Trade name: VersaQuat®

SECTION 1: Identification

Product identifier used on the label:
Product Name: **VersaQuat®**

Other means of identification:
Product Code Number: VQUAT1Q, VQUAT4G, VQUAT6Q

Recommended use of the chemical and restrictions on use:
Recommended use: Disinfectant.
Recommended restrictions: Uses other than as recommended above

Name, U.S. address, and U.S. telephone number of the chemical manufacturer, importer, or other responsible party:

Company Name: Berkshire Corporation
Company Address: 6509 Franz Warner Parkway
Whitsett, NC 27377, USA
Company Telephone: 1-800-242-7000
Company Email: ghs@berkshire.com

Emergency phone number: CHEMTREC: 1-800-424-9300

SECTION 2: Hazard(s) identification

Classification of the chemical in accordance with paragraph (d)(1)(i) of §1910.1200:
Physical hazards
None expected

Health hazards
Serious eye irritation, category 2A

Environmental hazards
Not adopted under OSHA paragraph (d) of §1910.1200

GHS Signal word: WARNING

GHS Hazard statement(s): Causes serious eye irritation

GHS Hazard symbol(s):

GHS Precautionary statement(s):

Prevention:

- Wash face, hands and any exposed skin thoroughly after handling
- Wear eye protection/face protection.

Response:

- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention.

Storage:

- None required.

Disposal:

- None required.

Hazard(s) not otherwise classified (HNOC):
Toxic to aquatic life with long lasting effects.

Describe any hazards not otherwise classified that have been identified during the classification process:
Not applicable

SECTION 3: Composition/information on ingredients

Mixture:

Chemical name	CAS#	Concentration (weight %)
Tetrasodium EDTA	64-02-8	1-5
Alcohol Ethoxylate	68131-39-5	0.1-1
Alkyl dimethyl ethylbenzyl ammonium chloride	85409-23-0	0.1-1
Alkyl dimethyl benzyl ammonium chloride	68391-01-5	0.1-1

Note:
The exact percentage (concentration) of composition has been withheld as a trade secret.
The balance of the ingredients are not classified as hazardous or are below the concentration limit to be classified as hazardous, under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

SECTION 4: First-aid measures

Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact, and ingestion:

Inhalation: Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Oxygen should only be administered by qualified personnel. Delayed pulmonary edema may occur. Get immediate medical advice/attention.

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.

Eye contact: Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.

Ingestion: Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get immediate medical advice/attention.

Most important symptoms/effects, acute and delayed:
Causes serious eye irritation

Indication of immediate medical attention and special treatment needed, if necessary:
If any symptoms are observed, contact a physician and give them this SDS sheet.
The use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. Treat symptomatically.

SECTION 5: Fire-fighting measures

Suitable (and unsuitable) extinguishing media:
Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment
Unsuitable extinguishing media: None known

Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products):
The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion do not breathe fumes.
Hazardous combustion products may include the following substances: Carbon monoxide (CO), carbon dioxide (CO2) and nitrogen oxides may be formed during a fire.

Special protective equipment and precautions for fire-fighters:
Use water spray or fog for cooling exposed containers. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8).

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:
Avoid contact with skin, eyes or clothing. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Use personal protective equipment as required.
Wear appropriate protective equipment, as conditions warrant (see Section 8).
See Sections 2 and 7 for additional information on hazards and precautionary measures.

Methods and materials for containment and cleaning up:
Do not allow into any sewer, on the ground or into any body of water. Should not be released into the environment. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so. Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Clean contaminated surface thoroughly. Prevent product from entering drains. Dam up. Take up mechanically, placing in appropriate containers for disposal. After cleaning, flush away traces with water.

SECTION 7: Handling and storage

Precautions for safe handling:
Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation, especially in confined areas. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems.

Conditions for safe storage, including any incompatibles:
Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers.
Incompatible materials: Incompatible with strong acids and bases. Incompatible with oxidizing agents.

SECTION 8: Exposure controls/personal protection

For all ingredients or constituents listed in Section 3, the OSHA permissible exposure limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV), and any other exposure limit or range used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available.

	US OSHA PELs		US ACGIH TLVs		NIOSH OELs	
Substance	**TWA (8 hour)**	**STEL (15 min)**	**TWA (8 hour)**	**STEL (15 min)**	**IDLH**	**TWA (8hr)**
Ethanol	TWA: 1000 ppm TWA: 1900 mg/m3 (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m3	No data available	No data available	STEL: 1000 ppm	15 mg/m3	TWA: 1000 ppm TWA: 1900 mg/m3

Other Information:
Vacated limits revoked by the Court of Appeals decision in AFL-CIOv. OSHA, 965F.2d962(11th Cir., 1992).

Appropriate engineering controls:
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. Provide eyewash station. Eye wash fountain and emergency showers are recommended. Concentrations should be monitored hazardous substances in the workplace in accordance with recognized test methods. Mode, method, type and frequency of testing and measurement of harmful factors in the working environment should meet the requirements of local/regional/national laws.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Face protection shield, or tight sealing safety goggles are recommended.

Skin and hand protection: Chemical-resistant, impervious gloves (such as nitrile rubber) complying with an approved standard should be worn when handling this product. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Respiratory protection: If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. Based on the potential for exposure, select a respirator that meets the appropriate standard or certification.

General hygiene considerations: Avoid contact with skin, eyes or clothing. Wash hands before breaks and immediately after handling the product.

SECTION 9: Physical and chemical properties

Physical state:	Liquid.
Color:	Clear, colorless
Odor (includes odor threshold):	Sweet
Melting point/freezing point:	Not determined
Boiling point (or initial boiling point or boiling range):	Not determined
Flammability:	Not determined
Lower and upper explosion limit/flammability limit:	
Lower limit (%):	Not determined
Upper limit (%):	Not determined

Flash point:	> 200 ºF
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
pH:	11.0 - 12.0
Kinematic viscosity:	<100 cP @ 75°F
Solubility:	Soluble in water
Partition coefficient n-octanol/water (log value):	Not determined
Vapor pressure (includes evaporation rate):	Not determined
Density and/or relative density:	1.0068 8.4 lbs./gal
Relative vapor density:	Not determined
Particle characteristic:	Not determined
VOC Content (%):	0.02% VOC CARB COMPLIANT for product category

SECTION 10: Stability and reactivity

Reactivity:	No hazardous reactions anticipated under normal storage and handling conditions.
Chemical stability:	Stable under normal ambient and anticipated conditions of use
Possibility of hazardous reactions, including those associated with foreseeable emergencies:	Under normal conditions of storage and use, hazardous specifications.
Conditions to avoid:	Exposure to air or moisture over prolonged periods.
Incompatible materials:	Incompatible with strong acids and bases. Incompatible with oxidizing agents.

Hazardous decomposition products: Thermal decomposition can lead to release of irritating and toxic gases and vapors.

SECTION 11: Toxicological information

Information on likely routes of exposure:
Inhalation: Causes burns.
Ingestion: Causes burns.
Skin: Irritating to skin.
Eyes: Severely irritating to eyes.

Symptoms related to the physical, chemical, and toxicological characteristics:
Causes severe eye irritation. Causes skin irritation.

Delayed and immediate effects and chronic effects from short or long-term exposure: Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Avoid repeated exposure. Possible risk of irreversible effects. Ethanol has been shown to be a reproductive toxin only when consumed as an alcoholic beverage. Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage.

Numerical measures of toxicity (such as acute toxicity estimates):

Acute toxicity: Does not meet the criteria for classification.

Substance	Test Type (species)	Value
Tetrasodium EDTA	LD_{50} Oral (Rat)	1658 mg/kg
	LD_{50} Dermal (Rabbit)	None known
	LC_{50} Inhalation (Rat)	None known
Alcohol Ethoxylate	LD50 Oral (Rat)	1600 mg/kg
	LD50 Dermal (Rabbit)	2500 mg/kg
	LC50 Inhalation (Rat)	None known
Alkyl dimethyl ethylbenzyl ammonium chloride	LD50 Oral (Rat)	None known
	LD50 Dermal (Rabbit)	2300 mg/kg
	LC50 Inhalation (Rat)	None known
Alkyl dimethyl benzyl ammonium chloride	LD50 Oral (Rat)	850 mg/kg
	LD50 Dermal (Rabbit)	2300 mg/kg
	LC50 Inhalation (Rat)	None known

Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/eye irritation: Causes serious eye irritation

Respiratory sensitization: Does not meet the criteria for classification.

Skin sensitization: Does not meet the criteria for classification

Germ cell mutagenicity: Does not meet the criteria for classification**.**

Carcinogenicity: Does not meet the criteria for classification.

Reproductive toxicity: Does not meet the criteria for classification.

STOT – Single exposure: Does not meet the criteria for classification.

STOT – Repeat exposure: Does not meet the criteria for classification.

Aspiration hazard: Does not meet the criteria for classification.

Interactive effects: None known.

Whether the hazardous chemical is listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA:

Ethanol has been shown to be carcinogenic in long-term studies only when consumed as an alcoholic beverage

SECTION 12: Ecological information

Ecotoxicity (aquatic and terrestrial, where available):

Substance	Test Type	Species	Value
Tetrasodium EDTA	LC_{50}	Fish Lepomis macrochirus Fish Pimephales promelas	41 mg/L 96h 59.8 mg/L 96h
	EC_{50}	Invertebrates - Daphnia magna	610 mg/L 24h
	EC_{50}	Algae Desmodesmus subspicatus	1.01 mg/L 72h

Persistence and degradability:
Not determined

Bioaccumulative potential:
Not determined

Mobility in soil:
Not determined.

Other adverse effects (such as hazardous to the ozone layer):
None known.

SECTION 13: Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging.

Product
Follow label instructions for proper 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.

Contaminated packaging
Do not reuse container. Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse empty container with water. Then offer for

recycling or reconditioning. If not available, puncture and dispose in a sanitary landfill.

This product contains one or more substances that are listed with the State of California as a hazardous waste

SECTION 14: Transport Information

UN number:	Not applicable
UN proper shipping name:	Not regulated as dangerous for transport
Transport hazard class(es):	Not applicable
Packing group, if applicable:	Not applicable

Environmental hazards
Marine pollutant: No

Transport in bulk (according to IMO instruments)
Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident

Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises.
None known

SECTION 15: Regulatory Information

USA:

United States Federal Regulations: This SDS complies with the OSHA, 29 CFR 1910.1200. The product is classified as hazardous under OSHA.

Toxic Substances Control Act (TSCA) – All of the ingredients are listed on the U.S. EPA TSCA Inventory List.

Emergency Planning and Community Right To-Know Act (EPCRA)
Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):
None of the components are listed

SARA HAZARD DESIGNATION SECTIONS 311/312 (40 CFR 370 (amended 2018)):
Serious eye damage or eye irritation

Section 313 Toxic Chemicals (40 CFR 372.65):
None of the components are listed

STATE REGULATIONS:

This SDS contains specific health and safety data is applicable for state requirements. For details on your regulatory requirements, you should contact the appropriate agency in your state.

California Proposition 65 (California Safe Drinking Water and Toxic Enforcement Act of 1986:
This product has been evaluated and does not require warning labeling under California Proposition 65.
Ethanol: Listed as carcinogen, 4/29/2011 (in alcoholic beverages), developmental toxicity, 10/1/1987 (in alcoholic beverages)

Massachusetts Right to Know: Ethanol is listed on the Massachusetts Right to Know list.

New Jersey Right to Know Ethanol is listed on the New Jersey Right to Know List.

Pennsylvania Right to Know: Ethanol is listed on the Pennsylvania Right to Know List.

U.S. EPA LABEL INFORMATION:

EPA Pesticide Registration Number: 1839-220-92998

EPA Statement
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. See the product label for the FIFRA hazard information as required on the pesticide label.

Difference between SDS and EPA Pesticide label:
Signal Word: CAUTION
See Label for EPA FIRST AID and Hazard Statements

SECTION 16: Other Information

NFPA 704: Standard System for the Identification of the Hazards of Materials for Emergency Response

Hazardous Materials Identification System (HMIS)

DISCLAIMER:
This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 1910.1200. To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier nor any of its subsidiaries assumes any liability whatsoever for completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.