

MATERIAL SAFETY DATA SHEET

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LAST REVISION DATE: 08-06-12 APPROVAL: JJF  
CURRENT REVISION DATE: 03-07-10  
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IDENTIFICATION

PRODUCT NAME: Tramfloc® 907 EPA PRODUCT REGSTRAT. NO: NA  
EPA ESTABLISHMENT NO.: NA  
TSCA INVENTORY/CAS. NO.: 534-18-9

CHEMICAL NAME: SODIUM TRITHIOCARBONATE

HAZARDOUS INGREDIENTS - % COMPOSITION - OSHA-TWA, ppm - ACGIH-TWA, ppm

SODIUM TRITHIOCARBONATE 42.0 HYDROGEN SULFIDE 20  
HYDROGEN SULFIDE 10

PHYSICAL DATA

BOILING POINT (F/C): 212/100 SPECIFIC GRAVITY (Water = 1): 1.20-1.40  
VAPOR PRESSURE (mm Hg): ND MELTING POINT: NA  
VAPOR DENSITY (Air - 1): ND EVAPORATION RATE: ND (Water = 1)  
SOLUBILITY IN WATER: ND FREEZING POINT (F/C): ND  
% VOLATILE: ND TYPICAL pH: 12.0 TO 13.5

APPEARANCE AND ODOR: CLEAR RED LIQUID WITH A SULFIDE ODOR.

SPECIAL HAZARD DESIGNATIONS

NFPA: HEALTH \* FLAMMABILITY \* REACTIVITY \* PROTECTIVE EQUIPMENT  
3 1 0 2

KEY: 0-MINIMAL, 1-SLIGHT, 2-MODERATE, 3-SERIOUS, 4-SEVERE

NR: NOT REQUIRED, NE: NOT ESTABLISHED, NA: NOT APPLICABLE  
FIRE AND EXPLOSION DATA:

FLAMMABLE LIMITS IN AIR, % BY VOLUME: UPPER: NE; LOWER: NE  
FLASH POINT (TEST METHOD) : TAG CLOSED CUP (ASTM D56): NE  
TAG OPEN CUP (ASTM D1310): NE

EXTINGUISHING MEDIA: Product is non-flammable as supplied. Use water, foam, carbon dioxide or dry chemical to extinguish fire.

PRODUCT NAME: Tramfloc® 907

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus while extinguishing fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Product is non-flammable as supplied. Do not depend on ambient air for breathing air supply during fires. Fire may result into release of toxic gases such as oxides of carbon, nitrogen, and sulfur.

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REACTIVITY DATA

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STABILITY: Stable.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Acidification releases flammable gases.

MATERIALS TO AVOID: Mineral acids such as sulfuric, nitric, hydrochloric, and nitrosating agents.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:

A-Thermal decomposition may release gases such as carbon disulfide.  
B-Combustion of dry film may release oxides of carbon, nitrogen, and sulfur.

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HEALTH HAZARD DATA

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ROUTES OF ENTRY/EFFECTS OF EXPOSURE:

Ingestion (swallowing): May cause nausea and vomiting.  
Skin contact: Slightly irritating to skin.  
Eye contact: Possibly irritating to eyes.  
Inhalation: Vapors may be irritating to nose, throat, and respiratory tract producing symptoms of nausea in poorly ventilated areas.

TARGET ORGAN EFFECT: NE; DELAYED EFFECTS: NE; CARCINOGENICITY: NE

TOXICITY: Dermal LD 50 - Albino rabbit >3.1 gm/Kg, 25% SOLUTION  
Inhalation LC 50 - Rat >5.93 mg/liter, 25% SOLUTION  
Oral LD 50 - Female Rats: 3.5 gm/Kg; Male Rats: 2.9 gm/Kg, 25% SOLUTION

EMERGENCY AND FIRST AID DATA

Ingestion: If swallowed, dilute by drinking copious amounts of water and obtain medical attention.  
Skin contact: Wash affected skin with soap and water and obtain medical attention.  
Eye contact: Wash eyes with large amounts of water for at least 15 minutes. Obtain medical attention.  
Inhalation: Remove subject to fresh air. Obtain medical attention.

PRODUCT NAME: Tramfloc® 907

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SPILL OR LEAK PROCEDURES

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STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Soak up spills with absorbent material and scoop into drums. Follow all local, state, and federal regulations for disposal. Do not discharge into lakes and streams. The floor may be slippery. Use caution to avoid falls.

WASTE DISPOSAL METHOD:

Hazardous waste. Follow all local, state, and federal regulations for waste disposal.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

Wear rubber gloves and safety goggles. Avoid breathing vapors and avoid skin contact.

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SPECIAL PROTECTION INFORMATION

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RESPIRATORY PROTECTION: None required if good ventilation is maintained. Otherwise, wear self-contained breathing apparatus. Pressure Demand, MSHA/NIOSH approved or equivalent).

VENTILATION PROTECTION: Local exhaust: Yes: Mechanical (general): Yes.

PROTECTIVE GLOVES: Yes.

EYE PROTECTION: Safety goggles.

OTHER PROTECTION: Long sleeve shirt, long pants, boots, and hat.

WORK/HYGIENIC PRACTICES: Follow normal hygienic practices for handling chemicals.

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SARA-TITLE III INGREDIENT INFORMATION

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NAME: SODIUM TRITHIOCARBONATE

CAS NO.: 534-18-9

PRODUCT NAME: Tramfloc® 907

APPLICABLE SARA SUBSECTIONS: 313  
THRESHOLD PLANNING QUANTITY: 10,000 LBS.  
THRESHOLD REPORTING QUANTITY: NONE

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NEW JERSEY/PENNSYLVANIA RTK TOTAL INGREDIENTS LABEL  
TITLE 8

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CAS NO.\NJEIN TRADE SECRET	COMMON NAME\COMMENTS
534-18-9	SODIUM TRITHIOCARBONATE
7732-18-5	WATER

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FOR CALIFORNIA CUSTOMERS ONLY

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CALIFORNIA PROPOSITION 65: This product does contain toxic chemicals currently on the California List of known carcinogens and reproductive toxins.

PRODUCT INFORMATION: Pursuant to the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) we are providing this information to you. In part, this law requires that "clear and reasonable warning" be given to any individual, knowingly or intentionally exposed to any substances identified by the state as being cancer or reproductive hazards, unless it can be shown that the exposure poses "no significant risk." It has not been feasible to carry out the detailed analysis that would be required to determine whether each of the materials on the list of chemicals known to cause cancer or reproductive toxicity associated with the Act, is present in detectable amounts in our products. Based on available data, the following chemicals listed by Proposition 65 may be present in this product:

SODIUM TRITHIOCARBONATE	534-18-9	42.0%
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Please read the entire MSDS before using a product and always use it as directed by the Material Safety Data Sheet. Of course, you may wish to conduct further evaluation based on your specific end-use. The warning above is the result of compliance with Proposition 65. There is no new scientific or technical evidence which suggests an increased risk associated with using this product. We are continuing to monitor proposition 65 activity and will keep you informed of any pertinent changes.

CALIFORNIA RULE 443.1 VOC'S:

Volatile Organic components (VOC'S) = Substances with vapor pressure of  
=> 0.5 mmHg at 104'C (219.2'F).

This product contains <8.9 g/liter VOC'S and <8.9 g/liter VOC'S (less water and exempt compounds).