Section 1: IDENTIFICATION

Product Name: WT-1001

Synonyms: Not available.

Product Use: Dust control agent in industrial applications.

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: Slip hazard when spilled.

Ingredients with Unknown Toxicity: None.

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.
2,4-Pentanediol, 2-methyl-	Hexylene glycol	107-41-5	5 - 10 *
3,5,7-Triaza-1-azoniatricyclo[3.3.1.13,7]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: Causes eye irritation by WHMIS criteria. 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. The product can be ignited at high temperatures and will burn.

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: Do not use straight streams.

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: Slip hazard when spilled. 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

Hexylene glycol [CAS No. 107-41-5]
ACGIH: 25 ppm (C); (1974)
OSHA: 25 ppm (TWA) [Vacated];

Quaternium-15 (CTAC) [CAS No. 4080-31-3]
ACGIH: No TLV established.
OSHA: No PEL established.

PEL: Permissible Exposure Limit
TLV: Threshold Limit Value
TWA: Time-Weighted Average
C: Ceiling

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: Wear safety glasses. Ensure that eyewash stations are close to the workstation location. 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.
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. Acrolein.

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}
Hexylene glycol	107-41-5	3097 mg/kg (mouse)	8.56 mL/kg (rabbit)	> 310 mg/m³ (rat); 1H
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. Nervous 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: Causes eye irritation by WHMIS criteria. 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 Aggravated By Exposure: Not available.

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

Target Organs: Skin. Eyes. Gastrointestinal tract. Respiratory system. Nervous 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: Hexylene glycol does not induce gene mutations in bacterial strains, mitotic gene conversion in yeast or chromosome aberrations in CHO cell *in vitro*. 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: Hexylene glycol shows minor foetotoxicity at maternally toxic dose levels; there was no evidence of teratogenicity. 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: There was no evidence of teratogenicity after treatment with hexylene glycol.

Embryotoxicity: Not available.

Toxicologically Synergistic Materials: Not available.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity:

Hexylene glycol:
Gambusia affinis (Mosquito fish): LC50 = 8510 mg/L, 96-Hr;
Ceriodaphnia reticulata (Invertebrates): EC50 = 2800 mg/L, 48-Hr;
Rana catesbiana (Tadpoles): EC50 = 11800 mg/L, 96-Hr;
Selenastrum capricornutum (Freshwater algae): EC50 > 429 mg/L, 72-Hr.

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 product is completely soluble in water and it is expected to be biodegradable in both aerobic and anaerobic conditions. This product is not expected to affect the pH of water.
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.

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.

ICAO/IATA

Proper Shipping Name:	This product is non-hazardous per IATA regulations and can be transported internationally.
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: Class D2B - Eye irritant.

Hazard Symbols:

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
Hexylene glycol	107-41-5	Listed.

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

Component	CAS No.	RTK List
Hexylene glycol	107-41-5	Listed.
Quaternium-15 (CTAC)	4080-31-3	Listed.

Pennsylvania

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

Component	CAS No.	RTK List
Hexylene glycol	107-41-5	Listed.

California

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

Component	Type of Toxicity
Methylene chloride	cancer
1,3-Dichloropropene	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: 1.1

GHS SDS Prepared by: **Aegis Regulatory Inc.**

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