



MEG-301

SAFETY DATA SHEET / MATERIAL SAFETY DATA SHEET

Date of Preparation: March 3, 2014

Section 1: IDENTIFICATION

Product Name: MEG-301
Synonyms: Not available.
Product Use: Dust Suppression.
Restrictions on Use: Not available.
Manufacturer/Supplier: Martin Engineering
One Martin Place
Neponset, IL 61345
Phone Number: 1-800-544-2947
Emergency Phone: CHEMTREC (24 HR Emergency Telephone): 1-800-424-9300
Medical: Rocky Mountain Poison Center: 1-303-623-5716
Date of Preparation of SDS: March 3, 2014

Section 2: HAZARD(S) IDENTIFICATION

GHS INFORMATION

Classification: Sensitization - Skin, Category 1

LABEL ELEMENTS

Hazard

Pictogram(s):



Signal Word: Warning

Hazard Statements: May cause an allergic skin reaction.

Precautionary Statements

Prevention: Avoid breathing mist, vapors, or spray.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves, protective clothing and eye protection.

Response: If on skin: Wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.

Storage: Not applicable.

Disposal: Dispose of contents/container in accordance with applicable regional, national and local laws and regulations

Hazards Not Otherwise Classified: Not applicable.

Ingredients with Unknown Toxicity: None.



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This material is considered hazardous by the OSHA Hazard Communication Standard, (29 CFR 1910.1200).

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

| Hazardous Ingredient(s) | Common name / Synonyms | CAS No. | % wt./wt. |
|---|------------------------|-----------|-----------|
| 3,5,7-Triaza-1-azoniatricyclo[3.3.1.1 ^{3,7}]decane, 1-(3-chloro-2-propen-1-yl)-, chloride (1:1) | Quaternium-15; CTAC | 4080-31-3 | 0.1 - 1 * |

* Exact percentage (concentration) of composition has been withheld as a trade secret.

Section 4: FIRST-AID MEASURES

| | |
|----------------------------|--|
| Inhalation: | If inhaled: Call a poison center or doctor if you feel unwell. Acute and delayed symptoms and effects: May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. |
| Eye Contact: | If in eyes: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center or doctor if you feel unwell. Acute and delayed symptoms and effects: May cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision. |
| Skin Contact: | If on skin: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Acute and delayed symptoms and effects: May cause an allergic skin reaction. May cause skin irritation. Signs/symptoms may include localized redness, swelling, and itching. |
| Ingestion: | If swallowed: Call a poison center or doctor if you feel unwell. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Acute and delayed symptoms and effects: May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea. |
| General Advice: | In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible). |
| Note to Physicians: | Symptoms may not appear immediately. |

**Section 5: FIRE-FIGHTING MEASURES****FLAMMABILITY AND EXPLOSION INFORMATION**

Not flammable or combustible by OSHA/WHMIS criteria.

Sensitivity to Mechanical Impact: This material is not sensitive to mechanical impact.
Sensitivity to Static Discharge: This material is sensitive to static discharge at temperatures at or above the flash point.

MEANS OF EXTINCTION

Suitable Extinguishing Media: Small Fire: Dry chemical, CO₂, water spray or regular foam.
Large Fire: Water spray, fog or regular foam. Move containers from fire area if you can do it without risk.

Unsuitable Extinguishing Media: Not available.

Products of Combustion: Oxides of carbon. Oxides of nitrogen. Ammonia. Hydrogen chloride. Chlorine. Acrolein. Amines.

Protection of Firefighters: Fire may produce irritating, corrosive and/or toxic gases. Runoff from fire control or dilution water may cause pollution. Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.

Section 6: ACCIDENTAL RELEASE MEASURES

Emergency Procedures: Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Personal Precautions: Do not touch or walk through spilled material. Use personal protection recommended in Section 8.

Environmental Precautions: Keep out of drains, sewers, ditches, and waterways.

Methods for Containment: Stop leak if without risk. Do not flush to sewer or allow to enter waterways.

Methods for Clean-Up: Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

Other Information: See Section 13 for disposal considerations.

Section 7: HANDLING AND STORAGE**Handling:**

Do not swallow. Avoid breathing mist, vapors, or spray. Contaminated work clothing should not be allowed out of the workplace. See Section 8 for information on Personal Protective Equipment.

Storage:

Store away from incompatible materials. See Section 10 for information on Incompatible Materials. Keep out of the reach of children.

**Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION****Exposure Guidelines
Component**

Quaternium-15 (CTAC) [CAS No. 4080-31-3]

ACGIH: No TLV established.**OSHA:** No PEL established.**PEL:** Permissible Exposure Limit**TLV:** Threshold Limit Value

Engineering Controls: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapour, gas, etc.) below recommended exposure limits.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Eye/Face Protection: Safety glasses are recommended. Use equipment for eye protection that meets the standards referenced by CSA Standard CAN/CSA-Z94.3-92 and OSHA regulations in 29 CFR 1910.133 for Personal Protective Equipment.

Hand Protection: Wear protective gloves. Neoprene or Butyl Rubber gloves are recommended. Consult manufacturer specifications for further information.

Skin and Body Protection: Wear protective clothing.

Respiratory Protection: If engineering controls and ventilation are not sufficient to control exposure to below the allowable limits then an appropriate NIOSH/MSHA approved air-purifying respirator that meets the requirements of CSA Standard CAN/CSA-Z94.4-11, or self-contained breathing apparatus must be used. Supplied air breathing apparatus must be used when oxygen concentrations are low or if airborne concentrations exceed the limits of the air-purifying respirators.

General Hygiene Considerations: Handle according to established industrial hygiene and safety practices.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: A clear, fluorescent pink liquid having a very slight, mild odor.

Color: Fluorescent pink.

Odor: Very slight, mild.



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| | |
|---|------------------------------------|
| Odor Threshold: | Not available. |
| Physical State: | Liquid. |
| pH: | 8 to 9 |
| Melting Point / Freezing Point: | < 0 °C (32 °F) |
| Initial Boiling Point: | Not available. |
| Boiling Point: | > 100 °C (212 °F) |
| Flash Point: | > 93.3 °C (200 °F) (PMCC) |
| Evaporation Rate: | Not available. |
| Flammability (solid, gas): | Not applicable. |
| Lower Flammability Limit: | Not available. |
| Upper Flammability Limit: | Not available. |
| Vapor Pressure: | Not available. |
| Vapor Density: | Not available. |
| Relative Density: | 1.037 (Water = 1) at 20 °C (68 °F) |
| Solubilities: | Soluble in water. |
| Partition Coefficient: n- Octanol/Water: | Not available. |
| Auto-ignition Temperature: | 306 °C (582.8 °F) |
| Decomposition Temperature: | Not available. |
| Viscosity: | Not available. |
| Percent Volatile, wt. %: | Nil. |
| VOC content, wt. %: | Nil. |
| Density: | 1.037 g/mL at 20°C (68 °F) |
| Coefficient of Water/Oil Distribution: | Not available. |

Section 10: STABILITY AND REACTIVITY

| | |
|--|---|
| Reactivity: | Contact with incompatible materials. Sources of ignition. Exposure to heat. |
| Chemical Stability: | Stable under normal storage conditions. |
| Possibility of Hazardous Reactions: | None known. |
| Conditions to Avoid: | Contact with incompatible materials. Sources of ignition. Exposure to heat. |
| Incompatible Materials: | Strong acids. Strong bases. Strong oxidizers. |



Hazardous Decomposition Products: Oxides of carbon. Oxides of nitrogen. Ammonia.
Hydrogen chloride. Chlorine. Acrolein. Amines.

Section 11: TOXICOLOGICAL INFORMATION

EFFECTS OF ACUTE EXPOSURE

Product Toxicity

Oral: Not available.

Dermal: Not available.

Inhalation: Not available.

Component Toxicity

| Component | CAS No. | LD ₅₀ oral | LD ₅₀ dermal | LC ₅₀ |
|----------------------|-----------|-----------------------|-------------------------|------------------|
| Quaternium-15 (CTAC) | 4080-31-3 | 500 mg/kg (rat) | 565 mg/kg (rabbit) | Not available. |

Likely Routes of Exposure: Eye contact. Skin contact. Inhalation. Ingestion.

Target Organs: Skin. Eyes. Gastrointestinal tract. Respiratory system.

Symptoms (including delayed and immediate effects)

Inhalation: May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Eye: May cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Skin: May cause an allergic skin reaction. May cause skin irritation. Signs/symptoms may include localized redness, swelling, and itching.

Ingestion: May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Skin Sensitization: Not available.

Respiratory Sensitization: Not available.

Medical Conditions Not available.

Aggravated By Exposure:

EFFECTS OF CHRONIC EXPOSURE (from short and long-term exposure)

Target Organs: Skin. Eyes. Gastrointestinal tract. Respiratory system.

Chronic Effects: Prolonged or repeated contact may dry skin and cause irritation.

Carcinogenicity: This product does not contain any carcinogens or potential carcinogens as listed by ACGIH, IARC, OSHA, or NTP.

Mutagenicity: Quaternium-15 (CTAC) was genotoxic (mutagenic) to CHL cells and in the bacterial reverse mutation assay. However, it was not genotoxic (clastogenic) to rat whole blood lymphocytes. The substance is not genotoxic in rats in an *in vitro* unscheduled DNA Synthesis test, and it did not induce micronuclei in erythrocytes of treated mice and, consequently, was not genotoxic (clastogenic and/or aneugenic) in erythrocytes of mice.



Reproductive Effects: Quaternium-15 (CTAC) has caused birth defects in rats when administered at relatively high oral doses; no defects were observed at lower doses. Quaternium-15 (CTAC) did not cause any birth defects or any other effects on the fetus when relatively high doses were administered dermally, the most likely route of exposure.

Developmental Effects

Teratogenicity: Not available.

Embryotoxicity: Not available.

Toxicologically Synergistic Materials: Not available.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: **Quaternium-15 (CTAC):**
Lepomis macrochiorus (Bluegill): LC50 = 66 mg/L, 96-Hr;
Oncorhynchus mykiss (Rainbow trout): LC50 = 64 mg/L, 96-Hr;
Daphnia magna (Water flea): EC50 = 25.8 mg/L, 48-Hr;
Pseudokirchneriella subcapitata (Green algae): ErC50 = 1.5 mg/L, 96-Hr;
Activated sludge (Microorganisms): EC50 = 1504 mg/L.

Persistence / Degradability: This material is expected to be readily biodegradable.

Bioaccumulation / Accumulation: Not available.

Mobility in Environment: Not available.

Other Adverse Effects: Not available.

Section 13: DISPOSAL CONSIDERATIONS

Disposal Instructions: Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

Section 14: TRANSPORT INFORMATION

U.S. Department of Transportation (DOT)

Proper Shipping Name: Not regulated.

Class: Not applicable.

UN Number: Not applicable.

Packing Group: Not applicable.

Label Code: Not applicable.



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Canada Transportation of Dangerous Goods (TDG)

Proper Shipping Name: Not regulated.

Class: Not applicable.

UN Number: Not applicable.

Packing Group: Not applicable.

Label Code: Not applicable.

Section 15: REGULATORY INFORMATION

Chemical Inventories

US (TSCA)

The components of this product are in compliance with the chemical notification requirements of TSCA.

Canada (DSL)

The components of this product are in compliance with the chemical notification requirements of the NSN Regulations under CEPA, 1999.

Federal Regulations

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS Classification: Not a controlled product.

Hazard Symbols: None.

United States

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SARA Title III

| Component | Section 302 (EHS) TPQ (lbs.) | Section 304 EHS RQ (lbs.) | CERCLA RQ (lbs.) | Section 313 | RCRA CODE | CAA 112 (r) TQ (lbs.) |
|---------------|------------------------------|---------------------------|------------------|-------------|-------------|-----------------------|
| Quaternium-15 | Not listed. | Not listed. | Not listed. | 313 | Not listed. | Not listed. |

State Regulations

Massachusetts

US Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

| Component | CAS No. | RTK List |
|---------------------|----------|----------|
| Methylene chloride | 75-09-2 | E |
| 1,3-Dichloropropene | 542-75-6 | E |

Note: E = Extraordinarily Hazardous Substance



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New Jersey

US New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

Component

Quaternium-15 (CTAC)

CAS No.

4080-31-3

RTK List

Listed.

Pennsylvania

US Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

No components are listed.

California

California Prop 65: WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Component

Methylene chloride

1,3-Dichloropropene

Type of Toxicity

cancer

cancer

Section 16: OTHER INFORMATION

Disclaimer:

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for his own particular use.

Date of Preparation of SDS: March 3, 2014

SDS Expiry Date (Canada): March 2, 2017

Version: 1.0

GHS SDS Prepared by: Aegis Regulatory Inc.

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