



G E O
SPECIALTY CHEMICALS



Certified to ANSI/NSF 60

MUL = 200 mg/L

Material Safety Data Sheet

Section 1 - Chemical Product and Company Information

PRODUCT NAME: UltraFloc® 0045
 SYNONYMS: Water And Wastewater Treatment Coagulant/Flocculant
 SUPPLIER: GEO Specialty Chemicals
 ADDRESS: 701 Wissahickon Ave., Cedartown, GA 30125

NFPA Rating

HEALTH: 2
 FLAMMABILITY: 0
 REACTIVITY: 0

HMS Rating

HEALTH: 2
 FLAMMABILITY: 0
 REACTIVITY: 0

EMERGENCY TELEPHONE NUMBER: CHEMTREC 1-800-424-9300

EMERGENCY OVERVIEW

Corrosive Liquid! Clear to slightly hazy, colorless to yellow liquid with no appreciable odor. May cause skin, eye and respiratory irritation.

Section 2 - Composition Information

| <u>INGREDIENTS</u> | <u>CAS NO.</u> | <u>% WT/WT</u> | <u>PEL</u> | <u>TLV</u> |
|--------------------------|----------------|----------------|---|--|
| Trade Secret Ingredients | Trade Secret | 100 | *15 mg/m ³ (TD) *5 mg/m ³ (RF) | SOLUBLE SALTS: *2 mg/m ³ (TWA) |

*Aluminum metal, (as Al)

LISTED AS CARCINOGEN BY:

IARC: NO
 OSHA: NO

NTP: NO
 ACGIH: NO

PEL: OSHA Permissible Exposure Limit
 STEL: Short Term Exposure Limit
 HI: Hazardous Ingredient
 OM: Oil mist
 ST: Skin TWA

TWA: Time Weighted Average, 8-hr
 TLV: ACGIH Threshold Limit
 C.LIM: Ceiling Limit
 WF: Wax fume

TD: Total dust
 ND: Nuisance dust
 INP: Inhalable Particulate
 RF: Respirable fraction

Section 3 - Hazards Identification

ROUTES OF EXPOSURE

INHALATION: Inhalation of mist or spray may irritate respiratory tract.
SKIN CONTACT: May cause skin irritation, especially on prolonged contact.
SKIN ABSORPTION: No Data
EYE CONTACT: Direct eye contact may cause irritation, redness, and swelling. Prolonged exposure to Aluminum salts may cause conjunctivitis.
INGESTION: May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

EFFECTS OF OVEREXPOSURE

ACUTE OVEREXPOSURE: Possible eye, skin and respiratory tract irritation.
CHRONIC OVEREXPOSURE: May aggravate existing skin, eye, and lung conditions. Persons with kidney disorders have an increased risk from exposure based on general information found on aluminum salts.

Section 4 - First Aid Measures

EYES: Immediately flush with plenty of water for at least 15 minutes, holding eyelids apart to ensure flushing of the entire surface. Washing within one minute is essential to achieve maximum effectiveness. Seek medical attention.
SKIN: Wash thoroughly with soap and water, remove contaminated clothing and footwear. Wash clothing before reuse. Get medical attention if irritation should develop.
INHALATION: Remove to fresh air.
INGESTION: Seek medical attention immediately. Give large amounts of water to drink. If vomiting should occur spontaneously, keep airway clear. Never give anything by mouth to an unconscious person.
NOTES TO PHYSICIAN: Aluminum soluble salts may cause gastroenteritis if ingested. Treatment includes the use of demulcents. Note: Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5 - Fire Fighting Measures

| | | |
|---------------------------|--|---|
| FLASHPOINT: | NAPL | <u>FLAMMABLE LIMITS IN AIR, % BY VOLUME</u> |
| AUTOIGNITION TEMPERATURE: | NAPL | LOWER FLAMMABILITY LIMIT: NAPL |
| | | UPPER FLAMMABILITY LIMIT: NAPL |
| EXTINGUISHING MEDIA: | Water Spray, Carbon Dioxide, Foam, Dry Chemical. | |

FIRE OR EXPLOSION HAZARDS: May produce hazardous fumes or hazardous decomposition products
FIRE FIGHTING PROCEDURES: Product is a water solution and nonflammable. In a fire, this product may build up pressure and rupture a sealed container; cool exposed containers with water spray. Use self-contained breathing apparatus in confined areas, avoid breathing vapors or dust.

Section 6 - Accidental Release Measures

Stop leaks. Clean up spill immediately. Build dikes as necessary to contain flow of large spills. Do not allow liquid to enter stream or waterways. For small spills, use soda ash to neutralize, an inert material to absorb, or wash product to a chemical sewer. Place contaminated materials into containers and store in a safe place to await proper disposal. Wear adequate personal protective clothing and equipment. Caution use of soda ash may generate carbon dioxide gas. Provide adequate ventilation to spill area. Approved breathing apparatus may be necessary.

Section 7 - Handling and Storage

PRECAUTIONARY STATEMENTS:

CAUTION!

CORROSIVE LIQUID!

MAY CAUSE IRRITATION.

Avoid contact with eyes, skin, and clothing.

Avoid breathing mist or spray.

Wear chemical splash goggles, gloves, and protective clothing when handling.

Use with adequate ventilation and employ respiratory protection where mist or spray may be generated.

Wash thoroughly after handling.

May be harmful if swallowed or inhaled.

Keep away from heat and open flame.

Keep container closed when not in use.

FOR INDUSTRIAL USE ONLY.

HANDLING/STORAGE REQUIREMENTS:

Store in a cool, dry place away from direct heat. Keep container tightly closed when not in use. Do not store in unlined metal containers. Product may slowly corrode iron, brass, copper, aluminum and mild steel.

Section 8 - Exposure Controls/Personal Protection

VENTILATION REQUIREMENTS: Local exhaust ventilation recommended.

EYE PROTECTION: Chemical splash goggles and/or face shield.

SKIN PROTECTION: Chemical resistant gloves.

RESPIRATORY PROTECTION: When exposures exceed the PEL, use NIOSH/MSHA approved respirator in accordance with OSHA Respiratory Protection Requirements under 29 CFR 1910.134.

OTHER REQUIRED EQUIPMENT: Standard work clothing and work shoes. Safety shower and eye wash located in immediate area.

Section 12 - Ecological Information

| | | |
|--------|------------------------|-----|
| BOD5: | mg O ₂ /mg: | NAV |
| | ppm: | NAV |
| | Biodegradable, %: | NAV |
| BOD28: | mg O ₂ /mg: | NAV |
| | ppm: | NAV |
| | Biodegradable, %: | NAV |
| COD: | mg O ₂ /mg: | NAV |
| | ppm: | NAV |
| | Biodegradable, %: | NAV |

Aquatic Toxicity:
Not Available

Section 13 - Disposal Considerations

Dispose of in accordance with all applicable federal, state and local regulations.

Section 14 - Transportation Information

DOT Proper Shipping Name:

Corrosive liquid, acidic, inorganic, N. O. S. (Polyaluminum chlorosulfate solution), 8, UN3264, PG III, ERG# 154

Harmonized Tariff Schedule Number:

Section 15 - Regulatory Information

This product does not contain any ingredients subject to the reporting requirements of SARA Title III, Section 313 (40 CFR Part 372).

SARA Section 311/312: Acute Health Hazard.

TSCA: Components found in TSCA Inventory.

Section 16 - Other Information

| | |
|------------------------------|------------------------------------|
| PREPARER'S NAME: | Michael R. Oldfield |
| PREPARER'S TITLE: | Enhanced Aluminum Products Manager |
| PREPARER'S TELEPHONE NUMBER: | (501) 888-1211 |
| REFERENCE NUMBER: | 3221T |
| LAST REVISION DATE: | 10/10/05 |

The information herein is given in good faith but no warranty, expressed or implied is made

Legend

NAV = Not Available; NAPL = Not Applicable; NTES = None Established; TRSC = Trade Secret

Section 9 - Physical and Chemical Properties

| | | | |
|-----------------------------|--|------------------------|----------------------------|
| APPEARANCE: | Clear to slightly hazy, colorless to yellow liquid | | |
| ODOR: | No appreciable odor | | |
| SOLUBILITY IN WATER: | Complete | pH: | 1.5 - 2.5 (AS IS) |
| SPECIFIC GRAVITY (WATER=1): | 1.278 - 1.298 | DENSITY @ 25°C: | 10.66 - 10.83 lit gal |
| BOILING POINT: | NAV | MELTING POINT: | NAV |
| FREEZING POINT: | NAV | EVAPORATION RATE: | NAV |
| VAPOR PRESSURE: | NAV | VAPOR DENSITY (AIR=1): | NAV |
| VISCOSITY: | <100 cps | VOLATILES BY WEIGHT: | 55 - 70% Water |

Section 10 - Stability and Reactivity

STABLE: YES

HAZARDOUS POLYMERIZATION: NO

CONDITIONS TO AVOID: NONE

INCOMPATIBLE MATERIALS: Product is incompatible with alkalis.

DECOMPOSITION PRODUCTS: Thermal decomposition may release toxic and/or hazardous gases such as aluminum, Cl₂, and HCl.**Section 11 Toxicological Information**

Test data is based on a product of similar composition.

Conclusions are drawn from sources other than direct testing.

This product is expected to be an irritant to the skin, eyes and mucous membrane. Irritation may become severe on prolonged contact.