



Cationic polymer

Safety Data Sheet

638 SOI SUANPLU7, SOUTHSATHORN ROAD, T.TUNGMAHAMEK, A.SATHORN, BANGKOK 10120, THAILAND

Date of issue: 07/06/2016 Revision date: 09/25/2018 Version: 1.1

Section 01 - Product And Company Identification

Product Identifier	Cationic polymer
Product Use and Restrictions on Use	Cationic polymer used for clarification of water and wastewater in industrial, mining and municipal applications.
Initial Supplier Identifier	CHEMWORK CO.,LTD. 638 SOI SUANPLU7, SOUTHSATHORN ROAD T.TUNGMAHAMEK, A.SATHORN BANGKOK 10120, THAILAND TEL: 0-2679-3915, 0-2679-3916

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
Cationic polymer	26062-79-3	>85%	Not Available

Section 04 - First Aid Measures

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

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.

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

Physical State Liquid

Colour Clear to Amber

Odour Odourless

Odour Threshold Not Applicable

Property

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

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

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

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, 2018
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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.