Safety Data Sheet



Clearflow Granular Flocculant 665MLC

1. Identification of the Product and the Company

Product Name: Clearflow Granular Flocculant 665MLC, Water Lynx 665MLC, WLG 665MLC, WL 665MLC

Product Type: Granular Solid Product Family: Cationic Polymer

Material Uses: Clearflow Granular Flocculant 665MLC is used as a processing aid for industrial applications.

Supplier: Clearflow Group Inc.

#140-134 Pembina Road Sherwood Park, AB T8H 0M2

Ph. 780-410-1403 Fx. 780-410-1406

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 (CO₂).

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

6. Accidental Release Measures

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.

7. Handling and Storage

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: $-40^{\circ}\text{C} - 50^{\circ}\text{C}$.

8. Exposure Controls / Personal Protection

Personal Protection

Respiratory: Dust safety masks are recommended where concentration of total dust is more than 10 mg/m³.

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.

9. Physical and Chemical Properties

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

10. Stability and Reactivity

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).

11. Toxicological Information

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 conjuctival effects similar to those which all granular materials have on conjuctivae.

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 Adic: skin irritant, severe eye irritant

12. Ecological Information

Aquatic Ecotoxicity

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

13. Disposal Considerations

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.

14. Transport Information

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.

15. Regulatory Information

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.

16. Other Information

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: Company name and logo, data review – 5/27/2016

Data Review - 4/24/2018

Data Review, SDS conversion – 4/04/2019

Logo update, data review, product name update -1/05/2021

Disclaimer: NOTICE TO READER:

Clearflow, expressly disclaims all express or implied warranties of merchantability and fitness for a particular purpose, with respect to the product or information provided herein, and shall under no

circumstances be liable for incidental or consequential damages.

Do not use ingredient information and/or ingredient percentages in this SDS as a product specification. For product specification information refer to a Product Specification Sheet and/or a

Certificate of Analysis. These can be obtained from Clearflow Group Inc.

All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources. While the information is believed to be accurate, Clearflow makes no representations as to its accuracy or sufficiency. Conditions of use are beyond Clearflow's control and therefore users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product, or from the publication or use of, or reliance upon, information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process.

END OF SDS