



TETRA CT-100 Friction Reducer

This MSDS Sheet complies with the style format specified by ANSI Z400 1-1993

SECTION 1: CHEMICAL PRODUCT - COMPANY IDENTIFICATION

TETRA Technologies, Inc. (281) 367-1983
25025 I-45 North (800) 327-7817
The Woodlands, Texas 77380

(800) 424-9300 CHEMTREC (24-Hour Emergency Response)
(800) 222-1222 POISON CONTROL

TRADE NAMES/SYNONYMS: TETRA CT-100 Friction Reducer
CREATION DATE: 30 DEC 02
MSDS REVISION DATE: 19 MAY 03

SECTION 2: COMPOSITION, INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER	RTECS NUMBER	PERCENTAGE
Proprietary	Proprietary	Proprietary	Proprietary

The composition information on this product is proprietary. This product or one of its components is/are hazardous as defined in 29 CFR 1910.1200. In the event of a medical emergency, spill or fire, compositional information will be revealed to a physician, nurse, or responding emergency personnel.

SECTION 3: HAZARDS IDENTIFICATION

NFPA RATINGS: (SCALE 0-4): HEALTH - 1 FIRE - 1 REACTIVITY - 0

EMERGENCY OVERVIEW: Clear, off-white liquid; hydrocarbon odor. May cause irritation-avoid contact with eyes and skin. Wash thoroughly after handling. Keep container tightly closed.

POTENTIAL HEALTH EFFECTS:

INHALATION, SKIN CONTACT, EYE CONTACT: May cause irritation
INGESTION: Not a likely route of exposure. No adverse effects expected.

CARCINOGEN STATUS:

OSHA: No NTP: No IARC: No

SECTION 4: FIRST AID MEASURES

INHALATION: Remove from exposure area to fresh air. If symptoms develop, get medical attention.
SKIN CONTACT: Wash affected area with soap and water. If symptoms develop, get medical attention
EYE CONTACT: Flush eyes with large amounts of water. If irritation persists, get medical attention.
INGESTION: Do not induce vomiting. Drink water to dilute. If symptoms develop, get medical attention.

SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT: >200°F/>93°C (PMCC)
FIRE AND EXPLOSION HAZARD: None known.
EXTINGUISHING MEDIA: Dry chemical, foam, CO₂ or other agents suitable for Class B fires
Do not use water unless flooding amounts are available.
HAZARDOUS COMBUSTION PRODUCTS: Oxides of carbon and oxides of nitrogen may evolve.
FIREFIGHTING: Use full face positive-pressure self-contained breathing apparatus and protective suit.



TETRA CT-100 Friction Reducer

This MSDS Sheet complies with the style format specified by ANSI Z400 1-1993

SECTION 6: ACCIDENTAL RELEASE MEASURES

Absorb with inert material and dispose of according to local, state and federal regulations.

SECTION 7: HANDLING AND STORAGE

Observe all federal, state and local regulations when storing this product. Store in a tightly closed container in a cool, dry location. Store separately from oxidizers.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

- EXPOSURE CONTROLS:** None established.
- VENTILATION:** Provide local exhaust ventilation system.
- EYE PROTECTION:** Wear safety glasses with splash shields or safety goggles/shield.
- EMERGENCY WASH FACILITIES:** An eye wash fountain/safety shower should be available where there is a possibility of contact with this product.
- CLOTHING:** Wear appropriate protective (impervious) clothing.
- GLOVES:** Wear appropriate protective gloves.
- RESPIRATOR:** NIOSH approved half face filter mask or air supplied breathing apparatus. Consider these filter type: A-P Multi-contaminant cartridge (gold) with a particulate pre-filter (purple).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

- DESCRIPTION:** Clear, off-white liquid
- ODOR:** Hydrocarbon odor
- PH (1%):** 7.0
- SPECIFIC GRAVITY:** 1.04-1.08@ 75° F/22° C
- DENSITY:** 8.7-9.0 lb/gal
- WATER SOLUBILITY:** Soluble
- VISCOSITY:** 300-2,400 cps @75° F/22° C
- MELTING POINT:** -9.9°F/-23/33° C
- VOC CONTENT:** 2%

SECTION 10: STABILITY AND REACTIVITY

- REACTIVITY:** Stable under normal conditions.
- INCOMPATIBILITIES:** Strong acids, bases, oxidizers.
- HAZARDOUS DECOMPOSITION:** Oxides of carbon and oxides of nitrogen.
- POLYMERIZATION:** Does not occur under normal temperatures and pressures.
- CONDITIONS TO AVOID:** Freezing temperatures

SECTION 11: TOXICOLOGICAL INFORMATION

Not available

SECTION 12: ECOLOGICAL INFORMATION

Species	Exposure	LC50	Test Descriptor
Rainbow Trout/Sheepshead Minnow	96 hrs.	>1,000 mg/l	1% aqueous solution
Rating: essentially non-toxic			



TETRA CT-100 Friction Reducer

This MSDS Sheet complies with the style format specified by ANSI Z400 1-1993

The organic portion of this preparation is expected to be inherently biodegradable.

SECTION 13: DISPOSAL INFORMATION

Observe all federal, state and local regulations when disposing of this substance.

SECTION 14: TRANSPORT INFORMATION

DOT Shipping Name-ID Number: Non-regulated.

SECTION 15: REGULATORY INFORMATION

TSCA STATUS:	Yes
OTHER TSCA ISSUES:	None
SARA CLASSIFICATIONS:	None
CALIFORNIA PROP. 65:	No

SECTION 16: OTHER INFORMATION

Individuals handling this product should be informed of the recommended safety precautions and should have access to this information.

This information relates to the specific product designated and may not be valid for such product used in combination with any other materials or in any other processes. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability, or completeness. It is the users' responsibility to satisfy themselves as to the suitability and completeness of such information for their own particular use. We do not accept liability for any loss or damage that may occur from the use of this information nor do we offer warranty against patent infringement.

TETRA Technologies, Inc. reserves the right to refuse shipment of this product to any consumer who fails to demonstrate the ability to consistently handle and use it safely and in compliance with all applicable laws, rules and regulations. Such demonstration may require on-site inspection of any or all storage, processing, packaging and other handling systems that come in contact with it.

Customers are responsible for compliance with local, state and federal regulations that may be pertinent in the storage, application and disposal of this product.