Safety Data Sheet



Clearflow Granular Flocculant 360

1. Identification of the Product and the Company **Product Name: Clearflow Granular Flocculant 360** Product Type: Granular Flocculant **Chemical Family:** Anionic Polymer Material Uses: Clearflow Granular Flocculant 360 is used as a flocculating agent in municipal and industrial water and wastewater treatment. **Supplier:** #140, 134 Pembina Rd. Sherwood Park, AB T8H 0M2 Clearflow Group, Inc. Ph. 780-410-1403 www.clearflowgroup.com Fx. 780-410-1406 In Case of Emergency: 780-410-1403

2. Composition / Information on Ingredients

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

3. Hazard Identification

Potential Acute Health Effects				
Inhalation:	Inhalation of vapours, mists or dusts of the product may be irritating to the respiratory system. May irritate mouth, nose, and throat.			
Ingestion:	May cause irritation of the lining of the stomach.			
Skin:	Mild to Moderate irritation can occur. Prolonged or repeated contact may cause defatting and drying of the skin. Prolonged or repeated contact may cause discomfort and local redness.			
Eyes:	May cause eye irritation. May result in mild to moderate irritation to eyes.			

4. First Aid Measures

Inhalation:	Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.
Skin contact:	In case of contact, rinse with soap and water. Remove contaminated clothing and launder before reuse.
Eye Contact:	In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes.
	Seek medical attention if irritation persists.
Ingestion:	Do NOT induce vomiting. Never give anything by mouth to an unconscious or convulsing person. If
	vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the longs.
Notes to Physician:	

5. Fire-Fighting Measures

Flash Point:	None.				
Flash Point Method:	Not applicable.				
Autoignition Temperature:	Not available.				
Flammable Limits in Air (%):	Not available.				
<u>Extinguishing Media</u> Suitable: Not Suitable:	Use an extinguishing media suitable for the surrounding fire. None known.				
Hazardous Thermal Decomposition Products:	Carbon and Nitrogen Oxides.				
Special Protective Equipment for Fire-Fighters:	Fire fighters should wear full protective clothing, including self-contained breathing equipment.				
NFPA Ratings for this product HMIS Ratings for this product					

6. Accidental	Release Me	easures			
Personal precautions:		Wear appropriate protective equipment. Wet product and aqueous solutions of product are very slippery. Trace amounts of product on smooth surfaces can become extremely slippery when wet.			
Environmental Precautions:		Prevent entry of concentrated solutions into sewers or streams, dike if needed.			
Procedure for Clean-up:		Sweep or scoop dry material and place in appropriate container. Absorb aqueous solutions with a dry inert material, such as clay, and place in an appropriate waste disposal container. After most of the material has been cleaned-up clean the area with warm, soapy water.			
7. Handling a	and Storage				
		se only. Handle and open containers with care. Avoid contact with eyes, skin and clothing. Do p the containers closed when not in use. Protect against physical damage. Use appropriate ctive equipment.			

Storage: Store in a cool, dry area. Store in accordance with good industrial practices. Keep away from direct sunlight. Protect against physical damage.

8. Exposure Controls / Personal Protection

Personal Protection	
Respiratory:	A respirator should not be required when working with Clearflow Granular Flocculant 360.
Hands:	Use gloves appropriate for work or task being performed. Recommended: PVC, vinyl, or rubber.
Eyes:	Safety eyewear should be used when there is a likelihood of exposure. Recommended: Chemical
	goggles; also wear a face shield if splashing hazard exists.
Skin	Skin Contact should be prevented through the use of suitable protective clothing, gloves and
	footwear, selected for conditions of use and exposure potential. Consideration must be given both to
	durability as well as permeation resistance.
Other Personal	
Protection Data:	Ensure that eyewash stations and safety showers are proximal to the work-station location.
Engineering Controls:	Local exhaust ventilation as necessary to maintain exposure to within applicable limits.

9. Physical and Chemical Properties

7. I hysical and Chelin	
Physical State:	Crystalline Solid
Color:	White or off-white
рН:	~7
Specific Gravity:	~1.1
Boiling/Condensing Point :	Not available.
Melting/Freezing Point:	Not available.
Vapour Pressure:	Not available.
Vapour Density:	Not available.
% Volatile by Volume:	Not available.
Evaporation Rate:	Not available.
Solubility:	Completely soluble but dissolves very slowly.
VOCs:	Not available.
Viscosity:	Concentration dependant.
Molecular Weight:	Not available.
Other:	None

10. Stability and Reactivity	
Chemical Stability:	The product is stable.
Hazardous Polymerization:	Will not occur.
Conditions to Avoid:	High temperatures.
Materials to Avoid:	Strong bases such as sodium hydroxide may cause the release of ammonia.
Hazardous Decomposition Products:	At high temperatures carbon oxides and nitrogen oxides may be released upon decomposition.
Additional Information:	No additional information.

11. Toxicological Information

Principle Routes of Expos	sure					
Ingestion:	May cause irritation of the lining of the stomach.					
Skin contact:	Mild to moderate irritation can occur. Prolonged or repeated contact may cause defatting and drying of the skin. Prolonged or repeated contact may cause discomfort and local redness.					
Inhalation: Inhalation of vapours, mists or dusts of the product may be irritating to the respiratory syst irritate mouth, nose, and throat.						
Eye Contact:	May causes eye irritation. May result in mild to moderate irritation to eyes.					
Additional Information:	Prolonged and repeated contact with the skin can cause defatting and drying of the skin resulting in skin irritation and dermatitis.					
Acute Toxicity						
Acute Oral LD50:	Oral LD50 (Rat) > 5000 mg/kg					
Acute Dermal LD50:	Not available.					
Acute Inhalation LC50:	Not available.					

Carcinogenicity

2-Propenamide is a suspected human carcinogen, but is present at <0.05% (drinking water additive standard).

Carcinogenicity Comment: No additional information available. Reproductive Toxicity / Teratogenicity / Embryotoxicity / Mutagenicity: Not available.

12. Ecological Information

Aquatic Ecotoxicity				
Ingredient	Species	Test	Result	
Whole Product	Oncorhynchus mykiss (Rainbow Trout) Daphnia magna	LC50 96 hr (survival) EC50 48 hr (immobilization)	96.3 mg/L 341.3 mg/L	

Other Information:

Bioaccumulation:	The product is not expected to bioaccumulate.				
Persistence / Degradability:	Not readily biodegradable. Full environmental degradation is expected. Degradation initiation				
	and rate are dependent on UV exposure.				

13. Disposal Considerations

Disposal of Waste Method:	Disposal of all wastes must be done in accordance with municipal, provincial and federal regulations.
Contaminated Packaging:	Empty containers should be recycled or disposed of through an approved waste management facility.

14. Transport Information

Regulatory Information	UN Number	Proper Shipping Name	Hazard Class	PG*	Label	Additional Information
DOT (U.S.)	-	-	-	-	-	not a regulated product
TDG (Canada)	-	-	-	-	-	not a regulated product

PG* : Packaging Group

15. Regulatory Information		
Canadian DSL Inventory		ponents of this product are either on the Domestic Substances List (DSL), the Non- ic Substances List (NDSL) or exempt.
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, minor formatting, review of data $- \frac{1}{27}{2017}$ Formatting, address update, data review $- \frac{3}{4}{2019}$ Logo update, data review, product name update $- \frac{1}{05}{2021}$	
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.	
	specification.	redient information and/or ingredient percentages in this SDS as a product For product specification information refer to a Product Specification Sheet and/or a Analysis. These can be obtained from Clearflow Group, Inc.
	recognized tech representations and therefore u determine whe their use, hand information co	n appearing herein is based upon data obtained from the manufacturer and/or hnical sources. While the information is believed to be accurate, Clearflow makes no s as to its accuracy or sufficiency. Conditions of use are beyond Clearflow's control users are responsible to verify this data under their own operating conditions to ther the product is suitable for their particular purposes and they assume all risks of ling, and disposal of the product, or from the publication or use of, or reliance upon, ontained herein. This information relates only to the product designated herein, and to its use in combination with any other material or in any other process.

END OF SDS