MATERIAL SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT and COMPANY IDENTIFICATION

PRODUCT NAMES: TRAMFLOC® 400-499 DATE ISSUED: 06/01/14

SUPERSEDES: 08/25/99

DESCRIPTION: Food Grade Polyacrylamide Copolymer

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

EMERGENCY TELEPHONE: 24 hours a day, 7 days a week, CHEMTREC: 800-424-9300

SECTION 2 - COMPOSITION and INFORMATION ON INGREDIENTS

CHEMICAL NAME CAS NUMBER

Cationic Polyacrylamide Copolymer 69418-26-4

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: White, free flowing dry powder with little or no odor. Spills are very slippery. Avoid contact with skin, eyes and clothing. Contact with eyes may produce irritation and/or redness. Inhaled dust may cause some respiratory irritation.

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Eye contact may produce slight irritation and/or redness.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Not available.

EFFECTS OF OVEREXPOSURE - INHALATION: Inhaled dust may cause some respiratory irritation.

EFFECTS OF OVEREXPOSURE: INGESTION: Not available.

EFFECTS OF OVEREXPOSURE: CHRONIC HAZARDS: Not available.

PRIMARY ROUTE OF ENTRY: Eyes, Inhalation.

SECTION 4 - FIRST AID MEASURES

INHALATION: Remove patient to fresh air.

SKIN: Remove contaminated clothing and launder before reuse. Wash affected area with soap and water for at least 15 minutes.

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EYE CONTACT: Flush with water at least 15 minutes with eyelids open. Call a physician. INGESTION: Do not give an emetic unless directed by a physician. Never give anything by mouth to an unconscious person.

SECTIONS 5 - FIRE FIGHTING MEASURES

FLASHPOINT: NA; FLAMMABILITY: NA; AUTO FLAMMABILITY: NA

EXPLOSION HAZARD: Dust in sufficient concentration can result in an explosive mixture in air.

EXPLOSIVE LIMITS: LOWER: NA; UPPER: NA

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical or foam to extinguish.

EXTINGUISHING MEDIA WHICH MUST NOT BE USED: Care must be taken when using water, as spilled product is extremely slippery when wet.

SPECIAL EXPOSURE HAZARDS IN A FIRE: In fire situation, may liberate oxides of nitrogen or carbon and hydrogen chloride. Keep containers cool by spraying with water if exposed to fire.

SPECIAL PROTECTIVE EQUIPMENT FOR A FIRE: Self-contained breathing apparatus should be worn.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

ENVIRONMENTAL PRECAUTIONS: Avoid runoff into storm sewers and ditches which lead to waterways.

METHODS FOR CLEANUP: Product becomes slippery and difficult to handle when wet; spills are best handled while dry. Sweep up and collect dry product. Absorb wet product with vermiculite or other inert material then water wash area to waste treatment.

OTHER INSTRUCTIONS: Dispose of solidified material in accordance with federal, state, local or other applicable laws and regulations.

SECTION 7 - HANDLING AND STORAGE

HANDLING: Avoid contact with eyes, skin and clothing.

STORAGE: Avoid extremes of temperature: wet damp or humid conditions.

SECTION 8 - EXPOSURE CONTROLS and PERSONAL PROTECTION

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

EXPOSURE GUIDELINES: No MAC values have been established.

PERSONAL PROTECTIVE EQUIPMENT: See below

RESPIRATORY PROTECTION: Use NIOSH approved dust respirator (ANSI Z 882.1980) or equivalent, as required to control exposure.

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HAND PROTECTION: Wear impervious gloves. 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: White free flowing dry powder with little or no odor.

pH as is: NA; MELTING POINT/RANGE: NA; SPECIFIC GRAVITY: 0.8-1.0

WATER SOLUBILITY: Completely soluble; DENSITY: 50-60 lb/ft³

SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable. CONDITIONS TO AVOID: None.

MATERIALS TO AVOID: Strong oxidants such as liquid chlorine, enriched gaseous or liquid oxygen and sodium or calcium hypochlorite.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon and nitrogen, ammonia and/or hydrogen chloride. Vapor may be harmful or irritating.

SECTION 11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY: Not listed as a carcinogen by IARC, NTP, OSHA or ACGIH. The OSHA 8-hour TWA for total dust is 15 mg/M³ (5 mg/M³ for the respirable fraction). The ACGIH TLV-TWA is 10 mg/m³. Product as produced is generally regarded as safe for recovered and reused products used in human and animal food formulation components.

IRRITANCY AND CORROSIVENESS: May be slightly irritating to skin and eyes on prolonged exposure. No evidence of corrosiveness.

SENSITIZATION: None known.

SUBACUTE, SUBCHRONIC AND PROLONGED TOXICITY: No information available.

EMPIRICAL DATA ON EFFECTS ON HUMANS: Considered non-toxic in normal use.

SECTION 12 - ECOLOGICAL INFORMATION: na

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.

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SECTION 14 - TRANSPORTATION INFORMATION: Non-Hazardous, Non-Regulated

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: 1; FLAMMABILITY: 1; REACTIVITY: 0; PROTECTION: F

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.