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® 876

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 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 29 CFR 1910.1200:

Eye Irritant 2A;H319

2.2. Label elements

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

Eye Irrit. 2A;H319

2.2. Label elements

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

Hazard symbol(s):

Signal word:	Warning
Hazard statement(s):	H319 - Causes serious eye irritation
Precautionary statement(s):	P280 - Wear eye protection/ face protection P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P337 + P313 - If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

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

For explanation of abbreviations see Section 16.FR 1910.1200:

SECTION 3. Composition/information on ingredients

3.1 Substances

Not applicable, this product is not a substance.

3.2 Mixtures

Hazardous components

Tannins, ammonium salts

Concentration/ gamme : 20 – 50%

Classification according to paragraph (d)

of 29 CFR 1910.1200: Eye Irritant 2A;H319

CAS Number: 71631-09-9

For explanation of abbreviations see section 16

SECTION 4. First aid measures

4.1. Description of first aid measures

Inhalation:

If inhaled, immediately remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Skin contact:

Wash off immediately with plenty of water. Consult a physician if necessary.

Eye contact:

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Ingestion:

Consult a physician. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

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

No information available.

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

No information available.

Other information:

In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Take off all contaminated clothing immediately.

SECTION 5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water spray. Dry powder. Foam. Carbon dioxide (CO_2).

Unsuitable extinguishing media:

None.

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).

5.3. Advice for fire-fighters

Protective measures:

Wear self contained breathing apparatus for fire fighting if necessary.

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions:

Use personal protective equipment.

Protective equipment:

Wear suitable protective clothing, gloves and eye/face protection.

Emergency procedures:

Keep people away from spill/leak.

6.2. Environmental precautions

The product should not be allowed to enter drains, water courses or the soil.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material.

Small spills:

Small amounts:Soak up with inert absorbent material and collect in a waste container for disposal.

Large spills:

Soak up with inert absorbent material. Shovel into suitable container for disposal. Do not flush with water.

Residues:

After cleaning, flush away traces with water.

6.4. Reference to other sections

SECTION 7: Handling and storage; SECTION 8: Exposure controls/personal protection; SECTION 13: Disposal considerations; SECTION 7. Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes. Use personal protective equipment.

7.2. Conditions for safe storage, including any incompatibilities.

Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible with acids and bases. Incompatible with oxidizing agents. Recommended shelf life is six months.

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.

8.2. Exposure controls

Appropriate engineering controls:

Use local exhaust if misting occurs. Natural ventilation is adequate in absence of mists. Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment:

Eye/face protection:	Safety glasses with side-shields. Tightly fitting safety goggles.
Skin protection:	Protective suit.
Hand protection:	Impervious gloves. Be aware that liquid may permeate gloves, frequent change is advised. Suitable gloves can be recommended by the glove supplier.
Respiratory protection:	No personal respiratory protective equipment normally required. In case of insufficient ventilation wear suitable respiratory equipment.
Environmental exposure controls:	Do not flush into surface water. Do not allow uncontrolled discharge of product into the environment.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:	Liquid, Brown.
Odour:	No data available.
Odour Threshold:	No data available.
pH:	2 - 8
Melting point/freezing point:	< 0°C

Initial boiling point and boiling range: > 100°C

Flash point:	Does not flash.
Evaporation rate:	No data available.
Flammability (solid, gas):	Not applicable.

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

Vapour pressure:	No data available.
Vapour density:	No data available.
Relative density:	1.0 - 1.2
Solubility(ies):	Completely miscible in water.
Partition coefficient:	~ 0
Autoignition temperature:	Does not self-ignite (based on the chemical structure).
Decomposition temperature:	No data available.
Viscosity:	See Technical Bulletin.
Explosive properties:	Not expected to be explosive based on the chemical structure.

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

9.2. Other information

None.

SECTION 10. Stability and reactivity

10.1. Reactivity

Stable at normal conditions.

10.2. Chemical stability

Stable at normal ambient temperature and pressure.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Keep away from heat and sources of ignition. Protect from light. Protect from contamination.

10.5. Incompatible materials

Acids. Bases. Oxidizing agents may cause exothermic reactions.

10.6. Hazardous decomposition products

No decomposition if stored and applied as directed. Thermal decomposition may produce: nitrogen oxides (NOx), carbon oxides (COx), sulfur oxides (SOx).

SECTION 11. Toxicological information

11.1. Information on toxicological effects

Information on the product as supplied:

Acute oral toxicity: LD50/oral/rat > 2000 mg/kg

Acute dermal toxicity: LD50/dermal/rat > 2000 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: Irritating to eyes.

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 effects.

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

Relevant information on the hazardous components:

Tannins, ammonium salts

Acute oral toxicity: LD50/oral/rat > 2000 mg/kg (OECD 420)

Acute dermal toxicity: LD50/dermal/rat > 2000 mg/kg (OECD 402)

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

Skin corrosion/irritation:	Not irritating (OECD 404)
Serious eye damage/eye irritation:	Irritating to eyes. (OECD 405)
Respiratory/skin sensitisation:	The product is not expected to be sensitizing.
Mutagenicity:	Not mutagenic. (OECD 474) Negative in the Ames Test (OECD 471). Negative in the In Vitro Mammalian Chromosome Aberration Test (OECD 473).
Carcinogenicity:	Based on the absence of mutagenicity, it is unlikely that the substance is carcinogenic.
Reproductive toxicity:	NOAEL/rat = 1000 mg/kg/day (OECD 422)
STOT - single exposure:	No known effects.
STOT - repeated exposure:	NOAEL/oral/rat/54 days = 1000 mg/kg/day (OECD 422)
Aspiration hazard:	No known effects.

SECTION 12. Ecological information

12.1. Toxicity

Information on the product as supplied:

Acute toxicity to fish:	LC50/Fish/96 hours > 100 mg/L
Acute toxicity to invertebrates:	EC50/Daphnia/48 hours > 50 mg/L
Acute toxicity to algae:	IC50/Algae/72 hours > 50 mg/L
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. Readily biodegradable, exposure to soil is unlikely.
Sediment toxicity:	No data available. Readily biodegradable, exposure to sediment is unlikely.

Relevant information on the hazardous components:

Tannins, ammonium salts

Acute toxicity to fish:	LC50/Pimephales promelas/96 hours = 67.1 mg/L (OECD 203)
Acute toxicity to invertebrates:	EC50/Daphnia magna/48 hours = 13.2 mg/L (OECD 202)
Acute toxicity to algae:	IC50/Algae/72 hours = 15 mg/L
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. Readily biodegradable, exposure to soil is unlikely.
Sediment toxicity:	No data available. Readily biodegradable, exposure to sediment is unlikely.

12.2. Persistence and degradability

Information on the product as supplied:

Degradation:	Readily biodegradable.
Hydrolysis:	No data available.
Photolysis:	No data available.

Relevant information on the hazardous components:

Tannins, ammonium salts

Degradation:	Readily biodegradable. 100% / 20 days (OECD 301 B)
Hydrolysis:	No data available.
Photolysis:	No data available.

12.3. Bioaccumulative potential

Information on the product as supplied:

The product is not expected to bioaccumulate.

Partition co-efficient (Log Pow): ~ 0

Bioconcentration factor (BCF): No data available.

Relevant information on the hazardous components:

Tannins, ammonium salts

Partition co-efficient (Log Pow): 0.3 @ 25°C (OECD 117)

Bioconcentration factor (BCF): No data available.

12.4. Mobility in soil

Information on the product as supplied:

No data available.

Relevant information on the hazardous components:

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.

Contaminated packaging:

Reuse or recycle container after thorough cleaning.

Recycling:

Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local 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 on the inventory or are exempt from listing.

US SARA Reporting Requirements:

SARA (Section 311/312) hazard class:

Acute.

RCRA status :

Not RCRA hazardous.

California Proposition 65 Information:

WARNING! This product contains a chemical known in the State of California to cause cancer, formaldehyde

SECTION 16. Other information

NFPA and HMIS Ratings:

NFPA

Health: 1

Flammability: 0

Instability: 0

HMIS

Health: 1

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 12. Ecological information, SECTION 16. Other Information.

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

Abbreviations

Eye Irritant 2A = Serious eye damage/eye irritation Category Code 2A

H-Phrases

H319 - Causes serious eye irritation

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.