

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® 872

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 #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

Product identifier

Product name

Other means of identification

Product code

872

Synonyms

None

Recommended use of the chemical and restrictions on use

Recommended use [RU]

No information available

Uses advised against

No information available

SECTION 2. Hazards Identification

2.1. Classification of the substance or mixture

OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

2.2. Label elements

EMERGENCY OVERVIEW

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Other information

Not applicable

SECTION 3. Composition/information on ingredients

3.1 Substances

Component	CAS-No	weight-%	TRADE SECRET
Polyquaternaryamine (Epichlorohydrin-DMA Copolymer)	42751-79-1	~ 50%	*

*The exact percentage (concentration) of composition has been withheld as a trade secret

3.2 Mixtures

This product is a mixture.

SECTION 4. First aid measures

4.1. Description of first aid measures

Eye contact:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Alternatively, rinse immediately with Diphoterine®. Get prompt medical attention.

Skin contact:

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. In case of persistent skin irritation, consult a physician.

Ingestion:

Do NOT induce vomiting. If vomiting should occur spontaneously, keep airway clear. Never give anything by mouth to an unconscious person. Get medical attention.

Inhalation:

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

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

Acute effects

None under normal use.

Chronic effects

None under normal use.

Indication of any immediate medical attention and special treatment needed

Note to physicians:

Treat symptomatically.

SECTION 5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water. Water spray. Foam. Carbon dioxide (CO₂). Drypowder Warning! Spills produce extremely slippery surfaces.

Extinguishing media which must not be used for safety reasons

No information available

5.2. Special hazards arising from the substance or mixture

Carbon oxides (CO_x). Nitrogen oxides (NO_x). Hydrogen chloride. Hydrogen cyanide (hydrocyanic acid) may be produced in the event of combustion in an oxygen deficient atmosphere.

5.3. Advice for fire-fighters

Firefighting measures

Wear self-contained breathing apparatus and protective suit.

Special protective equipment for firefighters

Spills produce extremely slippery surfaces.

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions:

Do not touch or walk through spilled material. Spills produce extremely slippery surfaces.

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

Do not contaminate the water.

Methods and material for containment and cleaning up

6.3. Methods and material for containment and cleaning up

Small spills:

Do not flush with water. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

Large spills:

Do not flush with water. Dam up. Clean up promptly by scoop or vacuum.

Residues:

Soak up with inert absorbent material. After cleaning, flush away traces with water.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes. Renders surfaces extremely slippery when spilled. When using, do not eat,

drink or smoke.

7.2. Conditions for safe storage, including any incompatibilities.

Keep away from heat and sources of ignition. Freezing will affect the physical condition and may damage the material.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Exposure Guidelines

None known.

Appropriate engineering controls

Use local exhaust if misting occurs. Natural ventilation is adequate in absence of mists.

Individual protection measures, such as personal protective equipment

Eye/face Protection	Wear chemical splash goggles and face shield (when eye and face contact is possible due to splashing or spraying of material).
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Hand Protection	Rubber gloves.
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Skin and body protection	While there is a possibility of skin contact, rubber gloves and boots impervious to liquid material should be worn.
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Respiratory protection	Under most conditions, use adequate general ventilation and protective equipment since volatility and toxicity are very low. If significant vapors, mists or aerosols are present, use NIOSH approved respirator (ANSI Z882.1980) or equivalent, that is equipped with a dust/mist cartridge.
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Other personal protection data	Avoid contamination of food, beverage or smoking materials. Eyewash fountains and safety showers must be easily accessible.
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Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.
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SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:	Clear to slightly yellow liquid.
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Odor:	None.
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Odor Threshold:	Not applicable.
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pH:	4 - 7
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Melting point/freezing point:	< 0°C
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Initial boiling point and boiling range:	> 100°C
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Flash point:	Does not flash.
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Evaporation rate:	No data available.
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Flammability (solid, gas):	Not applicable.
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Upper/lower flammability or explosive limits:	Not expected to create explosive atmospheres.
Vapor pressure:	2.3 kPa @ 20°C
Vapor density:	0.804 g/litre @ 20°C
Relative density:	1.1 - 1.2
Solubility(ies):	Completely miscible.
Partition coefficient:	< 0
Autoignition temperature: structure).	Does not self-ignite (based on the chemical
Decomposition temperature:	> 150°C
Brookfield Viscosity:	350-1000 cps
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

No data available.

10.2. Chemical stability

Stable under normal conditions of handling, use and transportation.

10.3. Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to avoid

None known

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

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

SECTION 11. Toxicological information

11.1. Information on toxicological effects

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

Acute dermal toxicity:	LD50/dermal/rat > 5000 mg/kg.
Acute inhalation toxicity:	Testing by the inhalation route is inappropriate because exposure of humans via inhalation is unlikely: the substance has no vapor pressure and there is practically no exposure to inhalable aerosols.
Skin corrosion/irritation:	Non-irritating to skin.
Serious eye damage/eye irritation:	Slightly irritating.
Respiratory/skin sensitisation:	Not sensitizing to skin. No respiratory sensitization has been observed in the workplace.
Mutagenicity:	By analogy with similar products, this product is not expected to be mutagenic.
Carcinogenicity:	By analogy with similar substances, this substance is not expected to be carcinogenic.
Reproductive toxicity:	By analogy with similar substances, this substance is not expected to be toxic for reproduction.
STOT - Single exposure:	No known effects.
STOT - Repeated exposure:	No known effect.
Aspiration hazard:	No hazards resulting from the material as supplied.

SECTION 12. Ecological information

12.1. Toxicity

Acute toxicity to fish:	LC50/Danio rerio/96 hours = 10 - 100 mg/L
Acute toxicity to invertebrates:	EC50/Daphnia magna/48 hours = 10 - 100 mg/L.
Acute toxicity to algae:	Algal inhibition tests are not appropriate. The flocculation characteristics of the product interfere directly in the test medium preventing homogenous distribution which invalidates the test.
Chronic toxicity to fish:	
Chronic toxicity to invertebrates:	
Toxicity to microorganisms:	
Effects on terrestrial organisms:	No data available. Exposure to soil is unlikely.
Sediment toxicity:	No data available. Exposure to sediment is unlikely.

12.1. Persistence and degradability

Information on the product as supplied:

Degradation: Not readily biodegradable.

Hydrolysis: Does not hydrolyze.

Photolysis: No data available.

12.2. Bioaccumulative potential

Information on the product as supplied:

The product is not expected to bioaccumulate.

Partition co-efficient (Log Pow): < 0

Bioconcentration factor (BCF): ~0

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Disposal of wastes:

Recycle, if possible. If not, dispose of the waste material in accordance with all applicable federal, state and local laws and regulations regarding health and pollution.

Contaminated packaging:

Since empty containers retain product residue, follow label warnings even after container is emptied.

SECTION 14. Transport information

DOT

Not regulated

ICAO/IATA

Not regulated

IMDG

Not regulated

SECTION 15. Regulatory information

International Inventories

TSCA (United States)

All ingredients are on the inventory or exempt from listing

Australia (AICS)

All ingredients are on the inventory or exempt from listing

Canada (DSL)

All ingredients are on the inventory or exempt from listing

Canada (NDSL)

None of the ingredients are on the inventory.

China (IECSC)

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, Epichlorohydrin, 1,3-Dichloro-2-propanol (1,3-DCP), 3-Monochloropropane-1,2-diol (3-MCPD)

All ingredients are on the inventory or exempt from listing

EINECS (European Inventory of Existing Chemical Substances)

Some ingredients are not on the inventory.

ELINCS (European List of Notified Chemical Substances)

None of the ingredients are on the inventory.

ENCS (Japan)

All ingredients are on the inventory or exempt from listing

South Korea (KECL)

All ingredients are on the inventory or exempt from listing

Philippines (PICCS)

All ingredients are on the inventory or exempt from listing

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

AICS - Australian Inventory of Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

IECSC - China Inventory of Existing Chemical Substances

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

U.S. Federal Regulations

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

SARA 311/312 Hazard Categories

Acute health hazard

No

Chronic health hazard

No

Fire hazard

No

Sudden release of pressure hazard

No

Reactive hazard

No

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

U.S. State Regulations

California Proposition 65

This product may contain traces of a substance(s) known to the State of California to cause cancer and/or reproductive toxicity.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

SECTION 16. Other information

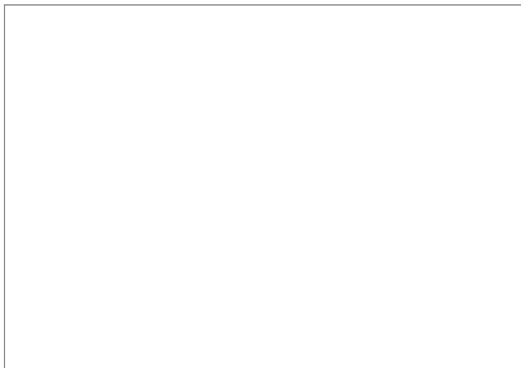
NFPA Rating

Health - 1

Flammability - 0

Instability - 0

Special Hazard -



HMIS Rating

Health - 0

Flammability - 0

Physical hazard - 0

Personal protection - B

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.