MATERIAL SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT and COMPANY IDENTIFICATION

PRODUCT NAME: TRAMFLOC® 801 DATE ISSUED: 09/01/14

SUPERSEDES: 05/07/10

DESCRIPTION: Alcohol-based emulsion breaker and hydrocarbon solvent.

COMPANY IDENTIFICATION:

TRAMFLOC, INC. P. O. Box 60469 Houston, TX 77205-0469 480-491-6895

EMERGENCY TELEPHONE: 24 hours a day, 7 days a week

CHEMTREC 1-800-424-9300

SECTION 2 - COMPOSITION/INFORMATION on INGREDIENTS

CHEMICAL NAME	EQUAL TO	CAS NUMBER
Sodium Carbonate	<10 %	497-19-8
Sodium Hydroxide	<2.5 %	1310-73-2
2-butoxyethanol	<2.5%	111-76-2

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW - Clear colorless and odorless liquid. Avoid contact with skin, eyes and clothing.

POTENTIAL HEALTH EFFECTS

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Eye contact will cause severe burns.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Corrosive. Causes burns.

EFFECTS OF OVEREXPOSURE - INHALATION: Will burn lungs.

EFFECTS OF OVEREXPOSURE - INGESTION: Will lead to strong caustic effect on mouth and throat and to the danger of perforation of the esophagus and stomach.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: None known.

PRIMARY ROUTE OF ENTRY- Skin contact.

SECTION 4 - FIRST AID MEASURES

INHALATION: Remove patient to fresh air. Give artificial respiration if not breathing. Give oxygen if breathing is difficult. Seek medical attention immediately.

SKIN: Flush immediately with soap and water for at least 15 minutes. Seek medical advice if irritation develops.

EYE CONTACT: Flush with water at least 15 minutes with eyelids open. Call a physician.

Product Name: Tramfloc® 801

INGESTION: If swallowed, do not induce vomiting. Give victim plenty of water to drink. Consult a physician immediately.

Never give anything by mouth to an unconscious person.

SECTION 5 - FIRE-FIGHTING MEASURES

FLASHPOINT: NA.

FLAMMABILITY: None; AUTO FLAMMABILITY: None

EXPLOSIVE LIMITS:

LOWER: Not applicable; UPPER: Not applicable. EXPLOSION HAZARD- None

EXTINGUISHING MEDIA: Does not burn. Use water, foam, carbon dioxide or dry chemical to extinguish.

EXTINGUISHING MEDIA WHICH MUST NOT BE USED: None.

SPECIAL EXPOSURE HAZARDS IN A FIRE: None known.

SPECIAL PROTECTIVE EQUIPMENT: Self-contained breathing apparatus may be worn. Use equipment appropriate to source of fire.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

ENVIRONMENTAL PRECAUTIONS: Avoid runoff into storm sewers, streams and ditches.

METHODS FOR CLEANUP: Recycle if possible. If not, dike and absorb spill with inert materials such as clays, sand, earth, sawdust or other commercially available dry sweeping compound, and collect for disposal in accordance with federal, state, local or other applicable laws and regulations. Do not touch or walk through spilled material. Large spills should be contained and pumped into salvage tanks. Product may cause a slip hazard. If slippery conditions persist, apply more dry sweeping compound.

SECTION 7 - HANDLING AND STORAGE

HANDLING: Keep containers closed. Avoid contact with eyes, skin and clothing.

STORAGE: Avoid storage temperatures $>140^{\circ}$ F. Keep containers closed, store away from acids, reactive metals and ammonium salts. Do not store or mix in aluminum, fiberglass, copper, brass, zinc or galvanized containers. Use inventory on a FIFO basis.

SECTION 8 - EXPOSURE CONTROLS/ PERSONAL PROTECTION

ENGINEERING CONTROLS: General ventilation is recommended. Eyewash and safety shower stations are recommended.

EXPOSURE GUIDELINES: 1310-73-2, sodium hydroxide: WEL short term value: 2 mg/m³. 111-76-2, 2-butoxyethanol: WEL short term value: 50 mg/m³; long term value: 25 mg/m³.

PERSONAL PROTECTIVE EQUIPMENT: Wear personal protective clothing. Wear eye goggles. Wear rubber boots.

RESPIRATORY PROTECTION: Is normally not needed since volatility and toxicity are low. If significant vapors, mists, or aerosols are present, use NIOSH approved respirator (ANSI Z 882.1980) or equivalent

HAND PROTECTION: Wear chemically impervious gloves.

Product Name: Tramfloc® 801

EYE PROTECTION: Wear chemical splash goggles or face mask.

SKIN PROTECTION: If clothing is contaminated, wash skin and launder clothing.

NOTE: Before eating, drinking or smoking, wash face and hands thoroughly with soap and water.

SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES

PHYSICAL STATE, COLOR and ODOR: Clear, colorless and odorless liquid.

pH as is: >12; BOILING POINT/RANGE: 212°F; MELTING POINT/RANGE: NA.

FLASH POINT: NA; VAPOR PRESSURE: 23 hPa; SPECIFIC GRAVITY: 1.01g/cm³

WATER SOLUBILITY: Fully soluble

SECTION 10 - STABILITY and REACTIVITY

CHEMICAL STABILITY: Stable under recommended conditions of use and storage; CONDITIONS TO AVOID: None.

MATERIALS TO AVOID: Strong exothermic reaction when mixed with acid. May react with ammonium salt solutions resulting in evolution of ammonia gas. Flammable hydrogen gas may be produced on contact with aluminum, tin, lead, and zinc. Carbon monoxide gas may be produced on contact with reducing sugars.

HAZARDOUS DECOMPOSITION PRODUCTS: None known.

SECTION 11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Acute Oral Toxicity (Albino Rat) $LD/LC_{50} = > 2000 \text{mg/kg}$ Acute Dermal Toxicity(Albino Rabbit) $LD_{50} = > 1350 \text{mg/kg}$.

IRRITANCY:

Skin: Caustic effect on skin. Eye: Strong caustic effect.

SUBACUTE AND PROLONGED TOXICITY: Not known. SENSITIZATION: None known.

EMPIRICAL DATA ON EFFECTS ON HUMANS: No studies known.

SECTION 12 - ECOLOGICAL INFORMATION

PERSISTENCE IN THE ENVIRONMENT: Not available.

AQUATIC TOXICITY: 1310-73-2, sodium hydroxide: LC₅₀/24 hour, 125 mg/L, fish

OTHER INFORMATION: Discharge of this product must be in accordance with all federal, state, local or other applicable laws and regulations.

Product Name: Tramfloc® 801

SECTION 13 - DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Recycle if possible. If not, absorb spilled material on inert absorbent and dispose of solidified material in accordance with federal, state, local or other applicable laws and regulations.

SECTION 14 - TRANSPORTATION INFORMATION

Corrosive substance. UN number: 3266, Packing group II; Hazard label 8. Description of goods: 3266 corrosive liquid, basic, inorganic, N.O.S. (Sodium Hydroxide)

SECTION 15 - REGULATORY INFORMATION

U. S. FEDERAL REGULATIONS:

CERCLA-SARA Hazard Category:

No SARA Section 313 components exist in this product.

INVENTORY INFORMATION

EEC EINECS: All components of this product are included on the European Inventory of Existing Chemical Substances (EINECS) in compliance with Council Directive 67/548/EEC as amended.

US TSCA: This product is manufactured in compliance with all provisions of the Toxic Substances Control Act, 15 U.S.C.

CANADA DSL: Components of this product have been reported to Environment Canada in accordance with subsection 25 of the Canadian Environmental Protection Act and are included on the Domestic Substances List.

SECTION 16 - OTHER INFORMATION

HMIS RATINGS: HEALTH: 3; FLAMMABILITY: 0; REACTIVITY: 2

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.