

Material Safety Data Sheet

Product: Entecide QG40

Revision Date: 14-November- 2011

Replaces:N/A

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: Entecide QG40

Emergency Response No: (800) 255-3924 (Chemtel)

Manufacturer: U.S. Water Services
 330 South Cleveland St
 Cambridge, MN 55008

Section 2 - Composition/Information on Ingredients

<u>Ingredient Name</u>	<u>CAS Number</u>	<u>% wt or % vol</u>	pEL/TLV
GLUTARALDEHYDE	111-30-8	< 27 %	TLV: 0.05 ppm CEILING [SEN]
n-ALKYL DIMETHYL BENZYL	68424-85-1	< 5.5 %	NO PEL/TLV EST.
AMMONIUM CHLORIDE			
DIDECYL DIMETHYL AMMONIUM	7173-51-5	< 8.3 %	NO PEL/TLV EST.
CHLORIDE			
ETHANOL	64-17-5	< 2.8 %	PEL: 1900 mg/m ³ TWA TLV: 1000 ppm STEL

Section 3 - Hazards Identification

+ + + + Emergency Overview + + + +

Potential Health Effects

Primary Entry Routes: Eye, Skin contact, and Ingestion.

Acute Effects: May cause eye, skin and respiratory irritation.

Inhalation: Vapor is irritating to the respiratory tract, causing stinging sensations in the nose and throat, discharge from the nose, possibly bleeding from the nose, coughing, chest discomfort and tightness, difficulty with breathing, and headache. Heating the solution may result in more severe irritant effects.

Eye: Liquid will cause a severe and persistent conjunctivitis. Severe corneal injury may develop, which could permanently impair vision if prompt first-aid and medical treatment are not obtained. Vapor will cause stinging sensations in the eye with excess tear production, blinking, and possibly a slight excess redness of the conjunctiva.

Skin: Brief contact will cause itching with mild to moderate local redness and possibly swelling. Contact with solutions of glutaraldehyde may cause a harmless yellow or brownish discoloration of the skin.

Ingestion: Moderately toxic. May cause moderate to marked irritation and possibly chemical burns of the mouth, throat, esophagus, and stomach. There will be discomfort or pain in the chest and abdomen, nausea, vomiting, diarrhea, dizziness, faintness, drowsiness, thirst, weakness, circulatory shock, collapse and coma. Aspiration into the lungs may occur during ingestion or vomiting, resulting in lung injury.

Carcinogenicity: IARC, NTP, and OSHA do not list this product or its components as a carcinogen.

Medical Conditions Aggravated by Long-term Exposure: Pre-existing dermatitis. Inhalation of material may aggravate asthma and inflammatory or fibrotic pulmonary disease.

Chronic Effects: Repeated skin contact may cause a cumulative dermatitis.

HMIS	
H	2
F	0
R	0
PPE	H
+Sec.8	

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Section 4 - First Aid Measures

Inhalation: If inhaled and irritation or difficulty breathing occurs, remove to fresh air. Seek medical aid if irritation persists.

Eye Contact: Flush with copious amounts of water for a minimum of 15 minutes. DO NOT remove contact lenses, if worn. Get immediate medical attention preferably from an ophthalmologist.

Skin Contact: In case of contact, flush skin with plenty of water and remove contaminated clothing. Apply glycerin. Seek medical aid if irritation persists. Wash clothing before reuse.

Ingestion: DO NOT INDUCE VOMITING. Do not give anything to drink. Obtain medical attention without delay. Note to physician: Due to the severely irritating or corrosive nature of the material, any material aspirated during vomiting may cause lung injury. If it is considered necessary to evacuate the stomach contents, this should be done by means least likely to cause aspiration (e.g. gastric lavage after endotracheal intubation)

Section 5 - Fire-Fighting Measures

Flash Point: 187°F

Flash Point Method: Pensky Marten Closed Cup

Burning Rate: Not applicable

Auto-ignition Temperature: NE

LEL: Not determined

UEL: Not determined

Extinguishing Media: After water evaporates, remaining material will burn. Water fog, carbon dioxide, foam, dry chemical.

Unusual Fire or Explosion Hazards: Toxic gasses, vapors

Hazardous Combustion Products: Burning can produce carbon monoxide and/or carbon dioxide.

Fire-Fighting Instructions: Cool containers/exposed structures with water spray.

Fire-Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full-face piece operated in pressure-demand or positive-pressure mode.

Section 6 - Accidental Release Measures

Spill/Leak Procedures: Follow all Federal, State and local regulations

Small Spills: Absorb spill with paper towel or similar absorbent; and dispose of in compliant with state and local regulations.

Large Spills: Dike and contain to prevent entering fish bearing waters.

Containment: Dike spill, recover if possible. Absorb remainder and dispose of properly. Toxic to fish; avoid discharge to natural waters. Very low concentrations (5 ppm or less of glutaraldehyde) can be degraded in a biological treatment system. Large spills should be collected for disposal. It may also be possible to decontaminate spilled material by careful application of aqueous sodium hydroxide, dibasic ammonium phosphate solution, or ammonium bisulfite. Depending on conditions, considerable heat and fumes can be liberated by the decontamination reaction.

Cleanup: Accumulate the absorbed materials and dispose of according to federal, state and local regulations.

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120)

Section 7 - Handling and Storage

Handling Precautions: Use the recommended safety controls and personal protective equipment as outlined. Fully review all data before handling of the material itself. Avoid contact with skin or eyes. Avoid breathing dust or mist. Keep from contact with clothing and other combustible materials. Observe good personal hygiene and housekeeping practices.

Storage Requirements: KEEP OUT OF REACH OF CHILDREN. Store in closed container away from incompatible materials, heat and sources of ignition. Protect from extreme cold.

Regulatory Requirements: Store materials according to all local, state and federal guidelines that are established for corrosive materials.

Section 8 - Exposure Controls/Personal Protection

Engineering Controls: No specifications

Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

Administrative Controls: No specifications

Respiratory Protection: Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency

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or non-routine operations (cleaning spills, reactor vessel, or storage tanks), wear an SCBA. *Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.* If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Protective Clothing/Equipment: Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye-and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section – 9 Physical and Chemical Properties

Boiling Point: 213°F

Appearance and Odor: Clear, colorless liquid with sharp fruity medicinal odor.

Vapor Pressure: PSIG @ 70°F (Aerosols): NA

Vapor Density (Air=1): NA

Specific Gravity (H₂O=1, at 4°C): 1.05

Water Solubility: Complete

Other Solubilities: Not tested for the blend

Evaporation Rate (water =1): 0.8

Water Reactive: No

pH: aprox. 4.5

Section 10 - Stability and Reactivity

Stability: This product is stable at room temperature in closed containers under normal storage and handling conditions. However, avoid temperature extremes.

Polymerization: Hazardous polymerization will not occur.

Chemical Incompatibilities: Ammonia. Strong alkalis and acids catalyze an aldol-type condensation (exothermic, but not expected to be violent)

Conditions to Avoid: Extreme temperatures

Hazardous Decomposition Products: Burning can produce carbon monoxide and/ or carbon dioxide.

Section 11 - Toxicological Information

Acute Toxicity

See Section 3

Chronic Effects: No chronic effects are known to be attributable to this product for this product.

Carcinogenicity: No carcinogenic effects are known to be applicable for the formulation components of this product.

Mutagenicity: No mutagenic effects are known to be applicable for the formulation components of this

Teratogenicity: No studies have been performed.

**See NIOSH, RTECS, for additional toxicity data.

Section 12 - Ecological Information

Eco-toxicity: (Glutaraldehyde)

SPECIES	ACUTE LC50 24 Hr	ACUTE LC50 48 Hr	ACUTE LC50 72 Hr	ACUTE LC50 96 Hr	ACUTE NOEC	ACUTE LOEC
Ceriodaphnia (Water Flea)	22.2 mg/L	17.5 mg/L	-----	-----	13 mg/L 48 Hr	21.6 mg/L 48 Hr
Fathead Minnow	19.0 mg/L	13.7 mg/L	13.2 mg/L	13.0 mg/L	7.8 mg/L 96 Hr	13 mg/L 96 Hr

Environmental Fate: Ground and/or water

Environmental Degradation: No information available

Soil Absorption/Mobility: No studies have been conducted for this blend

Section 13 - Disposal Considerations

Disposal: Review federal, state and local government requirements prior to disposal.

Disposal Regulatory Requirements: Follow all Federal, State and local regulations.

Container Cleaning and Disposal: Review federal, state and local government requirements prior to disposal.

Section 14 - Transport Information

DOT Transportation Data (49 CFR 172.101):

Shipping Name: Disinfectants, Liquid, Corrosive, N.O.S.

Contains: Quaternary Ammonium Compound

Hazard Class: 8

ID No.: UN 1903

Packing Group: PG III

Label Code: Corrosive

HMIS Label Code: 200 H

Shipping Notations: None

Section 15 - Regulatory Information

EPA Regulations:

RCRA Hazardous Waste Classification (40 CFR 261.22): Corrosivity

RCRA Hazardous Waste Number (40 CFR 261.22): D002

CERCLA Reportable Quantity (RQ): Not applicable

SARA TITLE III –CERCLA LIST: This product does not contain a CERCLA Listed hazardous substance.

SARA TITLE III-TOXIC CHEMICAL LIST: This product does not contain chemicals subject to routine annual toxic chemical release reporting

SARA TITLE III-EXTREMELY HAZARDOUS SUBSTANCE: This product does not contain any extremely hazardous substances subject to the emergency planning requirements.

Section 16 - Other Information

Prepared By: US Water Services

Additional Hazard Rating Systems:

Disclaimer:

USERS RESPONSIBILITY

The information and recommendations contained herein cannot cover all possible situations which the user may experience during processing. Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin should be provided to your employees or customers. It is your responsibility to use this information to develop appropriate work practice guidelines and employee instructional programs for your operation.

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