SAFETY DATA SHEET

According to Federal Regulation 29 CFR 1910.1200

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

1.1. Product identifier

Product name: TRAMFLOC® 135

Type of product: Mixture

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

Identified uses: Anionic flocculant used as a processing aid for industrial applications.

Uses advised against: none

1.3. 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

1.4 Emergency telephone number:

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

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

Classification according to paragraph (d) of Regulation 29 CFR 1910.1200:

Not classified.

2.2. Label elements

Labelling according to paragraph (f) of Regulation 29 CFR 1910.1200:

Hazard symbol(s): none
Signal word: none
Hazard statement(s): none
Precautionary statement(s): none

2.3. Other hazards

Aqueous solutions or powders that become wet render surfaces extremely slippery.

SECTION 3. Composition/information on ingredients

3.1 Substances

Not applicable, this product is not a substance.

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3.2 Mixtures

Hazardous components

Contains no reportable hazardous substances

SECTION 4.First aid measures

4.1. Description of first aid measures

Inhalation:

Move to fresh air. No hazards which require special first aid measures.

Skin contact:

Wash off with soap and plenty of water. Get medical attention if irritation develops and persists.

Eye contact:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. In case of persistent eye irritation, consult a physician.

Ingestion:

Rinse mouth with water. Do NOT induce vomiting. No hazards which require special first aid measures.

4.2. Most important symptoms and effects, both acute and delayed

None.

4.3. Indication of any immediate medical attention and special treatment needed.

None reasonably foreseeable.

Other information:

Aqueous solutions or powders that become wet render surfaces extremely slippery.

SECTION 5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Use water spray, foam, dry powder or carbon dioxide.

Unsuitable extinguishing media:

None.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products:

Thermal decomposition may produce: nitrogen oxides (NO_x) , carbon oxides (CO_x) . Hydrogen cyanide (hydrocyanic acid) may be produced in the event of combustion in an oxygen deficient atmosphere.

5.3. Advice for fire-fighters

Protective measures:

In the event of fire, wear self-contained breathing apparatus.

Other information:

Aqueous solutions or powders that become wet render surfaces extremely slippery.

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SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions:

Aqueous solutions or powders that become wet render surfaces extremely slippery.

Protective equipment:

Wear adequate personal protective equipment (see Section 8 Exposure Controls/Personal Protection).

Emergency procedures:

Keep people away from spill/leak.

6.2. Environmental precautions

As with all chemical products, do not flush into surface water.

6.3. Methods and material for containment and cleaning up

Small spills:

Do not flush with water. Clean up promptly by sweeping or vacuum. Keep in suitable, closed containers for disposal. After cleaning, flush away traces with water.

Large spills:

Do not flush with water. Clean up promptly by sweeping or vacuum. Keep in suitable, closed containers for disposal. After cleaning, flush away traces with water.

Residues:

Flush away with large quantities of water.

6.4. Reference to other sections

SECTION 7: Handling and storage; SECTION 8: Exposure controls/personal protection; SECTION 9: Physical and chemical properties; SECTION 13: Disposal considerations;

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Aqueous solutions or powders that become wet render surfaces extremely slippery. Use personal protective equipment.

7.2. Conditions for safe storage, including any incompatibilities.

Keep in a dry place. Keep container closed when not in use. Incompatible with oxidizing agents.

7.3. Specific end use(s)

None.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits:

None.

8.2. Exposure controls

Appropriate engineering controls:

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

Individual protection measures, such as personal protective equipment:

Eye/face protection: Safety glasses with side-shields.

Skin protection: Work clothes protecting arms, legs and body.

Hand protection: PVC or other plastic material gloves.

Respiratory protection: No personal respiratory protective equipment normally required. Dust safety

masks recommended where working powder concentration is more than 10

mg/m3.

Additional advice: Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls: Do not allow uncontrolled discharge of product into the environment. Do not

flush into surface water.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance: Clear to slightly yellow liquid.

Odor: slight

Odor Threshold: Not applicable.

PH: 6 - 9

Melting point/freezing point: < 0°C

Initial boiling point and boiling range: > 1000°C

Flash point: Not applicable.

Evaporation rate: Same as water.

Flammability (solid, gas): No data available.

Upper/lower flammability or explosive limits: Not expected to create explosive atmospheres.

Vapor pressure: 2.3 kPa @ 20°C

Vapor density: equivalent to water ($\sim 0.8 \text{ g/l}$)

Relative density: 1.0 - 1.4

Solubility(ies): completely miscible in water

Partition coefficient: < 0

Autoignition temperature: Does not self-ignite (based on the chemical structure).

Decomposition temperature: > 100°C

Viscosity: See Technical Bulletin.

Explosive properties: Kst = 0

Non-flammable to ignition sources of less than 2.5 kJ.

Oxidizing properties: Not expected to be oxidizing based on the chemical structure.

9.2. Other information

None.

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SECTION 10. Stability and reactivity

10.1. Reactivity

None known.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Protect from frost, heat and sunlight.

10.5. Incompatible materials

Incompatible with oxidizing agents.

10.6. Hazardous decomposition products

Thermal decomposition may produce: nitrogen oxides (NO_x) , carbon oxides (CO_x) , hydrogen cyanide (hydrocyanic acid).

SECTION 11. Toxicological information

11.1. Information on toxicological effects

Information on the product as supplied:

Acute oral toxicity: $LD_{50}/oral/rat > 5000 \text{ mg/kg}$

Acute dermal toxicity: $LD_{50}/dermal/rat > 5000 \text{ mg/kg}$

Acute inhalation toxicity: The product is not expected to be toxic by inhalation.

Skin corrosion/irritation: Not irritating.

Serious eye damage/eye irritation: Not irritating.

Respiratory/skin sensitization: Not sensitizing.

Mutagenicity: Not mutagenic.

Carcinogenicity: Not carcinogenic.

Reproductive toxicity: Not toxic for reproduction.

STOT - single exposure: No known effects.
STOT - repeated exposure: No known effects.

Aspiration hazard: No hazards resulting from the material as supplied.

SECTION 12. Ecological information

12.1. Toxicity

Information on the product as supplied:

Acute toxicity to fish: LC_{50} /Oncorhynchus mykiss/96 hours > 100 mg/L (estimated)

Acute toxicity to invertebrates: EC₅₀/Daphnia/48 hours > 100 mg/L (estimated)

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Acute toxicity to algae: $IC_{50}/Algae/72 \text{ hours} > 100 \text{ mg/L (estimated)}$

Chronic toxicity to fish: No data available.

Chronic toxicity to invertebrates: No data available.

Toxicity to microorganisms: No data available.

Effects on terrestrial organisms: No known effects.

Sediment toxicity: No data available.

12.2. Persistence and degradability

Information on the product as supplied:

Degradation: Not readily biodegradable.

Hydrolysis: Does not hydrolyze.

Photolysis: No data available.

12.3. Bioaccumulative potential

Information on the product as supplied:

Not bioaccumulating.

Partition co-efficient (Log Pow): < 0

Bioconcentration factor (BCF): no data available

12.4. Mobility in soil

Information on the product as supplied:

None.

12.5. Other adverse effects

None known.

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Waste from residues / unused products:

Dispose in accordance with local and national regulations. Can be landfilled or incinerated, when in compliance with local regulations.

Contaminated packaging:

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

Recycling:

The product and its packaging are not suitable for recycling.

SECTION 14. Transport information

Land transport (DOT)

Not classified.

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Sea transport (IMDG)

Not classified.

Air transport (IATA)

Not classified.

SECTION 15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Information on the product as supplied: TSCA Chemical Substances Inventory:

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

US SARA Reporting Requirements: SARA (Section 311/312) hazard class:

Not concerned.

RCRA status:

Not RCRA hazardous.

California Proposition 65 Information:

WARNING! This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm, Acrylamide.

SECTION 16. Other information

NFPA and HMIS Ratings: NFPA:

Health: 0

Flammability: 0

Instability: 0

HMIS:

Health: 0

Flammability: 0

Physical Hazard: 0

PPE Code: B



This data sheet contains changes from the previous version in section(s):

SECTION 2. Hazards identification, SECTION 3. Composition/information on ingredients, SECTION 4. First aid measures, SECTION 11. Toxicological information, SECTION 16. Other Information.

Key or legend to abbreviations and acronyms used in the safety data sheet:

None.

This SDS was prepared in accordance with the following:

Federal Regulation 29 CFR 1910.1200

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

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comply with all federal, state, and local laws and regulations.

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