

## **MATERIAL SAFETY DATA SHEET**

CYCOCEL  
CAROLINA BIOLOGICAL

Revised: 13/10/09  
Replaces: 15/05/08  
Printed: 13/07/10

### **1. PRODUCT DESCRIPTION**

Product Name: Cycocel  
Product Code(s): 20-7533, 20-7534, 20-7815  
Size: 1 oz, 4 oz  
Chemical Name: Cycocel  
CAS Number: 999-81-5  
Formula: C5H13Cl2N  
Synonyms: (2-Chloroethyl) trimethylammonium chloride;  
Chloromequat chloride; CCC  
Distributor: Carolina Biological Supply Company  
2700 York Road  
Burlington, NC 27215

Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)

Chemtrec (Transportation Spill Response 24 hours): 800-424-9300

### **2. COMPOSITION/INFORMATION ON INGREDIENTS**

Principle Hazardous Components: Chlormequat (CAS# 999-81-5) 11.8%  
TLV and PEL units: None established

### **3. HAZARD IDENTIFICATION**

Emergency Overview:

Potential Health Effects:

Eyes: May cause irritation.

Skin: May cause irritation.

Ingestion: May cause gastrointestinal discomfort.

Inhalation: May cause irritation to respiratory tract.

### **4. FIRST AID MEASURES**

Emergency and First Aid Procedures:

Eyes - Flush with water for at least 15 minutes, raising and lowering eyelids occasionally. Get medical attention if irritation persists.

Skin - Thoroughly wash exposed area for at least 15 minutes. Remove contaminated clothing. Launder contaminated clothing before reuse. Get medical attention if irritation persists.

Ingestion - If swallowed, if conscious, give plenty of water and induce vomiting immediately as directed by medical personnel. Immediately call a physician or poison control center. Never give anything by mouth to an unconscious person.

Inhalation - Remove to fresh air. Give oxygen if breathing is difficult; give artificial respiration if breathing has stopped. Keep person warm, quiet, and get medical attention.

### **5. FIREFIGHTING PROCEDURES**

Flash Point(Method Used): 190 F (cc)

NFPA Rating: Health: 2  
Fire: 0  
Reactivity: 0

Extinguisher Media:

Use media suitable to extinguish surrounding fire.

Flammable Limits in Air % by Volume: No information available

Autoignition Temperature: No information available

Special Firefighting Procedures:

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Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: This material will not burn or burns with difficulty.

### **6. SPILL OR LEAK PROCEDURES**

Steps to be Taken in Case Material is Released or Spilled:  
Ventilate area of spill. Eliminate all sources of ignition. Remove all non-essential personnel from area. Clean-up personnel should wear proper protective equipment and clothing. Absorb material with suitable absorbent and containerize for disposal.

### **7. SPECIAL PRECAUTIONS**

Precautions to be Taken in Handling or Storing: Do not contaminate water, food, or feed by storage or disposal. Store in a secure, dry, well-ventilated separate room, building or covered area. Keep away from sources of ignition and protect from exposure to fire and heat.  
Other Precautions: Not for storage in or around the home. Wash thoroughly after handling. Do not eat, drink, or smoke while using this product.

### **8. SPECIAL PROTECTION INFORMATION**

Respiratory Protection(Specify Type):

A NIOSH/MSHA chemical cartridge respirator should be worn if PEL or TLV is exceeded.

Ventilation:

Local Exhaust: Yes  
Mechanical(General): Yes  
Special: No  
Other: No

Protective Gloves:

Rubber, neoprene, PVC, or equivalent.

Eye Protection:

Splash proof chemical safety goggles should be worn at all times.

Other Protective Clothing or Equipment:

Lab apron, eye wash, and safety shower.

### **9. PHYSICAL DATA**

Molecular Weight: 158.110

Melting Point: N/A

Boiling Point: 100 C

Vapor Pressure: No information available

Vapor Density(Air=1): No information available

Specific Gravity(H<sub>2</sub>O=1): 1.02 (8.52 lbs. per gallon)

Percent Volatile by Volume: 88%

Evaporation Rate(H<sub>2</sub>O=1): <1

Solubility in Water: Complete

Appearance and Odor: Colorless to pale yellow liquid; slight fishy odor.

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### **10. REACTIVITY DATA**

Stability: Stable  
Conditions to Avoid: Do not freeze. Keep away from sources of ignition and protect from exposure to fire and heat.  
Incompatibility(Materials to Avoid): Strong Alkalies  
Hazardous Decomposition Products: Combustion may produce CO, CO<sub>2</sub>, HCl, and alkylamines.  
Hazardous Polymerization: Will not occur

### **11. TOXICITY DATA**

Toxicity Data: oral-rat LD<sub>50</sub>: 3915 mg/kg

Effects of Overexposure:

Acute: See section 3

Chronic: Not listed as causing cancer by NTP, IARC, or OSHA.

Conditions Aggravated by Overexposure: Preexisting conditions of the respiratory tract, skin, and eyes.

Target Organs: No information available

Primary Route(s) of Entry: Ingestion, skin and eye contact.

### **12. ECOLOGICAL DATA**

EPA Waste Numbers: None

### **13. DISPOSAL INFORMATION**

Waste Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations.

Always contact a permitted waste disposer (TSD) to assure compliance.

### **14. TRANSPORT INFORMATION**

Non-regulated

### **15. REGULATORY INFORMATION**

EPA TSCA Status: On TSCA Inventory

Hazard Category for SARA Section 311/312 Reporting: Acute

	SARA EHS	SARA Sec. 313 Chemicals	CERCLA
RCRA Product or Sec.	Sec. 302	Name      Chemical	Sec. 103
Components 261.33	TPQ	List      Category	RQ      lbs.

Chlormequat Chloride      No      No      No  
No

### **16. ADDITIONAL INFORMATION**

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must

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carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

### Glossary

ACGIH.....American Conference of Governmental Industrial Hygienists  
CAS Number..Chemical Abstracts Service Number  
CERCLA.....Comprehensive Environmental Response, Compensation, and Liability Act  
DOT.....U.S. Department of Transportation  
IARC.....International Agency of Research on Cancer  
mppcf.....million particles per cubic foot  
N/A.....Not Available  
NTP.....National Toxicology Program  
OSHA.....Occupational Safety and Health Administration  
PEL.....Permissible Exposure Limit  
ppm.....parts per million  
RCRA.....Resource Conservation and Recovery Act  
SARA.....Superfund Amendments and Reauthorization Act  
TLV.....Threshold Limit Value  
TSCA.....Toxic Substances Control Act