

SAFETY DATA SHEET

According to Federal Regulation 29 CFR 1910.1200

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Product name: TRAMFLOC® 221 Cationic Granular Powder

Type of product: Mixture

Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Processing aid for industrial applications.

Uses advised against: none

Details of the supplier of the safety data sheet

Company: Tramfloc, Inc.
6046 FM 2920 Rd. #615
Spring, TX 77379-2542

Telephone: 888-929-8973

Telefax: 480-383-6895

E-mail address: water@tramfloc.com

Emergency telephone number:

24-hour emergency number: 800-424-9300 CHEMTREC (CCN 20412), Outside US 703-527-3887

SECTION 2: Hazards identification

According to Hazardous Products Regulations (HPR) (SOR/2015-17) Classification of the product

No need for classification according to GHS criteria for this product.

Label elements

The product does not require a hazard warning label in accordance with GHS criteria.

Hazards not otherwise classified

Very slippery when wet.

Labeling of special preparations (GHS):

This product is not combustible in the form in which it is shipped by the manufacturer, but may form a combustible dust through downstream activities (e.g. grinding, pulverizing) that reduce its particle size.

SECTION 3: Composition/information on ingredients

| Component | CAS # | % |
|----------------------|------------|--------|
| Acrylamide Copolymer | 69418-26-4 | 88-92% |
| Water | 7732-18-5 | 8-12% |

SECTION 4: First aid measures*Contact with skin:*

Wash with plenty of water and soap.

Contact with eyes:

Wash immediately with water for at least 15 minutes. If there is any irritation, OBTAIN IMMEDIATELY MEDICAL ATTENTION.

Swallowing:

Do not induce vomiting. Do not give anything to an unconscious person. Check for breathing and pulse, if present, place in the recovery position and obtain medical attention. If conscious rinse out the mouth with water. Give 3/4 L of water to drink immediately and repeat drinks of water at a rate of a cupful (approx. 250 mL) every 10 minutes.

SEEK A MEDICAL EXAMINATION IMMEDIATELY and present the safety data sheet.

Inhalation:

Ventilate the premises. The patient is to be removed immediately from the contaminated premises and made to rest in a well ventilated area. Should the patient feel unwell, OBTAIN MEDICAL ATTENTION.

SECTION 5: Fire-fighting measures*Extinguishing media*

Suitable extinguishing media: dry powder, foam, carbon dioxide

Unsuitable extinguishing media for safety reasons: water jet

Additional information:

If water is used, restrict pedestrian and vehicular traffic in areas where slip hazard may exist.

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

carbon oxides, nitrogen oxides

The substances/groups of substances mentioned can be released in case of fire. Very slippery when wet.

Advice for fire-fighters

Protective equipment for fire-fighting: Wear a self-contained breathing apparatus.

Further information: Dusty conditions may ignite explosively in the presence of an ignition source causing flash fire.

SECTION 6: Accidental release measures*Further accidental release measures:*

Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Avoid the formation and build-up of dust - danger of dust explosion. Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting and eliminate open flame and other sources of ignition. Forms slippery surfaces with water.

Personal precautions, protective equipment and emergency procedures

Use personal protective clothing.

Environmental precautions

Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

Nonsparking tools should be used.

SECTION 7. Handling and storage

Precautions for safe handling

Breathing must be protected when large quantities are decanted without local exhaust ventilation. Handle in accordance with good industrial hygiene and safety practice. Forms slippery surfaces with water.

Protection against fire and explosion:

Avoid dust formation. Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting and eliminate open flame and other sources of ignition. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids (2013 Edition) for safe handling.

Conditions for safe storage, including any incompatibilities

Unsuitable materials for containers: Aluminum

Further information on storage conditions: Store in unopened original containers in a cool and dry place. Avoid wet, damp or humid conditions, temperature extremes and ignition sources.

Storage stability:

Avoid extreme heat.

Protect from temperatures above: 60 °C

SECTION 8: Exposure controls/personal protection

No occupational exposure limits known.

Advice on system design:

It is recommended that all dust control equipment such as local exhaust ventilation and material transport

systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.

Personal protective equipment

Respiratory protection:

Wear a NIOSH-certified (or equivalent) organic vapor/particulate respirator.

Hand protection:

Chemical resistant protective gloves

Eye protection:

Safety glasses with side-shields.

Body protection:

light protective clothing

General safety and hygiene measures:

Handle in accordance with good industrial hygiene and safety practice.

Ensure adequate ventilation. Wearing of closed work clothing is recommended. Wear protective clothing as necessary to minimize contact. Handle in accordance with good industrial hygiene and safety practice. No eating, drinking, smoking or tobacco use at the place of work.

SECTION 9: Physical and chemical properties

| | |
|--------------------------|---|
| Color: | White Granule Powder |
| Appearance: | Crystalline Powder |
| Odor: | Odorless |
| pH: | 6-8 |
| Melting Point: | N/A |
| Boiling Point: | N/A |
| Flash Point: | N/A |
| Solid/ Gas Flammability: | As with many organic powders flammable dust clouds may form |
| Explosive Properties: | N/A |
| Oxidizing Properties: | N/A |
| Vapor Pressure: | N/A |
| Relative Density: | 600-900 Kg/m ³ |
| Solubility in Water: | Limited by viscosity |

| | |
|-------------------------------|-------|
| Vapor Density: | N/A |
| Percent Volatile (% by Wt): | 8-10% |
| Saturation in Air (% by Vol): | N/A |
| Evaporation Rate: | N/A |
| Autoignition Temperature: | N/A |
| Decomposition Temperature: | N/A |
| Partition Coefficient: | N/A |
| Odor Threshold: | N/A |

SECTION 10: Stability and reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals: No corrosive effect on metal.

Oxidizing properties: not fire-propagating

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

The product is not a dust explosion risk as supplied; however the build-up of fine dust can lead to a risk of dust explosions.

Stable under normal conditions.

No hazardous reactions known.

Conditions to avoid

Avoid extreme temperatures. Avoid humidity.

Incompatible materials

strong acids, strong bases, strong oxidizing agents

Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

SECTION 11: Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: No known acute effects.

Oral

Type of value: LD₅₀

Species: rat

Value: > 5,000 mg/kg (OECD Guideline 401)

Irritation / corrosion

Assessment of irritating effects: Not irritating to eyes and skin.

Skin

Species: rabbit

Result: non-irritant

Method: OECD Guideline 404

Eye

Species: rabbit

Result: non-irritant

Sensitization

Assessment of sensitization: Based on the ingredients, there is no suspicion of a skin-sensitizing potential.

Aspiration Hazard

No aspiration hazard expected.

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses. The product has not been tested. The statement has been derived from the properties of the individual components.

Genetic toxicity

Assessment of mutagenicity:

Based on the ingredients, there is no suspicion of a mutagenic effect.

Carcinogenicity

Assessment of carcinogenicity:

The whole of the information assessable provides no indication of a carcinogenic effect.

None of the components in this product at concentrations greater than 0.1% are listed by IARC; NTP, OSHA or ACGIH as a carcinogen.

Reproductive toxicity

Assessment of reproduction toxicity: Based on the ingredients, there is no suspicion of a toxic effect on

reproduction.

Teratogenicity

Assessment of teratogenicity: Based on the ingredients, there is no suspicion of a teratogenic effect.

Other Information

The product has not been tested. The statements on toxicology have been derived from products of a similar structure and composition.

Symptoms of Exposure

The most important known symptoms and effects are described in section

Further important symptoms and effects are so far not known.

SECTION 12: Ecological information

Toxicity

Toxicity to fish

LC₅₀ (96 h) > 100 mg/l, *Oncorhynchus mykiss* (static) (under static conditions in the presence of 10 mg/L humic acid)

Aquatic invertebrates

LC₅₀ (48 h) > 100 mg/l, *Daphnia magna*

Persistence and degradability

Assessment biodegradation and elimination (H₂O)

Not readily biodegradable (by OECD criteria).

Bio-accumulative potential

Assessment bioaccumulation potential

Based on its structural properties, the polymer is not biologically available.

Accumulation in organisms is not to be expected.

Mobility in soil

Assessment transport between environmental compartments

Information on: Anionic polyacrylamide

Adsorption to solid soil phase is expected.

Additional information

Other ecotoxicological advice:

The product has not been tested. The statements on ecotoxicology have been derived from products of a similar structure and composition.

SECTION 13: Disposal considerations

Waste disposal of substance:

Must be disposed of or incinerated in accordance with local regulations.

Container disposal:

Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

SECTION 14: Transport information

Land Transport (TDG, Transport Canada):

Not classified as a dangerous good under transport regulations.

Sea Transport (IMDG):

Not classified as a dangerous good under transport regulations.

Air Transport (IATA/ICAO):

Not classified as a dangerous good under transport regulations.

SECTION 15: Regulatory information

WHMIS CLASSIFICATION: Not WHMIS controlled

United States (USA): All components of this product are included on the TSCA Chemical Inventory or are not required to be listed on the TSCA Chemical Inventory.

Canada: All components of this product are included on the Domestic Substances List (DSL) or are not required to be listed on the DSL.

European Union (EU): All components of this product are included on the European Inventory of Existing Chemical Substances (EINECS) or are not required to be listed on EINECS.

SECTION 16: Other information

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, Tramfloc, Inc. makes no guarantee for results obtained, and assumes no responsibility for damages incurred by use of this product. It is the responsibility of the user to comply with all federal, state, and local laws and regulations.