SAFETY DATA SHEET

According to U.S. Code of Federal Regulations 29 CFR 1910.1200, Hazard Communication.

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

1.1. Product identifier

Product name: Tramfloc® 3005

Type of product: Mixture.

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

Identified uses: 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 Road,

Suite 615

Spring, TX 77379

888-929-8973

Telephone: 480-383-6895

Telefax: water@tramfloc.com

E-mail address:

1.4. Emergency telephone number 800-424-9300 CHEMTREC (CCN 20412), Outside U.S. 703-527-3887

24-hour emergency number: +33 (0)4 77 36 87 25

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Not classified.

2.2. Label elements

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

Hazard symbol(s): None.

Product name: Tramfloc® 3005 Page: 1 Date: 06/01/2021

Signal word:	NT
Hazard statement(s):	None.
Precautionary statement(s):	None.
	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 a mixture.

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.

Inaestion:

Rinse mouth with water. Do NOT induce vomiting. Get medical attention if symptoms occur.

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: Firefighting measures

Product name: Tramfloc® 3005 Page: 2 Date: 06/01/2021

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water. Water spray. Foam. Carbon dioxide (CO2). Dry powder.

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

Unsuitable extinguishing media:

None known.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products:

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

5.3. Advice for firefighters

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.

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. Prevent further leakage or spillage if safe to do so.

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.

Large spills:

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

Residues:

After cleaning, flush away traces with water.

6.4. Reference to other sections

Product name: Tramfloc® 3005 Page: 3 Date: 06/01/2021

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

No special precautions required. Aqueous solutions or powders that become wet render surfaces extremely slippery.

7.2. Conditions for safe storage, including any incompatibilities

Keep in a dry place. Keep container closed when not in use.

Incompatible with strong acids and oxidizing agents.

7.3. Specific end use(s)

This information is not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits:

None known.

8.2. Exposure controls

Appropriate engineering controls:

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

Individual protection measures, such as personal protective equipment:

a) Eye/face protection:

Safety glasses with side-shields. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

b) Skin protection:

- i) Hand protection: PVC or other plastic material gloves. Be aware that liquid may permeate gloves, frequent change is advised. Suitable gloves can be recommended by the glove supplier. The selected protective gloves have to satisfy the specifications of EU Directive 89/689/EEC and the standard EN 374 derived from it.
- ii) Other: Workclothes protecting arms, legs and body. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

c) Respiratory protection:

No personal respiratory protective equipment normally required. Dust safety masks recommended where working powder concentration is more than 10 mg/m³. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

d) Additional advice:

Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls:

Product name: Tramfloc® 3005 Page: 4 Date: 06/01/2021

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 Granular solid, White. a) Appearance: None. b) Odor: Not applicable. c) Odor Threshold: 5 - 9 @ 5 g/L (See Technical Bulletin or Product d) pH: Specifications for a more precise value, if available) > 150°C e) Melting point/freezing point: Not applicable. f) Initial boiling point and boiling range: Not applicable. g) Flash point: Not applicable. h) Evaporation rate: No data available. i) Flammability (solid, gas): Not expected to create explosive atmospheres. j) Upper/lower flammability or explosive limits: Not applicable. k) Vapor pressure: Not applicable. I) Vapo r density: 0.5 - 0.9 (See Technical Bulletin or Product Specifications for a more precise value, if available) Relative density: Soluble in water. n) Solubility(ies): < 0

o) Partition coefficient:

p) Autoignition temperature:

q) Decomposition temperature:

r) Viscosity:

s) Explosive properties:

t) Oxidizing properties: 9.2. Other information

Product name: Tramfloc® 3005

None.

See Technical Bulletin.

 $> 150^{\circ}$ C

Kst = 0

Page: 5

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

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

Not expected to be oxidising based on the chemical structure.

Date: 06/01/2021

SECTION 10: Stability and reactivity

10.1. Reactivity

None known.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Oxidizing agents may cause exothermic reactions.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Incompatible with strong acids and oxidizing agents.

10.6. Hazardous decomposition products

Thermal decomposition may produce: nitrogen oxides (NOx), carbon oxides (COx), sulfur oxides (SOx). Hydrogen cyanide (hydrocyanic acid).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on the product as supplied:

Acute oral toxicity: LD50/oral/rat > 5000 mg/kg

Acute dermal toxicity: LD50/dermal/rat > 5000 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 sensitisation: 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 effect.

Product name: Tramfloc® 3005 Page: 6 Date: 06/01/2021

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: LC50/Danio rerio/96 hours > 100 mg/L (OECD 203)

LC50/Fathead minnow/96 hours > 100 mg/L (OECD 203)

Acute toxicity to invertebrates: EC50/Daphnia magna/48 hours > 100 mg/L (OECD 202)

Acute toxicity to algae: IC50/Scenedesmus subspicatus/72 hours > 100 mg/L (OECD 201)

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 data available.

Sediment toxicity: No data available.

12.2. Persistence and degradability

Information on the product as supplied:

Degradation: Not readily biodegradable.

Hydrolysis: Does not hydrolyse.

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): ~0

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. If recycling is not practicable, dispose of in compliance with local regulations. Can be landfilled or incinerated, when in compliance with local regulations.

Recycling:

In accordance with local and national regulations.

SECTION 14: Transport information

Land transport (DOT)

Not classified.

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 as active on the inventory or are exempt from listing.

US SARA Reporting Requirements:

SARA (Section 311/312) hazard class:

Not concerned.

SARA Title III Sections:

Section 302 (TPQ) - Reportable Quantity:

Not concerned.

Product name: Tramfloc® 3005 Page: 8 Date: 06/01/2021

Section 304 - Reportable Quantity:

Not concerned.

Section 313 (De minimis concentration):

Not concerned.

Clean Water Act

Section 311 Hazardous Substances (40 CFR 117.3) - Reportable Quantity: Not concerned.

Clean Air Act

Section 112(r) Accidental release prevention requirements (40 CFR 68) - Reportable Quantity: Not concerned.

Product name: Tramfloc® 3001 Page: 10 / 10 Date: 06/01/2021

Hazardous Substances List (40 CFR 302.4) - Reportable Quantity: 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



Product name: Tramfloc® 3005 Page: 9 Date: 06/01/2021

HMIS:

Health: 0
Flammability: 0
Physical Hazard: 0
PPE Code: B

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

SECTION 8. Exposure controls/personal protection, SECTION 9. Physical and chemical properties, SECTION 16. Other Information.

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

Acronyms

STOT = Specific target organ toxicity

Training advice:

Do not handle until all safety precautions have been read and understood.

This SDS was prepared in accordance with the following:

U.S. Code of Federal Regulations 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 comply with all federal, state, and local laws and regulations.

Product name: Tramfloc® 3005 Page: 10 Date: 06/01/2021

Technical Data Sheet

Tramfloc® 3005

Form:	Granular solid
Color:	Slightly yellowish
lonic character:	Anionic
Charge density:	Medium
Molecular Weight:	Very high
Particle size:	> 2 mm : <= 2 % < 0.15 mm : <= 6 %
Approx. bulk density:	0.80
Brookfield viscosity† (cP):	@ 5.0 g/L: 1500 @ 2.5 g/L: 600 @ 1.0 g/L: 275
Recommended working concentration (g/L):	3
Maximum use concentration (g/L):	5
Dissolution time (minutes) in DI water @ 5 g/L, 25°C:	120
Stability of DI solution (days):	1
Storage temperature (°C):	0 - 35
Shelf life (months)*:	12
Packing sizes	
Multiwall bags	25 kg
Big Bags	500 & 750 kg
Other dimensions	On request

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.

Product name: Tramfloc® 3005 Date: 06/01/2021