

**MATERIAL SAFETY DATA SHEET**

ISSUE DATE: 07/22/2004

SUPERSEDES: 999 8000 0097 VER: 05

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**1 PRODUCT IDENTIFICATION**

**PRODUCT NAME** AQUACAT® CG518 CLEAR CATIONIC SOLUTION  
**CHEMICAL/COMMON NAME** aqueous solution of guar hydroxypropyltrimonium chloride  
**CAS NUMBER** mixture

**2 COMPOSITION / INFORMATION ON INGREDIENTS**

<b>OSHA Hazardous Ingredient</b>	<b>CASRN</b>	<b>Amount</b>
guar gum, 2-hydroxy-3-(trimethylammonio)propyl ether, chloride	65497-29-2	9 - 11 %

**3 HAZARDS IDENTIFICATION****EMERGENCY OVERVIEW**  
CAUTION!

May cause eye irritation.  
Inhalation may cause respiratory tract irritation.  
Surfaces subject to spills may become slippery.

Refer to Section 5 for Hazardous Combustion Products, and Section 10 for Hazardous Decomposition/Hazardous Polymerization Products.

**4 FIRST AID MEASURES****SKIN**

Not a skin hazard under anticipated conditions of use. Good industrial hygiene practice dictates thoroughly washing skin with soap and water should accidental contact occur.

**EYE**

Remove contact lenses. Hold eyelids apart. Immediately flush eyes with plenty of low-pressure water for at least 15 minutes. Get immediate medical attention.

**INHALATION**

Remove to fresh air. Get medical attention if nasal, throat or lung irritation develops.

**INGESTION**

No adverse health effects are expected from accidental ingestion of small amounts of this product. For ingestion of large amounts: Do NOT induce vomiting. Get immediate medical attention.

**5 FIRE FIGHTING MEASURES****EXTINGUISHING MEDIA**

Water spray, dry chemical, foam, or carbon dioxide may be used in fires involving this product.

**FIRE FIGHTING PROCEDURES**

Wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH approved (or equivalent) and full protective gear when fighting fires involving this product.

**CONDITIONS TO AVOID**

None known.

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## HAZARDOUS COMBUSTION PRODUCTS

This material is not expected to support combustion. If heated to decomposition, the following substances may be formed: carbon monoxide, carbon dioxide and smoke

## 6 ACCIDENTAL RELEASE MEASURES

Ventilate area. For small spills: Add absorbent, sweep up, and dispose appropriately. Clean up spills immediately. For large spills: Dike to contain and pump into appropriate containers. In case of accidental spill or release, refer to Section 8, Personal Protective Equipment and General Hygiene Practices.

## 7 HANDLING & STORAGE

### GENERAL MEASURES

Store in a cool, dry place: approximately 25° C (77° F).  
Keep container closed when not in use.

### MATERIALS OR CONDITIONS TO AVOID

Avoid storing product near incompatible materials. See MSDS Section 10.  
Protect from freezing.

## 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

### WORK PRACTICES & ENGINEERING CONTROLS

Eyewash fountains and safety showers should be easily accessible.  
Provide adequate ventilation.  
If upper respiratory tract irritation occurs, use an approved dust/mist respirator to minimize exposure.  
Keep floors clean and dry. Clean up spills immediately.

### GENERAL HYGIENIC PRACTICES

Avoid contact with eyes, skin, and clothing.  
Handle in areas with adequate ventilation.  
Avoid inhalation of mist or aerosol particulates.  
Avoid contamination of food, beverages, or smoking materials.

### RECOMMENDED EXPOSURE LIMITS

No exposure limit has been established. This product may irritate the upper respiratory tract if used under conditions that create dust or mist particulates.

### PERSONAL PROTECTIVE EQUIPMENT

Chemical goggles  
Wear approved dust/mist respirator if user operations create dust/mist that causes irritation.  
For good industrial hygiene practice: Impervious gloves  
Appropriate protective clothing

### PROTECTIVE MEASURES DURING REPAIR AND MAINTENANCE

For good industrial hygiene practice: Completely isolate and thoroughly clean all equipment, piping, or vessels before beginning maintenance or repairs.

## 9 PHYSICAL & CHEMICAL PROPERTIES

<b>PHYSICAL STATE:</b>	clear liquid
<b>COLOR:</b>	colorless to amber
<b>ODOR:</b>	characteristic of aldehyde
<b>Boiling Point</b>	212 ° F (approx.)
<b>Vapor Pressure</b>	similar to water
<b>Evaporation Rate</b>	slower than butyl acetate
<b>Vapor Density</b>	lighter than air; value for component
<b>Viscosity</b>	20 - 100 cps at 77° F
<b>Solubility In Water</b>	miscible
<b>pH Value</b>	5.0 - 7.0

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**Freezing Point** 14 - 32 ° F  
**Weight % Solids** 9 - 11

## 10 STABILITY & REACTIVITY

### HAZARDOUS DECOMPOSITION PRODUCTS

None known.

### HAZARDOUS POLYMERIZATION

Not anticipated under normal or recommended handling and storage conditions.

### GENERAL STABILITY CONSIDERATIONS

Stable under recommended handling and storage conditions.

### INCOMPATIBLE MATERIALS

Incompatible with: acids, oxidizing agents, alkalies, free-radicals and strong sunlight or ultraviolet light

## 11 TOXICOLOGICAL INFORMATION

### CARCINOGENICITY INFORMATION

Not listed as a carcinogen by NTP. Not regulated as a carcinogen by OSHA. Not evaluated by IARC.

### REPORTED HUMAN EFFECTS

No human toxicity studies have been carried out with this product.

### REPORTED ANIMAL EFFECTS

No animal toxicity studies have been carried out with this product.

COMPONENT - guar gum, 2-hydroxy-3-(trimethylammonio)propyl ether, chloride: Moderate rabbit eye irritant when not washed from eye; mild to non-irritating when washed. Not a rabbit skin irritant.

### MUTAGENICITY/GENOTOXICITY INFORMATION

No mutagenicity studies have been carried out with this product.

## 12 ECOLOGICAL INFORMATION

### ECOTOXICOLOGICAL INFORMATION

No ecological studies have been carried out on this product.

## 13 DISPOSAL CONSIDERATIONS

### WASTE DISPOSAL

Neutralize waste material to adjust pH to levels appropriate for discharge, and flush material with water into an acclimated biological waste treatment system permitted to handle such waste. Landfilling in a permitted solid or hazardous waste facility is a suitable alternative after solidification to remove free liquids. Treatment and disposal should be in accordance with Federal, State and local regulations.

## 14 TRANSPORT INFORMATION

### GENERAL

This product is not subject to DOT regulations.

For specific information regarding transportation of this product, please call the Hercules representative at (905) 279-3338.

## 15 REGULATORY INFORMATION

### CHEMICAL INVENTORIES

U.S. TSCA: The components of this product are included on the TSCA Inventory or are exempt from TSCA Inventory requirements.

### SARA TITLE III - SECTIONS 302/304

This product is not an Extremely Hazardous Substance subject to reporting under 40CFR355.

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**SARA TITLE III - SECTIONS 311 AND 312**

HC-1: Acute health hazard  
 NPH: Not a physical hazard

**SARA TITLE III - SECTION 313**

This product does not contain any chemicals subject to reporting under Section 313 of Title III of the Superfund Amendments and Reauthorization Act and 40CFR372.

**CERCLA**

This product does not contain any chemicals subject to reporting as a CERCLA Hazardous Substance under 40CFR302.4.

**RCRA**

This product is not a hazardous waste as listed in 40CFR261.33. It does not exhibit any of the hazardous characteristics listed in 40CFR261, Subpart C.

**16 OTHER INFORMATION****HMIS RATINGS:**

<b>Health</b>	1	Slight Hazard
<b>Flammability</b>	0	Minimal Hazard
<b>Reactivity</b>	0	Minimal Hazard

**LIST OF ACRONYMS**

ACGIH: American Conferences of Governmental Industrial Hygienists  
 AIHA WEEL: American Industrial Hygienists Association - Workplace Environmental Exposure Level  
 CASRN: Chemical Abstracts Service Registry Number  
 CERCLA: Comprehensive Emergency Response, Compensation and Liability Act  
 HMIS: Hazardous Materials Identification System  
 IARC: International Agency for Research on Cancer  
 NTP: National Toxicology Program  
 OSHA: Occupational Safety and Health Administration  
 PEL: OSHA Permissible Exposure Limit  
 RCRA: Resource Conservation and Recovery Act  
 RQ: Reportable Quantity  
 SARA: Superfund Amendment Reauthorization Act  
 STEL: Short-Term Exposure Limit  
 TLV: Threshold Limit Values (registered trademark of ACGIH)  
 TPQ: Threshold Planning Quantity  
 TSCA: Toxic Substance Control Act  
 TWA: Time Weighted Average

**DISCLAIMER**

The information and recommendations contained in this Material Safety Data Sheet have been compiled from sources believed to be reliable and to represent the most reasonable current opinion on the subject when the MSDS was prepared. No warranty, guaranty or representation is made as to the correctness or sufficiency of the information. The user of this product must decide what safety measures are necessary to safely use this product, either alone or in combination with other products, and determine its environmental regulatory compliance obligations under any applicable federal or state laws.

**MSDS STATUS**

Supersedes Date	MSDS Revision(s)
12/17/2003	Sections 1 (product name and descriptor)