391-01-5	5 - < 10

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures general : Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
- First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician or poison control center immediately.
- First-aid measures after skin contact : Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.
- First-aid measures after eye contact : Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.
- First-aid measures after ingestion : Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting.

4.2. Most important symptoms and effects (acute and delayed)

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

4.3. Immediate medical attention and special treatment, if necessary

If the product is ingested, probable mucosal damage may contraindicate the use of gastric lavage. Treat the affected person appropriately.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).
- Unsuitable extinguishing media : Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Specific hazards arising from the chemical

- General fire hazards : No unusual fire or explosion hazards noted.

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Hazardous decomposition products in case of fire : During fire, gases hazardous to health may be formed. Phosphorus Oxides (P_xO_y).

5.3. Special protective equipment and precautions for fire-fighters

Fire fighting equipment/instructions : Move containers from fire area if you can do so without risk.

Protection during firefighting : Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Specific methods : Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

6.2. Environmental precautions

Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Large Spills : Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. Following product recovery, flush area with water.

Small Spills : Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

6.4. Reference to other sections

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not breathe mist or vapor. Do not get this material in contact with eyes. Do not get this material in contact with skin. Do not taste or swallow. Do not get this material on clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Do not empty into drains.

Hygiene measures : Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling.

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7.2. Conditions for safe storage, including any incompatibilities

Storage Measures : DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE OR DISPOSAL.
Pesticide Storage : Store in a dry place no lower in temperature than 50°F or higher than 120°F. Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Name	USA - ACGIH - Occupational Exposure Limits	USA - OSHA - Occupational Exposure Limits	USA - NIOSH - Occupational Exposure Limits
Phosphoric acid (7664-38-2)	STEL: 3 mg/m ³ TWA: 1 mg/m ³	PEL: 1 mg/m ³	STEL: 3 mg/m ³ TWA: 1 mg/m ³

No biological exposure limits noted for the ingredient(s).

8.2. Appropriate engineering controls

Appropriate engineering controls : Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

8.3. Individual protection measures/Personal protective equipment

Hand protection:	Wear appropriate chemical resistant gloves.
Eye/face protection:	Wear safety glasses with side shields (or goggles) and a face shield.
Skin and body protection:	Wear appropriate chemical resistant clothing.
Respiratory protection:	In case of insufficient ventilation, wear suitable respiratory equipment.
Thermal hazards:	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations:	When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Aqueous solution
Color : Clear, Red
Odor : Mild

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Odor threshold	: No data available
pH	: 0.5 – 0.7
Melting point	: Not available
Freezing point	: < 20 °F (< -7 °C)
Boiling point	: > 212 °F (> 100 °C)
Flash point	: > 201.0 °F (> 93.9 °C) Pensky-Martens Closed Cup
Relative evaporation rate (butyl acetate=1)	: Not available
Flammability (solid, gas)	: Not available
Vapor pressure	: Not available
Relative vapor density at 20°C	: Not available
Relative density	: Not available
Density	: 9.76 lb/gal
Specific gravity	: 1.17 g/cc
Solubility	: Completely soluble in water
Partition coefficient n-octanol/water (Log Pow)	: Not available
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
Viscosity, kinematic	: Not available
Viscosity, dynamic	: Not available
Explosion limits	: Not available
Explosive properties	: Not available
Oxidizing properties	: Not available

9.2. Other information

VOC content : 1.20% (0.117 lbs/gal)

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Material is stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Avoid temperatures exceeding the flash point. Reacts violently with strong acids. This product may react with oxidizing agents. Do not mix with other chemicals. Contact with incompatible materials.

10.5. Incompatible materials

Acids. Oxidizing agents.

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10.6. Hazardous decomposition products

No hazardous decomposition products are known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Harmful if swallowed. Fatal if inhaled.
Skin corrosion/irritation	: Causes severe skin burns and eye damage.
Serious eye damage/eye irritation	: Causes serious eye damage.
Respiratory sensitization	: Not available.
Skin sensitization	: This product is not expected to cause skin sensitization
Germ cell mutagenicity	: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	: This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
Reproductive toxicity	: This product is not expected to cause reproductive or developmental effects.
STOT-single exposure	: May cause damage to organs.
STOT-repeated exposure	: Not applicable.
Aspiration hazard	: Not likely, due to the form of the product.

Information on likely routes of exposure

Inhalation	: Not likely, due to the form of the product.
Skin contact	: Causes severe skin burns.
Eye contact	: Causes serious eye damage.
Ingestion	: Causes digestive tract burns. Harmful if swallowed.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Very toxic to aquatic life. Toxic to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected.
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12.2. Persistence and degradability

No data is available on the degradability of this product.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

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SECTION 13: Disposal considerations

13.1. Disposal methods

- Pesticide Disposal : Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.
- Container Disposal : Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container promptly after emptying.
- (For containers 5 gallons or less):
Triple rinse as follows: Fill container 1/4 full with water and recap. Agitate vigorously. Drain for 10 seconds after the flow begins to drip. Follow Pesticide Disposal instructions for rinsate disposal. Repeat procedure two more times. Then offer for recycling or reconditioning. If not available, puncture and dispose in a sanitary landfill.
- (For containers greater than 5 gallons):
Triple rinse as follows: Fill container 1/4 full with water. Tip container on its side and roll it back and forth, ensuring at least one complete revolution for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Follow Pesticide Disposal instructions for rinsate disposal. Repeat procedure two more times. Then offer for recycling or reconditioning. If not available, puncture and dispose in a sanitary landfill.
- Local disposal regulations : Dispose in accordance with all applicable regulations.
- Hazardous waste code : The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
- Waste from residues / unused products : Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see above).
- Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

DOT	IMDG	IATA
14.1. UN number		
UN1760	UN1760	UN1760

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DOT	IMDG	IATA
14.2. Proper Shipping Name		
Corrosive liquid, n.o.s. (Contains Phosphoric Acid; Quaternary Ammonium Chloride)	Corrosive liquid, n.o.s. (Contains Phosphoric Acid; Quaternary Ammonium Chloride)	Corrosive liquid, n.o.s. (Contains Phosphoric Acid; Quaternary Ammonium Chloride)
14.3. Transport hazard class(es)		
8	8	8
		
14.4. Packing group		
III	III	III
14.5. Environmental hazards		
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No
Read safety instructions, SDS and emergency procedures before handling.		

SECTION 15: Regulatory information

15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
Phosphoric acid	7664-38-2	Present	Active	
Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chloride	85409-23-0	Not present	-	
Alkyl dimethyl benzyl ammonium chloride (C12-18)	68391-01-5	Present	Active	

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

Phosphoric acid (7664-38-2)

CERCLA RQ 5000 lb

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FIFRA Labelling	
EPA Registration Number	1839-51-63679
This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:	
Signal word	DANGER
Hazard statement	Corrosive. Causes irreversible eye damage and skin burns. May be fatal if absorbed through skin. Harmful if swallowed. This pesticide is toxic to fish and aquatic invertebrates.

15.2. International regulations

Name	Inventory
Phosphoric acid (7664-38-2)	Listed on the Canadian DSL (Domestic Substances List) Listed on INSQ (Mexican National Inventory of Chemical Substances)
Alkyl dimethyl benzyl ammonium chloride (C12-18) (68391-01-5)	Listed on the Canadian DSL (Domestic Substances List) Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations

California Proposition 65 -

WARNING: This product may contain a chemical known to the State of California to cause cancer and birth defects or other reproductive harm: ethylene oxide (75-21-8).

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm: ethylene glycol (107-21-1).

WARNING: This product contains a chemical known to the State of California to cause cancer: Acetaldehyde (CAS 75-07-0).

State Regulation	Listing
New Jersey RTK - Substances: Listed substance	Phosphoric acid (CAS 7664-38-2)
Pennsylvania RTK - Hazardous Substances: Listed substance	Phosphoric acid (CAS 7664-38-2)
California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)	Not listed.
California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))	Phosphoric acid (CAS 7664-38-2)
Massachusetts RTK - Substance List	Phosphoric acid (CAS 7664-38-2)
Pennsylvania Worker and Community Right-to-Know Law	Phosphoric acid (CAS 7664-38-2)
Rhode Island RTK	Phosphoric acid (CAS 7664-38-2)

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SECTION 16: Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Version : 2.0

Issue date : 2/19/2021

Revision date : 2/11/2026

Supersedes : 1/27/2023

NFPA health hazard : 3 - Materials that, under emergency conditions, can cause serious or permanent injury.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.

Hazard Rating

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection : C - Safety glasses, gloves, synthetic apron

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.