

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

Product identifier

Product Name KC-681 Acid Sanitizer

Other means of identification

Product Code 20681

Recommended use of the chemical and restrictions on use

Recommended Use Acid sanitizer and disinfectant

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 USA

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)

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

Label elements

Emergency Overview

DANGER

Hazard statements

Harmful if swallowed
Toxic if inhaled
Causes severe skin burns and eye damage



Physical state Liquid **Color** Clear, Red **Odor** Mild

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Do not breathe dusts or mists
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Specific treatment (see Section 4 on SDS)
Immediately call a POISON CENTER or doctor
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
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. Wash contaminated clothing before reuse
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Do NOT induce vomiting

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed. 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	40-60
Phosphoric acid	7664-38-2	20-40
Alkyl dimethyl benzyl ammonium chloride (C12-18)	68391-01-5	1-6
Alky dimethyl ethyl benzyl ammonium chloride (C12-14)	85409-23-0	1-6
Alcohol (C12-15 Ln. Saturated) Ethoxylate	68131-39-5	1-6
Ethyl Alcohol	64-17-5	< 2

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

4. FIRST AID MEASURES

First aid measures

General advice

Have the product container, label, or SDS 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. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Call a poison control center or doctor for treatment advice.

Ingestion

Call a poison control center or doctor immediately 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

Dry chemical. Water spray (fog). Carbon dioxide (CO2). Foam.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed. Phosphorous Oxides (PxOy).

Hazardous combustion products

Phosphorus oxides. Carbon oxides.

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. Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.

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. Avoid breathing vapors or mists.

For emergency responders

Isolate area. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak.

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. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

Methods for cleaning up Collect spillage. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal. Following product recovery, flush area with water.

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 Store locked up. Do not contaminate water, food or feed. Keep container tightly closed in a dry and well-ventilated place. Keep at temperatures between 40°F and 120°F.

Incompatible materials Strong acids. Strong oxidizing agents. Strong bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Phosphoric acid 7664-38-2	STEL: 3 mg/m ³ TWA: 1 mg/m ³	TWA: 1 mg/m ³ (vacated) STEL: 3 mg/m ³	IDLH: 1000 mg/m ³ TWA: 1 mg/m ³ STEL: 3 mg/m ³

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 Chemical resistant gloves, suit and boots.
Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

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	Mild
Appearance	Aqueous solution	Odor threshold	No information available
Color	Clear, Red	Remarks • Method	
Property	Values		
pH	1.0		±0.5 @ 21°C
Melting point / freezing point	< -7 °C / < 20 °F		
Boiling point / boiling range	> 100 °C / > 212 °F		
Flash point	> 93.9 °C / > 201 °F		Pensky-Martens Closed Cup (PMCC)
Evaporation rate	No information available		
Flammability (solid, gas)	No information available		
Flammability Limit in Air			
Upper flammability limit:	No information available		
Lower flammability limit:	No information available		
Vapor pressure	No information available		
Vapor density	No information available		
Specific Gravity	1.17 g/cc		
Water solubility	Soluble in water		
Solubility in other solvents	No information available		
Partition coefficient	No information available		
Autoignition temperature	No information available		
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 (%)	1.20% (0.117 lbs/gal)		

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Avoid temperatures exceeding the flash point. Do NOT mix with other chemicals. Incompatible materials.

Incompatible materials

Strong acids. Strong oxidizing agents. Strong bases.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	None under normal use conditions. Inhalation of vapors in high concentrations may be irritating to eyes, nose, throat and respiratory system.
Eye contact	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. May cause burning pain in mouth, throat, abdomen, severe swelling of the larynx, skeletal muscle paralysis affecting the ability to breathe, circulatory shock, convulsions when swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Phosphoric acid 7664-38-2	= 1530 mg/kg (Rat)	= 2740 mg/kg (Rabbit)	> 850 mg/m ³ (Rat) 1 h
Alkyl dimethyl benzyl ammonium chloride (C12-18) 68391-01-5	= 850 mg/kg (Rat)	= 2300 mg/kg (Rabbit)	-
Alky dimethyl ethyl benzyl ammonium chloride (C12-14) 85409-23-0	= 430 mg/kg	= 3560 mg/kg	-
Ethyl Alcohol 64-17-5	= 7060 mg/kg (Rat)	-	= 124.7 mg/L (Rat) 4 h

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	Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage.
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	1.425 % 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	2,681.80 mg/kg
Dermal LD50	6,883.60 mg/kg
Mist	0.709 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	Fish	Crustacea
Phosphoric acid 7664-38-2	3 - 3.5: 96 h Gambusia affinis mg/L LC50	4.6: 12 h Daphnia magna mg/L EC50
Ethyl Alcohol 64-17-5	12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through	9268 - 14221: 48 h Daphnia magna mg/L LC50 10800: 24 h Daphnia magna mg/L EC50 2: 48 h Daphnia magna mg/L EC50 Static

Persistence and degradability

No information available.

Bioaccumulation

Chemical Name	Partition coefficient
Ethyl Alcohol - 64-17-5	-0.32

Mobility

Soluble in water.

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Refer to label for Disposal Instructions. 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.

14. TRANSPORT INFORMATION

DOT

UN/ID No. 1760

Proper shipping name Corrosive liquids, n.o.s. (contains phosphoric acid and quaternary ammonium chloride)

Hazard Class 8

Packing Group III

Emergency Response Guide Number 154

15. REGULATORY INFORMATION

International Inventories

TSCA Complies

DSL/NDSL Complies

EINECS/ELINCS No information available

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 does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard Yes

Chronic Health Hazard No

Fire hazard No

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
Phosphoric acid 7664-38-2	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)
Phosphoric acid 7664-38-2	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

WARNING! "This product can expose you to chemicals which is [are] known to the State of California to cause cancer. For more information go to www.p65warnings.ca.gov." Ethylene oxide 75-21-8; Acetaldehyde 75-07-0;

WARNING! "This product can expose you to chemicals which is [are] known to the State of California to cause birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov." Ethylene glycol 107-21-1 (ingested); Ethylene oxide 75-21-8

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Phosphoric acid 7664-38-2	X	X	X
Ethyl Alcohol 64-17-5	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number 1839-51-63679

16. OTHER INFORMATION

KC-681 Acid Sanitizer

Revision Date 19-Feb-2021

<u>NFPA</u>	Health hazards 3	Flammability 0	Instability 0	Physical and Chemical Properties Corrosive, Acid
<u>HMIS</u>	Health hazards 3	Flammability 0	Physical hazards 0	Personal protection C (safety glasses, gloves, synthetic apron)
Prepared By	Technical Department			
Issue Date	19-Feb-2021			
Revision Date	19-Feb-2021			
Version	1			
Revision Note	No information available			

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