TB-Cide Quat®

cleaner/deodorizer/disinfectant

TB-Cide Quat is a quaternary-based, ready-to-use cleaner/deodorizer/disinfectant. TB-Cide Quat is non-viscous and clear in color with a crisp, clean lemon fragrance. This broad spectrum, state-of-the-art disinfectant not only meets the recommendations of the OSHA Bloodborne Pathogen Standard for activity against Mycobacterium tuberculosis, BCG, HBV (Hepatitis B Virus), HCV (Hepatitis C Virus), and HIV-1 (AIDS Virus), but also addresses present-day health care management concerns relating to Escherichia coli O157:H7 and in the animal health care area, Canine parvovirus.
MEETS BLOODBORNE PATHOGEN STANDARDS:
An “intermediate-level” disinfectant by the Spaulding system, TB-Cide Quat is proven effective against the TB bacillus and HIV-1 (AIDS Virus), HBV (Hepatitis B Virus), and HCV (Hepatitis C Virus) in health care or other areas where blood or body fluids are present or expected.

KILLS GERMS IN MINUTES!:
Effective against the following Bacteria:
Staphylococcus aureus, Pseudomonas aeruginosa, Salmonella enterica, Listeria monocytogenes, Yersinia enterocolitica, Enterococcus faecium, Escherichia coli, Escherichia coli 0157:H7, Corynebacterium ammoniagenes.

Effective against the following Antibiotic-Resistant Bacteria:
Vancomycin resistant Enterococcus faecalis (VRE), Methicillin resistant Staphylococcus aureus (MRSA), Vancomycin intermediate resistant Staphylococcus aureus (VISA), Methicillin resistant Staphylococcus epidermidis (MRSE), Community Associated Methicillin resistant Staphylococcus aureus (CA-MRSA), Community Associated Methicillin resistant Staphylococcus aureus (CA-MRSA).

Effective against the following Viruses:
HIV-1 (AIDS Virus), Herpes simplex Type 2, Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), and Bovine Viral Diarrhea (BVDV), Influenza A2/Hong Kong viruses, Pandemic 2009 H1N1 influenza A virus, Rhinovirus type 39, Rotavirus, Norovirus, Feline Calicivirus, Rabies Virus, Human Coronavirus, SARS associated with Coronavirus and Avian Influenza A.

WHO CAN BENEFIT:
Health care providers in hospitals, nursing homes, schools; those involved in maintaining facilities where large numbers of people are present; and animal health care veterinarians, animal grooming, animal husbandry, etc. can benefit from TB-Cide Quat’s broad spectrum disinfectant activity.

TB-Cide Quat is an excellent disinfectant for use on walls, sink tops, tables, chairs, glazed ceramic tiles in bathrooms, shower stalls and tubs, cabinets.

MILDEWSTAT AND DEODORIZER:
TB-Cide Quat controls mold and mildew and is, therefore, excellent for use in restrooms, shower rooms, on damp concrete and other areas susceptible to mildew growth.

TB-Cide Quat deodorizes garbage storage areas, empty garbage bins and cans, on damp concrete and in restrooms and other areas which are prone to odors caused by microorganisms.

Be sure to read all Directions, Precautionary and First Aid Statements on product labels before use of this or any Spartan product. If questions remain, consult your employer or a physician. Material Safety Data Sheets for all Spartan products are available from your authorized Spartan distributor or by visiting www.spartanchemical.com.

SPECIFICATIONS:
- pH (Concentrate)– 11.5-12.5
- Color – Clear
- Scent – Lemon fragrance
- Stability:
  a. Shelf @ 24°C/75°F – One year minimum
  b. Freeze/Thaw – Three cycles
- Contains biodegradable surfactants.
- Phosphate free

For institutional and industrial use only.

Distributed by:

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1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: TB-CIDE QUAT
Product Number: 1021, 1017
Recommended Use: Disinfectant
Uses Advised Against: For Industrial and Institutional Use Only

Manufacturer/Supplier: Spartan Chemical Company, Inc.
1110 Spartan Drive
Maumee, Ohio 43537 USA
800-537-8990 (Business hours)
www.spartanchemical.com

24 Hour Emergency Phone Numbers:
Medical Emergency/Information: 888-314-6171
Transportation/Spill/Leak: CHEMTREC 800-424-9300

2. HAZARDS IDENTIFICATION

GHS Classification
Serious Eye Damage/Eye Irritation: Category 2A

GHS Label Elements
Signal Word: Warning
Symbols:

Hazard Statements: Causes serious eye irritation
Precautionary Statements:
Prevention: Wash hands and any exposed skin thoroughly after handling.
Wear eye / face protection
Response:
-Eyes 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 attention.
See Safety Data Sheet Section 4: "FIRST AID MEASURES" for additional information.
-Specific Treatment: Not Applicable

Storage: Not Applicable
Disposal: Not Applicable

Hazards Not Otherwise Classified: Not Applicable

Other Information:
- May be harmful if swallowed.
- May cause skin irritation.
- Inhalation of vapors or mist may cause respiratory irritation.
- Keep out of reach of children.

0.03383% of the mixture consists of ingredient(s) of unknown toxicity.
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>water</td>
<td>7732-18-5</td>
<td>60-100</td>
</tr>
<tr>
<td>diethylene glycol monobutyl ether</td>
<td>112-34-5</td>
<td>5-10</td>
</tr>
<tr>
<td>tetrasodium ethylenediaminetetraacetate</td>
<td>64-02-8</td>
<td>1-5</td>
</tr>
<tr>
<td>alkyl dimethyl ethylbenzyl ammonium chloride</td>
<td>85409-23-0</td>
<td>0.1-1</td>
</tr>
<tr>
<td>alkyl dimethyl benzyl ammonium chloride</td>
<td>68391-01-5</td>
<td>0.1-1</td>
</tr>
</tbody>
</table>

Specific chemical identity and/or exact percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

- **Eye Contact:** Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
- **Skin Contact:** Wash with soap and water. If skin irritation occurs: Get medical attention.
- **Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison control center or physician if you feel unwell.
- **Ingestion:** Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if you feel unwell.

Note to Physicians: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

- **Suitable Extinguishing Media:** Product does not support combustion, Use extinguishing agent suitable for type of surrounding fire
- **Specific Hazards Arising from the Chemical:** Dried product is capable of burning. Combustion products are toxic.
- **Hazardous Combustion Products:** May include Carbon monoxide Carbon dioxide and other toxic gases or vapors.
- **Protective Equipment and Precautions for Firefighters:** Wear MSHA/NIOSH approved self-contained breathing apparatus (SCBA) and full protective gear. Cool fire-exposed containers with water spray.

6. ACCIDENTAL RELEASE MEASURES

- **Personal Precautions:** Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.
- **Environmental Precautions:** Do not rinse spill onto the ground, into storm sewers or bodies of water.
- **Methods for Clean-Up:** 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).

7. HANDLING AND STORAGE

- **Advice on Safe Handling:** Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling.
- **Storage Conditions:** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep from freezing.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- **Occupational Exposure Limits:** None established.
- **Engineering Controls:** Provide good general ventilation. If work practices generate dust, fumes, gas, vapors or mists which expose workers to chemicals above the occupational exposure limits, local exhaust ventilation or other engineering controls should be considered.
- **Personal Protective Equipment**
Eye/Face Protection: Wear splash goggles.
Skin and Body Protection: Wear rubber or other chemical-resistant gloves.
Respiratory Protection: Not required with expected use.
If occupational exposure limits are exceeded or respiratory irritation occurs, use of a
NIOSH/MSHA approved respirator suitable for the use-conditions and chemicals in Section
3 should be considered.
General Hygiene Considerations: Wash hands and any exposed skin thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance/Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>Lemon</td>
</tr>
<tr>
<td>pH</td>
<td>11.5-12.5</td>
</tr>
<tr>
<td>Melting Point / Freezing Point</td>
<td>No information available.</td>
</tr>
<tr>
<td>Boiling Point / Boiling Range</td>
<td>98 °C / 208 °F</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt; 94 °C / &gt; 201 °F ASTM D56</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>&lt; 1 (BuAc = 1)</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available.</td>
</tr>
<tr>
<td>Upper Flammability Limit</td>
<td>No information available.</td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>No information available.</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No information available.</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No information available.</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.01</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Soluble in water</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>No information available.</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>No information available.</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No information available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No information available.</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity: This material is considered to be non-reactive under normal conditions of use.
Chemical Stability: Stable under normal conditions.
Possibility of Hazardous Reactions: Not expected to occur with normal handling and storage.
Conditions to Avoid: Extremes of temperature and direct sunlight.
Hazardous Decomposition Products: May include carbon monoxide, carbon dioxide (CO2) and other toxic gases or vapors.

11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Eyes, Skin, Ingestion, Inhalation.
Symptoms of Exposure:
- Eye Contact: Pain, redness, swelling of the conjunctiva and blurred vision.
- Skin Contact: Drying of the skin.
- Inhalation: Nasal discomfort and coughing.
- Ingestion: Pain, nausea, vomiting and diarrhea.
Immediate, Delayed, Chronic Effects: No information available.
Product Information: Data not available or insufficient for classification.
Numerical Measures of Toxicity
The following acute toxicity estimates (ATE) are calculated based on the GHS document.

- ATEmix (oral): 12697 mg/kg
- ATEmix (dermal): 27166 mg/kg
- ATEmix (inhalation-dust/mist): 447.8 mg/l
Component Acute Toxicity Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>water 7732-18-5</td>
<td>&gt; 90 mL/kg (Rat)</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>diethylene glycol monobutyl ether 112-34-5</td>
<td>3384 mg/kg (Rat)</td>
<td>2700 mg/kg (Rabbit)</td>
<td>Not Available</td>
</tr>
<tr>
<td>tetrasodium ethylenediaminetetraacetate 64-02-8</td>
<td>10 g/kg (Rat)</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

Carcinogenicity: No components present at 0.1% or greater are listed as to being carcinogens by ACGIH, IARC, NTP or OSHA.

12. ECOLOGICAL INFORMATION

Ecotoxicity

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/Aquatic Plants</th>
<th>Fish</th>
<th>Toxicity to Microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>diethylene glycol monobutyl ether 112-34-5</td>
<td>100: 96 h Desmodesmus subspicatus mg/L EC50</td>
<td>1300: 96 h Lepomis macrochirus mg/L LC50 static</td>
<td>Not Available</td>
<td>2850: 24 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>tetrasodium ethylenediaminetetraacetate 64-02-8</td>
<td>1.01: 72 h Desmodesmus subspicatus mg/L EC50</td>
<td>41: 96 h Lepomis macrochirus mg/L LC50 static 59.8: 96 h Pimephales promelas mg/L LC50 static</td>
<td>Not Available</td>
<td>610: 24 h Daphnia magna mg/L EC50</td>
</tr>
</tbody>
</table>

Persistence and Degradability: No information available.

Bioaccumulation: No information available.

Other Adverse Effects: No information available.

13. DISPOSAL CONSIDERATIONS

Disposal of Wastes: Dispose of in accordance with federal, state and local regulations.

Contaminated Packaging: Dispose of in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

DOT: Not Regulated
Proper Shipping Name: Non Hazardous Product
Special Provisions: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Check with a trained hazardous materials transportation expert for information specific to your situation.

IMDG: Not Regulated
Proper Shipping Name: Non Hazardous Product

15. REGULATORY INFORMATION

TSCA Status: (Toxic Substance Control Act Section 8(b) Inventory)
All chemical substances in this product are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

SARA 313
This product contains the following listed substances:
diethylene glycol monobutyl ether
CAS No 112-34-5 applies to R-(OCH2CH2)n-OR', where n = 1, 2, or 3, R=Alkyl C7 or less, or R = Phenyl or Alkyl substituted phenyl, R' = H or Alkyl C7 or less, or OR' consisting of Carboxylic acid ester, Sulfate, Phosphate, Nitrate, or Sulfonate, Chemical Category N230

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

**California Proposition 65**
This product is not subject to warning requirements under California Proposition 65.

**EPA Pesticide Registration Number:** 1839-83-5741
**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. Following is the hazard information as required on the pesticide label:

**EPA Pesticide Label:**
CAUTION. Keep out of reach of children. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco.

### 16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards: 2</th>
<th>Flammability: 0</th>
<th>Instability: 0</th>
<th>Special: N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMIS</td>
<td>Health Hazards: 2</td>
<td>Flammability: 0</td>
<td>Physical Hazards: 0</td>
<td></td>
</tr>
</tbody>
</table>

**Revision Date:** 27-Jul-2015
**Reasons for Revision:** Section 14 and 15

**Disclaimer:**
The information provided in this Material 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 information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet