

# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Material name** DECON-QUAT® 100  
**Revision date** 04-14-2011  
**Version #** 01  
**CAS #** Mixture  
**MSDS ID** DQ-98-01  
**Product use** Disinfectant/Sanitizer.  
**Company name** Veltek Associates, Inc.  
**Address** 15 Lee Blvd,  
Malvern, PA 19355, USA  
**Telephone number** 610-644-8335  
**Contact person** All questions regarding chemical content be directed to CareCHEM 24  
**Emergency telephone number** CARECHEM 24: 1-866-928-0789 (USA and Canada), 44-1235-239-670 (EU), 44-1235-239-671 (Arabic), 86-10-5100-3039 (China)  
**E-mail** vai@sterile.com

## 2. Hazards Identification

**Physical state** Liquid.  
**Appearance** Clear. Colorless to straw colored liquid with benzaldehyde (organic) odor.  
**Emergency overview** DANGER!  
Causes eye burns. Causes skin burns.  
**OSHA regulatory status** This product is hazardous according to OSHA 29 CFR 1910.1200.  
**Potential health effects**  
**Routes of exposure** Eye contact. Ingestion. Inhalation. Skin contact.  
**Eyes** Causes eye burns. Prolonged contact causes serious eye and tissue damage.  
**Skin** Causes skin burns. May cause serious chemical burns to the skin.  
**Inhalation** In high concentrations, vapors may be irritating to the respiratory system.  
**Ingestion** Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly the digestive tract.  
**Target organs** Eyes. Skin. Respiratory system.  
**Chronic effects** Prolonged skin contact may cause dermatitis.  
**Signs and symptoms** Extreme irritation of eyes and mucous membranes, including burning and tearing. May cause burns in mucous membranes, throat, esophagus and stomach. May cause serious chemical burns to the skin.  
**Potential environmental effects** The product contains a substance which is very toxic to aquatic organisms.

## 3. Composition / Information on Ingredients

| Components   | CAS #      | Percent |
|--|------------|---------|
| Water  | 7732-18-5  | 88 - 92 |
| Alkyl dimethyl benzyl ammonium chloride (C12-18)       | 68391-01-5 | 4 - 6   |
| Alkyl dimethyl ethyl benzyl ammonium chloride (C12-14) | 85409-23-0 | 4 - 6   |

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

## 4. First Aid Measures

### First aid procedures

**Eye contact** Flush thoroughly with water for at least 15 minutes. Get immediate medical assistance. If medical assistance is not immediately available, flush an additional 15 minutes.  
**Skin contact** Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention immediately! Chemical burns must be treated by a physician.

|                           |  |
|---------------------------|--|
| <b>Inhalation</b>         | Move injured person into fresh air and keep person calm under observation. Get medical attention if any discomfort occurs.                               |
| <b>Ingestion</b>          | Immediately rinse mouth and drink plenty of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention. |
| <b>Notes to physician</b> | Treat symptomatically. Symptoms may be delayed.  |
| <b>General advice</b>     | Chemical burns must be treated by a physician.   |

## 5. Fire Fighting Measures

|  |  |
|--|--|
| <b>Flammable properties</b>                                  | The product is not flammable.  |
| <b>Extinguishing media</b>                                   |  |
| <b>Suitable extinguishing media</b>                          | Use fire-extinguishing media appropriate for surrounding materials.  |
| <b>Unsuitable extinguishing media</b>                        | None known.  |
| <b>Protection of firefighters</b>                            |  |
| <b>Specific hazards arising from the chemical</b>            | During fire, gases hazardous to health may be formed. Thermal decomposition products are toxic and corrosive.  |
| <b>Protective equipment and precautions for firefighters</b> | Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| <b>Fire fighting equipment/instructions</b>                  | Move containers from fire area if you can do it without risk. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.  |
| <b>Specific methods</b>                                      | Move containers from fire area if you can do so without risk. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.  |

## 6. Accidental Release Measures

|                                  |   |
|----------------------------------|---|
| <b>Personal precautions</b>      | Ensure adequate ventilation. Avoid inhalation of vapors/spray and contact with skin and eyes. Wear suitable protective clothing. See Section 8 of the MSDS for Personal Protective Equipment.   |
| <b>Environmental precautions</b> | Do not allow to enter drains, sewers or watercourses. Collect and dispose of spillage as indicated in Section 13 of the MSDS. Contact local authorities in case of spillage to drain/aquatic environment.   |
| <b>Methods for containment</b>   | Collect spillage.   |
| <b>Methods for cleaning up</b>   | Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Clean up in accordance with all applicable regulations. |
| <b>Other information</b>         | Clean up in accordance with all applicable regulations.   |

## 7. Handling and Storage

|                 |  |
|-----------------|--|
| <b>Handling</b> | Provide adequate ventilation. Avoid inhalation of vapors/mist and contact with skin and eyes. Wear appropriate personal protective equipment. Handle and open container with care. Change contaminated clothing. Wash contaminated clothing before reuse. Observe good industrial hygiene practices. |
| <b>Storage</b>  | Keep container tightly closed and in a well-ventilated place. Store away from incompatible materials.  |

## 8. Exposure Controls / Personal Protection

|                                      |  |
|--------------------------------------|--|
| <b>Occupational exposure limits</b>  | No exposure limits noted for ingredient(s).  |
| <b>Engineering controls</b>          | Provide adequate ventilation and minimize the risk of inhalation of vapors. Shower, hand and eye washing facilities near the workplace are recommended.  |
| <b>Personal protective equipment</b> |  |
| <b>Eye / face protection</b>         | Use approved safety goggles or face shield.  |
| <b>Skin protection</b>               | Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier. Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapor contact.  |
| <b>Respiratory protection</b>        | In case of inadequate ventilation: Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use. |

**General hygiene considerations**

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.

**9. Physical & Chemical Properties**

|   |  |
|---|--|
| <b>Appearance</b>                                     | Clear. Colorless to straw colored liquid with benzaldehyde (organic) odor. |
| <b>Color</b>  | Clear. Colorless to straw.   |
| <b>Odor</b>   | Benzaldehyde (organic) odor.   |
| <b>Odor threshold</b>                                 | Not available.   |
| <b>Physical state</b>                                 | Liquid.  |
| <b>Form</b>   | Liquid.  |
| <b>pH</b>   | 6 - 9  |
| <b>Melting point</b>                                  | Not available.   |
| <b>Freezing point</b>                                 | Not available.   |
| <b>Boiling point</b>                                  | Not available.   |
| <b>Flash point</b>                                    | Cleveland Open Cup None when heated to 100°C                               |
| <b>Evaporation rate</b>                               | Not available.   |
| <b>Flammability limits in air, upper, % by volume</b> | Not available.   |
| <b>Flammability limits in air, lower, % by volume</b> | Not available.   |
| <b>Vapor pressure</b>                                 | Not available.   |
| <b>Vapor density</b>                                  | Estimated to be heavier than air.  |
| <b>Specific gravity</b>                               | 0.994  |
| <b>Solubility (water)</b>                             | Soluble in water.  |
| <b>Partition coefficient (n-octanol/water)</b>        | No data available.   |
| <b>Auto-ignition temperature</b>                      | Not available.   |
| <b>Decomposition temperature</b>                      | Not available.   |
| <b>Viscosity</b>                                      | 2.035 mm <sup>2</sup> /s (24°C)  |

**10. Chemical Stability & Reactivity Information**

|   |  |
|---|--|
| <b>Chemical stability</b>                 | Material is stable under normal conditions.            |
| <b>Conditions to avoid</b>                | Elevated temperatures. Freezing.                       |
| <b>Incompatible materials</b>             | Strong oxidizing agents.                               |
| <b>Hazardous decomposition products</b>   | Carbon oxides. Nitrogen Oxides. Hydrogen chloride gas. |
| <b>Possibility of hazardous reactions</b> | Will not occur.  |

**11. Toxicological Information****Toxicological data****Product**

DECON-QUAT® 100 (Mixture)

**Test Results**

Acute Dermal LD50 Rabbit: > 2000 mg/kg

Acute Oral LD50 Rat: > 2500 mg/kg

**Components**

Alkyl dimethyl benzyl ammonium chloride (C12-18) (68391-01-5)

**Test Results**

Acute Dermal LD50 Rat: 1420 mg/kg

Acute Oral LD50 Rat: 240 mg/kg

**Toxicological information**

Corrosive.

**Acute effects**

May cause burns of the gastrointestinal tract if swallowed. May be harmful if swallowed.

**Local effects**

Contact with this material will cause burns to the skin, eyes and mucous membranes. In high concentrations, vapors may be irritating to the respiratory system.

|                                   |  |
|-----------------------------------|--|
| <b>Sensitization</b>              | No data available.   |
| <b>Chronic effects</b>            | Prolonged skin contact may cause dermatitis.   |
| <b>Carcinogenicity</b>            | No data available.   |
| <b>Epidemiology</b>               | No data available.   |
| <b>Mutagenicity</b>               | No data available.   |
| <b>Reproductive effects</b>       | No data available.   |
| <b>Symptoms and target organs</b> | Corrosive effects. Prolonged contact causes serious eye and tissue damage. May cause serious chemical burns to the skin. |
| <b>Further information</b>        | Prolonged skin contact may cause dermatitis.   |

## 12. Ecological Information

### Ecotoxicological data

| Components  | Test Results   |
|---|--|
| Alkyl dimethyl benzyl ammonium chloride (C12-18) (68391-01-5) | LC50 Bluegill ( <i>Lepomis macrochirus</i> ): 0.223 - 0.46 mg/l 96 hours   |
| <b>Ecotoxicity</b>  | The product contains a substance which is very toxic to aquatic organisms. |
| <b>Persistence and degradability</b>                          | No data available.   |
| <b>Bioaccumulation / Accumulation</b>                         | No data available.   |
| <b>Partition coefficient (n-octanol/water)</b>                | No data available.   |
| <b>Mobility in environmental media</b>                        | The product is water soluble and may spread in water systems.              |

## 13. Disposal Considerations

|  |   |
|--|---|
| <b>Disposal instructions</b>                 | Dispose of this material and its container at hazardous or special waste collection point. Do not reuse container. Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations. |
| <b>Waste from residues / unused products</b> | Dispose of in accordance with local regulations.  |
| <b>Contaminated packaging</b>                | Since emptied containers retain product residue, follow label warnings even after container is emptied. Dispose of in accordance with local regulations.  |

## 14. Transport Information

### DOT

#### Basic shipping requirements:

|   |  |
|---|--|
| <b>UN number</b>                        | UN1903   |
| <b>Proper shipping name</b>             | Disinfectant, liquid, corrosive, n.o.s. (Quaternary Ammonium Compound) |
| <b>Hazard class</b>                     | 8  |
| <b>Packing group</b>                    | III  |
| <b>Environmental hazards</b>            |  |
| <b>Marine pollutant Labels required</b> | Yes  |
| <b>Additional information:</b>          | 8  |
| <b>Special provisions</b>               | IB3, T4, TP1   |
| <b>Packaging exceptions</b>             | 154  |
| <b>Packaging non bulk</b>               | 203  |
| <b>Packaging bulk</b>                   | 241  |

### IATA

#### Basic shipping requirements:

|                             |  |
|-----------------------------|--|
| <b>UN number</b>            | 1903   |
| <b>Proper shipping name</b> | Disinfectant, liquid, corrosive, n.o.s. (Quaternary Ammonium Compound) |
| <b>Hazard class</b>         | 8  |
| <b>Packing group</b>        | III  |

**Environmental hazards**  
**Marine pollutant** Yes  
**Additional information:**  
**ERG code** 8L

**IMDG**

**Basic shipping requirements:**  
**UN number** 1903  
**Proper shipping name** Disinfectant, liquid, corrosive, n.o.s. (Quaternary Ammonium Compound)  
**Hazard class Packing group Environmental hazards** 8 III  
**Marine pollutant** Yes  
**EmS No.** F-A, S-B

**TDG**

**Basic shipping requirements:**  
**Proper shipping name** Disinfectant, liquid, corrosive, n.o.s. (Quaternary Ammonium Compound)  
**Hazard class UN number Packing group Marine pollutant** 8 UN1903 III Yes  
**Additional information:**  
**Special provisions** 16

**15. Regulatory Information**

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification(40 CFR 707, Subpt. D)**  
Not regulated.

**CERCLA (Superfund) reportable quantity (lbs) (40 CFR 302.4)**  
None

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**Section 302 extremely hazardous substance (40 CRF 355, Appendix A)** No

**Section 311/312 (40 CFR 370)** Yes

**Drug Enforcement Administration (DEA) (21 CFR 1308.11-15)** Not controlled

**Canadian regulations** This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

**WHMIS status** Controlled  
**WHMIS classification** E - Corrosive

**WHMIS labeling**



**Inventory status**

| Country(s) or region | Inventory name                                     | On inventory (yes/no)* |
|----------------------|--|------------------------|
| Australia            | Australian Inventory of Chemical Substances (AICS) | No                     |

| Country(s) or region        | Inventory name   | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Canada                      | Domestic Substances List (DSL)   | No                     |
| Canada                      | Non-Domestic Substances List (NDSL)                                    | No                     |
| China                       | Inventory of Existing Chemical Substances in China (IECSC)             | Yes                    |
| Europe                      | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes                    |
| Europe                      | European List of Notified Chemical Substances (ELINCS)                 | No                     |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)               | No                     |
| Korea                       | Existing Chemicals List (ECL)  | No                     |
| New Zealand                 | New Zealand Inventory  | Yes                    |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS)      | No                     |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory                          | No                     |

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

**State regulations** This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

## 16. Other Information

|                            |   |
|----------------------------|---|
| <b>Further information</b> | HMIS® is a registered trade and service mark of the NPCA. G - Safety Glasses, Gloves, Vapor Respirator  |
| <b>HMIS® ratings</b>       | Health: 3<br>Flammability: 0<br>Physical hazard: 0<br>Personal protection: G  |
| <b>NFPA ratings</b>        | Health: 3<br>Flammability: 0<br>Instability: 0  |
| <b>Disclaimer</b>          | This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment. |
| <b>Issue date</b>          | 04-14-2011  |