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 names: TRAMFLOC® 5001

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

EMERGENCY OVERVIEW

Eye damage/eye irritation Category 2B
Respiratory irritation Category 1
Skin irritation Category 3

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: Warning! Irritant

Hazard statement(s): none
Precautionary statement(s): none

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2.3. Other hazards

H319: Causes serious eye irritation

H315: Causes skin irritation

H317: May cause an allergic skin reaction

H335: May case respiratory irritation

H411: Hazardous to the aquatic environment – chronic

Precautionary Statements:

P233: Keep container tightly closed

P261: Avoid breathing dust/fumes/gas/mist/vapors/spray

P273: Avoid release into the environment

P280: Wear protective gloves/protective clothing/eye protection/face protection

P301/330/331/313: IF SWALLOWED rinse mouth. DO NOT induce vomiting, seek, medical attention P303/361/353: IF ON SKIN OR HAIR: Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305/351/338/313: IF IN EYES rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Get medical attention

P304/313/340: IF INHALED remove person to fresh air and keep comfortable for breathing. Get medical attention

P332/313: If skin irritation occurs: Get medical attention

P403: Store in a well ventilated place

P402/404: Store in a dry place. Store in a closed container

P411/235: Store at temperatures not exceeding 49 °C/120 °F

P501: Dispose of contents/container in accordance with local/regional/national/ international regulation.

SECTION 3. Composition/information on ingredients

3.1 Substances

TRAMFLOC® 5001 is a proprietary blend of non-ionic surfactants that is dispersible in 25C/77F tap water. TRAMFLOC® 5001 is a light yellow to brown. TRAMFLOC® 5001 is not flammable, non-explosive and has no oxidizing properties.

Ingredient	TSCA/CAS No.	Weight%
Alkoxylated Tallow Alcohol	68002-96-0	40 - 60
Proprietary Surfactant	Proprietary	40 - 60
Water	7732-18-5	0 - 10

SECTION 4. First aid measures

4.1. Description of first aid measures

Inhalation:

If vapors or mist is inhaled, move person to fresh air. If the person is not breathing give artificial respiration. Consult a physician.

Skin contact:

Thoroughly wash off of the skin with soap and water. Consult a physician.

Eye contact:

Rise thoroughly with water for at least 15 minutes and consult a physician.

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Ingestion:

Never give anything by mouth to an unconscious person. Rinse out mouth with water. Consult a physician.

General Advice:

Consult a physician. Show this safety data sheet to the doctor in attendance.

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

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or section link in 9.2 and section 11.

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

See link in section 9.2

Other information:

None.

SECTION 5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Regular foam, carbon dioxide, dry chemical.

Unsuitable extinguishing media:

Streaming water.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products:

Carbon oxide

5.3. Advice for fire-fighters

Protective measures:

Wear self-contained breathing apparatus and protective suit.

Other information:

No data available.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions:

Use personal protective equipment. Use personal protective equipment. Avoid contact with skin, eyes, clothing and breathing vapors. Ensure adequate ventilation. For personal protection, see section 8.

Protective equipment:

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

Emergency procedures:

Keep people away from spill/leak.

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6.2. Environmental precautions

Do not let product enter drains. Stop all leakage as soon as possible. Contact local authorities if there is a significant spill.

6.3. Methods and material for containment and cleaning up

Small spills:

Soak up with inert absorbent material and flush remainder away with water.

Large spills:

Contain the leak by damming up and collecting product by pumping into a clean container. Product must be disposed in accordance with local and national regulations.

6.4. Reference to other sections

SECTION 13: Disposal considerations

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes. Provide appropriate exhaust and ventilation at places where the product is stored and used. Use normal measures for preventative fire protection.

7.2. Conditions for safe storage, including any incompatibilities.

Keep container tightly closed and in a dry location between 4C/40F and 49C/120F and well ventilated for storage or use.

7.3. Specific end use(s)

Apart from use mentioned in section 1.2, this product may be used to control foam on paper machines.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Contains no substances having occupational exposure limits.

8.2. Exposure controls

Appropriate engineering controls:

Handle in accordance with good industrial hygiene and safety practices. Wash hands before breaks and at the end of the work day.

Individual protection measures, such as personal protective equipment:

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

Skin protection: Wear coveralls and/or chemical apron and rubber footwear where physical

contact can occur.

Hand protection: Handle with gloves – neoprene, butyl or nitrile rubber with cuffs. Inspect gloves

prior to use. Use proper glove removal technique (without touching the glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory

practices. Wash and dry hands.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-

face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the

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sole means of protection, use a full-face supplied air respirator. Use respirator and components tested and approved under appropriate government standards

such as NIOSH (US) or CEN (EU).

Additional advice: Wash hands before breaks and at the end of workday. Handle in accordance with

good industrial hygiene and safety practice. Wash hands and face before breaks

and immediately after handling the product.

Environmental exposure controls: 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: Light yellow to brown liquid

Odor: Mild fatty surfactant odor

Odor Threshold: Not applicable.

PH: 4.0 - 7.0

Melting point/freezing point: > 32F/0C

Flash point: > 212F/100C

Evaporation rate: Not applicable.

Flammability (solid, gas): No data available.

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

Vapour pressure: No data available.

Relative density: 0.90 - 1.00

Solubility(ies): Dispersible in 25C/77F DI water

Partition coefficient: Not applicable.

Autoignition temperature: No data available.

Decomposition temperature: $> 204^{\circ} \text{ C}/400^{\circ} \text{ F}$

Viscosity: 100 - 400

Explosive properties: No data available.

Oxidizing properties: Not an oxidizer.

9.2. Other information

None.

SECTION 10. Stability and reactivity

10.1. Reactivity

Stable under recommended storage conditions.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See notes below.

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10.4. Conditions to avoid

Strong oxidizers and extreme temperatures

10.5. Incompatible materials

Avoid strong acids and alkali.

10.6. Hazardous decomposition products

Carbon oxides, in the event of fire, see section 5.

SECTION 11. Toxicological information

11.1. Information on toxicological effects

Information on the product as supplied:

Acute oral toxicity: LD50/oral/rat \geq 5000 mg/kg

Acute dermal toxicity: No data available.

Acute inhalation toxicity: Rats, LC50, 260 mg/m3, lung, thorax or respiration: Dyspnea Skin corrosion/irritation: Repeated contact with this product will cause skin irritation.

Serious eye damage/eye irritation: This product will cause eye irritation.

Respiratory/skin sensitization: Not sensitizing.

Mutagenicity: Not mutagenic.

Carcinogenicity:

IARC: No component of this product is present at levels greater than or equal to 0.1% is

identified as probable, possible, or confirmed human carcinogen by IARC.

ACGIH: No component of this product is present at levels greater than or equal to 0.1% is

identified as probable, possible, or confirmed human carcinogen by ACGIH.

NTP: No component of this product is present at levels greater than or equal to 0.1% is

identified as probable, possible, or confirmed human carcinogen by NTP.

OSHA: No component of this product is present at levels greater than or equal to 0.1% is

identified as probable, possible, or confirmed human carcinogen by OSHA.

Reproductive toxicity: Not toxic for reproduction.

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

Aspiration hazard: Due to the viscosity, this product does not present an aspiration hazard.

Relevant information on the hazardous components:

SECTION 12. Ecological information

12.1. Toxicity

No data available.

12.2. Persistence and degradability

No data available.

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12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvP assessment

PBT/vPvB assessment not available as chemical safety assessment not required/conducted.

12.6 Other adverse effects

This product can be harmful to aquatic life. Do not rinse down drains or release into the environment. Report all significant spills and leaks.

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Waste from residues / unused products:

Dispose of in accordance with local regulations.

Contaminated packaging:

If recycling is not practicable, dispose of 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.

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:

This product does not contain any chemicals known to the State of Calirofnia to cause cancer, birth defects, or any other reproductive harm.

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SECTION 16. Other information

NFPA and HMIS Ratings: NFPA:

Health: 1

Flammability: 1

Instability: 0

HMIS:

Health: 1

Flammability: 1 Physical Hazard: 0

Reactivity: 0

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

SECTION 1. Identification of the substance/mixture and of the company/undertaking, SECTION 2. Hazards identification, SECTION 3. Composition/information on ingredients, SECTION 4. First aid measures, SECTION 5. Fire-fighting measures, SECTION 6. Accidental release measures, SECTION 7. Handling and storage, SECTION 8. Exposure controls/personal protection, SECTION 9. Physical and chemical properties, SECTION 10. Stability and reactivity, SECTION 11. Toxicological information, SECTION 12. Ecological information, SECTION 13. Disposal considerations, SECTION 14. Transport information, SECTION 15. Regulatory information, SECTION 16. Other Information.

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

Abbreviations

Acute Tox. 4 = Acute toxicity Category Code 4

Asp. Tox. 1 = Aspiration hazard Category Code 1

Eye Dam 1 = Serious eye damage/eye irritation Category Code 1

H-Phrases

H302 - Harmful if swallowed

H304 - May be fatal if swallowed and enters airways

H318 - Causes serious eye damage

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

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