

# Safety Data Sheet



## Clearflow Granular Flocculant 690MLC

### 1. Identification of the Product and the Company

**Product Name(s):** Clearflow Granular Flocculant 690MLC, Water Lynx 690MLC, WLG 690MLC, WL 690MLC

**Material Uses:** Clearflow Granular Flocculant 690MLC is used as a processing aid for industrial applications.

**Product Type:** Granular Solid                      **Product Family:** Cationic Polymer

**Supplier:** Clearflow Group Inc.                      #140, 134 Pembina Road                      Sherwood Park, AB T8H 0M2  
Ph. 780-410-1403                      Fx. 780-410-1406                      [www.clearflowgroup.com](http://www.clearflowgroup.com)

**In Case of Emergency:** 780-410-1403

### 2. Composition / Information on Ingredients

**Identification:** Cationic water-soluble polymer.

#### Regulated Components:

Substance Name:	CAS Number	Weight %	Ingredient Disclosure List
Adipic Acid	124-04-9	<= 5	yes
Sulfamic Acid	5329-14-6	<= 2.5	yes

### 3. Hazard Identification

Spills produce extremely slippery surfaces.

#### Canada Hazard Identification

Canadian WHMIS Class: Not controlled.

### 4. First Aid Measures

**Inhalation:** Move to fresh air immediately.

**Skin contact:** Wash off immediately with soap and plenty of water. In case of persistent skin irritation, consult a physician.

**Eye Contact:** Rinse with plenty of water, also under the eyelids. Get medical attention.

**Ingestion:** Rinse mouth with water. Do not induce vomiting. Get medical attention if symptoms occur.

### 5. Fire-Fighting Measures

**Suitable Extinguishing Media:** Water, water spray, foam, dry powder, carbon dioxide (CO<sub>2</sub>).

**Precautions:** Spills that become wet produce extremely slippery surfaces.

**Special Protective Equipment:** No special protective equipment is required for firefighters.

**NFPA Ratings for this product are:** HEALTH 1                      FLAMMABILITY 0                      INSTABILITY 1

**HMIS Ratings for this product are:** HEALTH 1                      FLAMMABILITY 0                      REACTIVITY 1

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## 6. Accidental Release Measures

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- Personal precautions:** No special precautions required. Wear adequate personal protective equipment (see section 8. Exposure Controls / Personal Protection). Keep people away from spill/leak.
- Environmental Precautions:** As with all chemical products, do not contaminate surface water.
- Procedure for Clean-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.
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## 7. Handling and Storage

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- Handling:** **Safe handling advice:** Avoid contact with skin and eyes. Avoid dust formation. Do not breathe dust.
- Storage:** Keep in a dry place. Storage temperature: -40°C – 50°C.
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## 8. Exposure Controls / Personal Protection

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### Personal Protection

- Respiratory:** Dust safety masks are recommended where concentration of total dust is more than 10 mg/m<sup>3</sup>.
- Hands:** PVC or other plastic material gloves.
- Eyes:** Safety glasses with side-shields. Do not wear contact lenses where this product is used.
- Skin and body:** Chemical resistant apron or protective suit if splashing or repeated contact with aqueous solution is likely.

### Hygiene Measures:

Wash hands before breaks and at the end of workday. When using: do not eat, drink or smoke. Handle in accordance with good industrial hygiene and safety practice.

### Engineering Controls:

Use local exhaust if dusting occurs. Natural ventilation is adequate in absence of dusts.

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## 9. Physical and Chemical Properties

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- Physical State:** Granular solid
- Odor:** None
- Color:** White
- pH:** 2.5-4.5 @ 5 g/L
- Approx. Bulk Density:** 0.6-0.9
- Melting/Freezing Point:** Not applicable.
- Flash Point:** Not applicable.
- Autoignition Temperature:** Not applicable.
- Solubility:** See technical bulletin.
- LogPow:** 0
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## 10. Stability and Reactivity

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- Chemical Stability:** Stable. Hazardous polymerisation does not occur.
- Materials to Avoid:** Oxidizing agents may cause exothermic reactions.
- Hazardous Decomposition Products:** Thermal decomposition may produce Hydrogen Chloride gas, Carbon Oxides (COx), Nitrogen Oxides (NOx).
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## 11. Toxicological Information

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### Acute Toxicity

- Oral:** Oral LD50 (Rat) > 5000 mg/kg  
**Dermal:** The results of testing on rabbits showed this material to be non-toxic even at high dose levels.  
**Inhalation:** The product is not expected to be toxic by inhalation.

### Irritation

- Skin:** Based on laboratory tests, this product does not cause skin irritation.  
**Eyes:** Testing conducted according to the Draize technique showed the material produces no corneal or iridial effects and only slight transitory conjunctival effects similar to those which all granular materials have on conjunctivae.

### Sensitization

The results of testing on guinea pigs showed this material to be non-sensitizing.

### Chronic toxicity

A one-year feeding study on dogs did not reveal adverse health effects. A two-year feeding study on rats did not reveal adverse health effects.

### Component Information

- Adipic Acid: eye irritant  
Sulfamic Acid: skin irritant, severe eye irritant

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## 12. Ecological Information

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### Aquatic Ecotoxicity

Ingredient	Species	Test	Result
Whole Product	<i>Danio rerio</i> (zebra fish)	LC50 96 hr (OECD 203)	5-10 mg/L
	<i>Daphnia magna</i> (water flea)	LC50 48 hr (OECD 202)	20-50 mg/L
	Algae*	-	-
Sulfamic Acid	<i>Pimephales promelas</i> (fathead minnow)	LC50 96 hr	70.3 mg/L

\*Algal inhibition tests are not appropriate. The flocculation characteristics of the product interfere directly in the test medium preventing homogeneous distribution which invalidates the test.

### Environmental Fate:

- Bioaccumulation:** Does not bioaccumulate.  
**Hydrolysis:** At normal pHs (>6) the polymer degrades due to hydrolysis to more than 70% in 28 days. The hydrolysis products are not harmful to aquatic organisms.  
**LogPow:** 0

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## 13. Disposal Considerations

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### **Waste from residues / unused product:**

Dispose of in accordance with local, provincial and federal regulations.

### **Contaminated Packaging:**

Rinse empty containers with water and use the rinse water to prepare the working solution. Can be landfilled or incinerated, when in compliance with local, provincial and federal regulations.

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## 14. Transport Information

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### TDG (Canada)

Not classified as dangerous in the meaning of TDG (Canada) regulations.

### IMDG/IMO

Not classified as dangerous in the meaning of IMO/IMDG regulations.

### ICAO/IATA

Not classified as dangerous in the meaning of ICAO/IATA regulations.

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## 15. Regulatory Information

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### Canadian WHMIS Class:

Not controlled.

### Canadian Ingredients Disclosure List (IDL):

Adipic acid, Sulfamic Acid.

### Domestic Substances List (DSL):

All components of this product are either listed on the inventory or are exempt from listing.

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## 16. Other Information

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**Additional Information:** This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

**Prepared By:** Clearflow Group Inc.

**Date of Issue:** 1/05/2021

**Change List:** Initial document creation – 5/05/2015  
Formatting, data review – 6/28/2017  
Data review, SDS conversion – 4/05/2019  
Logo update, data review, product name update – 1/05/2021

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\*\*\*END OF SDS\*\*\*