



Safety Data Sheet

Section 01 - Identification

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|-------------------------------------|---|
| Product Identifier | Floquat FL 4540 PWG Polymer |
| Other Means of Identification | None |
| Product Use and Restrictions on Use | Cationic polymer used for clarification of water and wastewater in industrial, mining and municipal applications. |
| Initial Supplier Identifier | ClearTech Industries Inc. 1500 Quebec Avenue Saskatoon, SK. Canada S7K 1V7 |
| Prepared By | ClearTech Industries Inc. Technical Writer Phone: 1 (800) 387-7503 |
| 24-Hour Emergency Phone | Phone: 1 (306) 664 – 2522 |

Section 02 - Hazard Identification

GHS-Classification

This product has been assessed in accordance with the Hazardous Products Regulations and is not classified as a hazardous substance or mixture.

Section 03 - Composition / Information on Ingredients

| Chemical Name | CAS Number | Weight % | Unique Identifiers |
|--|------------|----------|--------------------|
| Poly(diallyldimethylammonium chloride) | 26062-79-3 | >85% | Not Available |

Section 04 - First Aid Measures

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|---------------------------|--|
| Inhalation | If symptoms are experienced, remove victim to fresh air. Give artificial respiration only if breathing has stopped. If breathing is difficult, give oxygen. Seek medical attention if irritation persists. |
| Skin Contact / Absorption | Rinse skin with water and soap. Seek medical attention if irritation occurs or persists. |
| Eye Contact | Immediately flush eyes with plenty of water for at least 30 minutes. Forcibly hold eyelids apart to ensure complete irrigation of eye tissue. Seek medical attention. |
| Ingestion | Rinse mouth. DO NOT INDUCE VOMITING. Seek medical attention if symptoms occur. |
| Additional Information | Not Available |

Section 05 - Fire Fighting Measures

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| Suitable Extinguishing Media | Water, water spray, foam, carbon dioxide (CO ₂), dry powder. |
| Unsuitable Extinguishing Media | None. |

Specific Hazards Arising From the Chemical Carbon oxides and nitrogen oxides.

Special Protective Equipment and Precautions for Fire-Fighters Wear NIOSH-approved self-contained breathing apparatus and protective clothing.

Further Information Not Available

Section 06 - Accidental Release Measures

Personal Precautions / Protective Equipment / Emergency Procedures Wear appropriate personal protective equipment. Ventilate area. Only enter area with PPE. Stop or reduce leak if safe to do so.

Environmental Precautions Do not contaminate water. Do not flush into surface of water.

Methods and Materials for Containment and Cleaning Up Do not flush with water. Dam up. Soak up with inert absorbent material. If liquid has been spilt in large quantities clean up promptly by scoop or vacuum. Keep in suitable and closed containers for disposal. AFTER CLEANING, flush away traces with water.

Section 07 - Handling and Storage

Precautions for Safe Handling Use proper equipment for lifting and transporting all containers. Use sensible industrial hygiene and housekeeping practices. Wash thoroughly after handling. Avoid all situations that could lead to harmful exposure.

Conditions for Safe Storage Keep in a dry, cool place (0-30°C). Keep away from heat and sources of ignition. Freezing will affect the physical condition and may damage the material.

Incompatibilities None.

Section 08 - Exposure Controls and Personal Protection

Exposure Limit(s)

| Component | Regulation | Type of Listing | Value |
|----------------|---------------|-----------------|-------|
| Floquat FL4540 | Not Available | | |

Engineering Control(s)

Ventilation Requirements Mechanical ventilation (dilution or local exhaust), process or personnel enclosure and control of process conditions must be provided in accordance with all fire codes and regulatory requirements. Supply sufficient replacement air to make up for air removed by exhaust systems.

Other Emergency shower and eyewash must be available and tested in accordance with regulations and be in close proximity.

Protective Equipment

Eyes/Face No specific requirements, but it is good practice to wear chemical safety glasses.

Hand Protection No specific requirements, but it is good practice to prevent skin contact by wearing impervious gloves of chemical resistance.

Skin and Body Protection No specific requirements, but it is good practice to prevent skin contact by wearing body suits, aprons and/or coveralls.

No special footwear is required other than what is mandated at place of work.

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| Respiratory Protection | In case of insufficient ventilation, we suitable respiratory equipment. Respiratory protection is normally not needed. |
| Thermal Hazards | Not Available |

Section 09 - Physical and Chemical Properties

Appearance

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|------------------------|----------------|
| Physical State | Liquid |
| Colour | Clear to Amber |
| Odour | Odourless |
| Odour Threshold | Not Applicable |

Property

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|--|-------------------------------|
| pH | 3-7 |
| Melting Point/Freezing Point | <0°C |
| Initial Boiling Point and Boiling Range | >100°C |
| Flash Point | Does not flash. |
| Evaporation Rate | Not Available |
| Flammability | Non-flammable |
| Upper Flammable Limit | Not Available |
| Lower Flammable Limit | Not Available |
| Vapour Pressure (mm Hg, 20°C) | 2.3 kPa @20°C |
| Vapour Density (Air=1) | Not Available |
| Relative Density | Not Available |
| Solubility(ies) | Completely miscible in water. |
| Partition Coefficient: n-octanol/water | Not Available |
| Auto-ignition Temperature | Does not ignite. |
| Decomposition Temperature | Not Available |
| Viscosity | Not Available |
| Explosive Properties | Not Available |
| Specific Gravity (Water=1) | 1.1-1.2 |
| % Volatiles by Volume | Not Available |

Formula Not Available

Molecular Weight Not Available

Section 10 - Stability and Reactivity

Reactivity Not Available

Stability Stable.

Possibility of Hazardous Reactions Polymerization will not occur.

Conditions to Avoid Extremes of temperatures. Protect from light, moisture and damage.

Incompatible Materials None.

Hazardous Decomposition Products Thermal decomposition may produce: hydrogen chloride gas, nitrogen oxides (NO_x), carbon oxides (CO_x), hydrogen cyanide.

Section 11 - Toxicological Information

Acute Toxicity

| Component | Oral LD ₅₀ | Dermal LD ₅₀ | Inhalation LC ₅₀ |
|----------------|-----------------------|-------------------------|-----------------------------|
| Floquat FL4540 | >5000mg/kg (rat) | >5000mg/kg (rat) | Not Available |

Chronic Toxicity – Carcinogenicity

| Component | IARC |
|----------------|--|
| Floquat FL4540 | None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen. |

Skin Corrosion/Irritation May cause skin irritation with susceptible persons.

Ingestion Not expected to be toxic by ingestion.

Inhalation Not expected to be toxic by inhalation.

Serious Eye Damage/Irritation May cause slight temporary eye irritation with susceptible persons.

Respiratory or Skin Sensitization Not sensitizing.

Germ Cell Mutagenicity Not mutagenic.

Reproductive Toxicity Not toxic for reproduction.

STOT-Single Exposure Not Available

STOT-Repeated Exposure Not Available

Aspiration Hazard Not Available

Synergistic Materials Not Available

Section 12 – Ecological Information

Ecotoxicity

| Component | Toxicity to Algae | Toxicity to Fish | Toxicity to Daphnia and Other Aquatic Invertebrates |
|--|-------------------|------------------|---|
| Poly(diallyldimethylammonium chloride) | Not Available | Not Available | LC ₅₀ (Daphnia magna, 48hr): 0.32mg/L |

| | |
|------------------------------|----------------------------|
| Biodegradability | Not readily biodegradable. |
| Bioaccumulation | Does not bioaccumulate. |
| Mobility | Not Available |
| Other Adverse Effects | Not Available |

Section 13 – Disposal Considerations

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|--|---|
| Waste From Residues/Unused Products | Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act. |
| Contaminated Packaging | Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act. |

Section 14 – Transport Information

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|-----------------------------------|--|
| UN Number | Not Regulated |
| UN Proper Shipping Name | Not Regulated |
| Transport Hazard Class(es) | Not Regulated |
| Packaging Group | Not Regulated |
| Environmental Hazards | Not listed as a marine pollutant under Canadian TDG Regulations, schedule III. |
| Special Precautions | Not Available |
| Transport in Bulk | Not Available |

TDG

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| Other | Secure containers (full and/or empty) with suitable hold down devices during shipment and ensure all caps, valves, or closures are secured in the closed position. |
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TDG PRODUCT CLASSIFICATION: This product has been classified on the preparation date specified at section 14 of this MSDS / SDS, for transportation in accordance with the requirements of part 2 of the Transportation of Dangerous Goods Regulations. If applicable, testing and/or published test data regarding the classification of this product are listed in the references at section 16 of this MSDS / SDS.

Section 15 – Regulatory Information

NOTE: THE PRODUCT LISTED ON THIS SDS HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CANADIAN CONTROLLED PRODUCTS REGULATIONS. THIS SDS CONTAINS ALL INFORMATION REQUIRED BY THOSE REGULATIONS.

Section 16 – Other Information

Preparation Date September 25, 2015

Note: The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations.

Attention: Receiver of the chemical goods / SDS coordinator

As part of our commitment to the Canadian Association of Chemical Distributors (CACD) Responsible Distribution[®] initiative, ClearTech Industries Inc. and its associated companies require, as a condition of sale, that you forward the attached Safety Data Sheet(s) to all affected employees, customers, and end-users. ClearTech will send any available supplementary handling, health, and safety information to you at your request.

If you have any questions or concerns please call our customer service center.

References:

- 1) CHEMINFO
- 2) eChemPortal
- 3) TOXNET
- 4) Transportation of Dangerous Goods Canada
- 5) HSDB
- 6) ECHA
- 7) PAN

ClearTech Industries Inc. - Locations

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