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® 905

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

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture

Skin irritant. 2; Eye Dam. 1

2.2 Label elements

Hazard symbol:

Signal word: Not applicable.

Hazard Statement(s): Not applicable.

Precautionary Statement(s) Not applicable.

2.3 Other hazards

Not applicable.

2.4 Additional information

Not applicable.

SECTION 3: Composition/Information on Ingredients

Chemical	Synonym Common Name	CAS No.	EINECS No.	% by Wt.
Thiosulfuric acid ($H_2S_2O_3$) calcium salt	Calcium thiosulfate	10124-41-1	233-333-7	20 – 30
Water	Water	7732-18-5	231-791-2	70-80

3.1 Additional Information

See Section 8 for exposure guidelines.

SECTION 4: First-Aid Measures

4.1 Description of first aid measures

Inhalation:

Remove victim from contaminated atmosphere. If breathing is labored, administer Oxygen. If breathing has ceased, clear airway and start CPR. Obtain medical attention.

Skin Contact:

Immediately flush with large quantities of water. Remove contaminated clothing under a safety shower. Continue rinsing. Obtain medical attention if irritation occurs.

Eye Contact:

Immediately flush with large quantities of water for 15 minutes. Hold eyelids apart during irrigation to insure thorough flushing of the entire area of the eye and lids. Obtain medical attention if irritation occurs.

Ingestion:

If victim is conscious, give 2 to 4 glasses of water and induce vomiting by touching finger to back of throat. Obtain medical attention.

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

Eye contact may cause eye irritation. Repeated or prolonged skin contact may cause skin irritation. Ingestion may irritate the gastrointestinal tract.

Chronic: No known chronic effects.

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

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable Extinguishing Media

Not flammable, use media suitable for combustibles involved in fire.

Unsuitable Extinguishing Media

None known.

5.2. Special hazards arising from the substance or mixture

None known.

5.3. Advice for fire-fighters

Firefighters should wear self-contained breathing apparatus (SCBA) and full fire-fighting turnout gear. Keep containers/storage vessels in fire area cooled with water spray.

Physical Hazards:

Heating (flames) of closed or sealed containers may cause violent rupture of containers due to thermal expansion of compressed gases.

Chemical Hazards:

Heating causes release of oxides of sulfur. Sulfur dioxide is highly irritating to the eyes, respiratory tract and moist skin.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment specified in Section 8. Isolate the hazard area and deny entry to unnecessary, untrained and unprotected personnel.

6.2 Environmental precautions

Keep out of "waters of the United States" because of potential aquatic toxicity.

6.3 Methods and material for containment and cleaning up

Cover spills with inert absorbent material. Transfer to a container for disposal or recovery. Shut off release if safe to do so. Dike spill area with earth, sand or other inert absorbents to prevent runoff into surface waterways (potential aquatic toxicity), storm drains and sewers. Recover as much of the spilled product as possible using portable pump and hoses. Use material as originally intended or dispose of as a chemical waste. Treat remaining material as a small release (above).

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with eyes. Use only in a well ventilated area. Wash thoroughly after handling product. Avoid prolonged or repeated contact with the skin.

7.2 Conditions for safe storage, including any incompatibilities

Store in well ventilated areas. Do not store combustibles in the area of storage vessels. Keep away from any sources of heat or flame. Store totes and smaller containers out of direct sunlight at moderate temperatures. (See Section 10.5 for materials of construction).

7.3 Specific end use(s)

Precipitant

SECTION 8: Exposure controls/Personal protection

8.1 Occupational exposure limits

Substance	Cas No.	OSHA PELs		ACGIH TLVs		Note:
		TWA	STEL	TWA	STEL	
Thiosulfuric acid ($H_2S_2O_3$), calcium salt	10124-41-1	None	None	None	None	
Water	7732-18-5	None	None	None	None	

8.2 Recommended monitoring method

Keep eye wash/safety showers in areas where product is commonly used.

8.3 Exposure controls

8.4 Appropriate engineering controls

Ensure that the eye flushing systems and safety showers are located close to the working place.

8.5 Personal protection equipment

Eye/face protection:	Chemical goggles and a full face shield.
Skin protection:	Neoprene rubber gloves and apron should be worn to prevent repeated or prolonged contact with the liquid. Wash contaminated clothing prior to reuse.
Respiratory protection:	None required. If conditions exist where mist may be created, a NIOSH/MSHA approved mist respirator should be worn.
Hygiene Considerations:	There are no known hazards associated with this product when used as recommended, however common good industrial hygiene practices should be followed, such as washing thoroughly after handling and before eating or drinking.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	Colorless liquid
Odor:	Fresh concrete to no odor at all.
Odor Threshold:	Not determined
pH:	6.5 – 8.0 (typical)
Melting Point/Freezing Point:	Salt out temperature is 32°F (0°C) (Typical).
Boiling Point:	212°F (100°C) with decomposition.
Flash Point:	Not applicable
Evaporation Rate:	Not determined
Flammability:	Not applicable
Upper/Lower Flammability Limits:	Not applicable
Vapor Pressure:	37mm Hg @ 100°F
Vapor Density:	Same as water
Relative Density:	1.25 – 1.26 (10.4 – 10.5 Lbs/gal) (Typical).
Solubility:	Complete
Partition Coefficient:	No data available.
Auto-Ignition Temperature:	Not applicable
Decomposition Temperature:	No data available.
Viscosity:	2.11 cSt @ 25°C

9.2 Other information

Not available

SECTION 10: Stability and reactivity

10.1 Reactivity

Avoid interaction with heat, flames, oxidizers or acids.

10.2 Chemical stability

This is a stable product under normal (ambient) temperature and pressure conditions.

10.3 Possibility of hazardous reactions

Strong oxidisers such as nitrates, nitrites or chlorates can cause explosive mixtures if heated to dryness.

10.4 Conditions to avoid

High heat or fire conditions.

10.5 Incompatible materials

Strong oxidisers (See Section 10.3). Acids will cause the release of Sulphur dioxide, a severe respiratory hazard. TRAMFLOC® 905 is not compatible with; carbon steel, Copper or Zinc or any of their alloys including brass, bronze or galvanised materials. These materials should not be utilised in handling systems or storage containers for this product.

10.6 Hazardous decomposition product(s)

Calcium oxide and Oxides of Sulfur. Sulfur dioxide is a severe respiratory irritant.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Oral

Oral Rat (female) LD50: > 2,000 mg/Kg (OECD 425)

Interperitoneal Rat LDLO: 573.mg/Kg (calcium thiosulfate)

Intravenous Rat LDLO: 344 mg/Kg (calcium thiosulfate)

Intraperitoneal Mouse LD50: 115 mg/Kg (calcium thiosulfate)

Dermal	No data available.
Inhalation	No data available.
Eye:	No data available.
Chronic/Carcinogenicity:	No data available.
Teratology:	No data available.
Reproduction:	No data available.
Mutagenicity:	No data available.

SECTION 12: Ecological information

12.1 Toxicity

No data available.

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

This product is not bioaccumulative.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

None known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Disposal should be in accordance with local, state or national legislation. Consult an accredited waste disposal contractor or the local authority for advice.

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.

Designated Hazardous Substances and Reportable Quantities (40 CFR 302.4):

None

SARA 311/312 – Hazard Category

SARA 313 - Toxic Chemicals (40 CFR 372):
None
SARA 302 – Extremely Hazardous Substances (40 CFR 355):
None
California Proposition 65 List:
None

SECTION 16: Other information

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.