TETRA Technologies, Inc. Material Safety Data Sheet

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

SECTION 1: CHEMICAL PRODUCT - COMPANY IDENTIFICATION

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

(800) 424-9300 - CHEMTREC (24 Hours Emergency Response)

SUBSTANCE: Sodium or Calcium or Potassium Salts and Polymer
TRADE NAME/SYNONYM: TETRA TDSP III Spacer
CHEMICAL FAMILY: Polymer/brine Mixture
MSDS CREATION DATE: 29 MAY 97
MSDS REVISION DATE: 17 JUN 97

SECTION 2: COMPOSITION, INFORMATION ON INGREDIENTS

COMPONENTS: Sodium or Calcium or Potassium Salts and Polymer
CAS NUMBER: 7647-14-5 (Sodium Chloride), 7647-15-6 (Sodium Bromide), 10043-52-4 (Calcium Chloride), 7789-41-5 (Calcium Bromide), 7447-40-7 (Potassium Chloride), 9004-62-0 (Hydroxyethyl Cellulose)
RTECS NUMBER: VZ4725000 (Sodium Chloride), VZ3150000 (Sodium Bromide), EV9800000 (Calcium Chloride), EV9328000 (Calcium Bromide), TS8050000 (Potassium Chloride), FJ5958000 (Hydroxyethyl Cellulose)
PERCENTAGE: 10.0 lb/gal Sodium Chloride or 12.5 lb/gal Sodium Bromide or 11.6 lb/gal Calcium Chloride or 15.0 lb/gal Calcium Bromide or 9.7 lb/gal Potassium Chloride or water (or a mixture of these brines) and Hydroxyethyl Cellulose (1-6 lb/bbl)

SECTION 3: HAZARDS IDENTIFICATION

NFPA RATINGS: (SCALE 0-4): HEALTH=1, FIRE=0, REACTIVITY=0
EMERGENCY OVERVIEW: Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

POTENTIAL HEALTH EFFECTS:

INHALATION:

Short Term Effects: May cause irritation.

Long Term Effects: Same effects as short term exposure.

SKIN CONTACT:

Short Term Effects: May cause irritation.

Long Term Effects: Same effects as short term exposure.

EYE CONTACT:

Short Term Effects: May cause irritation.

Long Term Effects: Same effects as short term exposure.

INGESTION:

Short Term Effects: May cause fever, vomiting, diarrhea, twitching, and lung congestion.

Long Term Effects: Same effects as short term exposure.

CARCINOGEN STATUS:

OSHA: No **NTP:** No **IARC:** No

SECTION 4: FIRST AID MEASURES

INHALATION: Remove from exposure area to fresh air immediately. If breathing has stopped, perform artificial resuscitation. Keep person warm and at rest. Treat symptomatically and supportively. Get medical attention immediately.

SKIN CONTACT: Remove contaminated clothing and shoes immediately. Wash affected area with soap or mild detergent and large amounts of water until no evidence of chemical remains (at least 15-20 minutes). If irritation persists seek medical attention.

EYE CONTACT: Flush eyes immediately with large amounts of water or normal saline solution, occasionally lifting upper and lower lids until no evidence of chemical remains (at least 15-20 minutes). Get medical attention if needed.

INGESTION: Not an expected pathway in the industrial environment. If vomiting occurs, keep head lower than hips to help prevent aspiration. Do not induce vomiting. Treat symptomatically and supportively. Get medical attention immediately.

NOTE TO PHYSICIAN: Antidote:

No specific antidote. Treat symptomatically and supportively.

SECTION 5: FIRE FIGHTING MEASURES

FIRE AND EXPLOSION HAZARD: Negligible fire hazard when exposed to heat or flame.
EXTINGUISHING MEDIA: Extinguish using agent suitable for type of surrounding fire.
FIREFIGHTING: No acute hazard. Move container from fire area if possible. Avoid breathing vapors; keep upwind.
HAZARDOUS COMBUSTION PRODUCTS: Thermal decomposition products may include toxic fumes of halogenated compounds, sodium oxides, calcium oxides and carbon oxides.

SECTION 6: ACCIDENTAL RELEASE MEASURES

OCCUPATIONAL SPILL: Stop leak if you can do it without risk. For small spills, take up with sand or other absorbent material and place into containers for later reclamation or disposal. For larger spills, dike far ahead of spill for later disposal. Deny entry to nonessential personnel and isolate area.
SOIL SPILL: Dig holding area such as lagoon, pond or pit for containment. Dike flow of spilled material using soil or sandbags or concrete. Use cement powder or fly ash to absorb liquid mass. Neutralize spill with suitable agent.
WATER SPILL: Add suitable agent to neutralize spilled material to pH 7. Use mechanical dredges or lifts to extract immobilized masses of pollution and precipitates.

SECTION 7: HANDLING AND STORAGE

Observe all federal, state, and local regulations when storing this liquid. Store away from incompatible substances.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS: No occupational exposure limits established by OSHA/ACGIH/NIOSH.
VENTILATION: Provide local exhaust ventilation system.
EYE PROTECTION: Wear safety glasses with splash shields or safety goggles/shields to prevent contact with this liquid.
EMERGENCY WASH FACILITIES: Where there is any possibility that an employee's eyes and/or skin may be exposed to this liquid, the employer should provide an eye wash fountain and quick drench shower within the immediate work area for emergency use.

CLOTHING: Wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this liquid.
GLOVES: Wear appropriate protective gloves to prevent contact with this liquid.
RESPIRATOR: The respirator selected must be based on contamination levels found in the work place and specific to the job assignment. Do not exceed the working limits of the respirator. Respirators must also be jointly approved by the National Institute for Occupational Safety and Health and the Mine Safety and Health Administration (NIOSH-MSHA). These respirators are ranked from minimum to maximum respiratory protection as listed below:

- Any dust and mist respirator with a full facepiece;
- Any air-purifying full facepiece respirator with a high-efficiency particulate filter;
- Any powered air-purifying respirator with a tight-fitting facepiece and high-efficiency particulate filter;
- Any Type 'C' supplied-air respirator with a full facepiece operated in pressure-demand or other positive-pressure mode or with a full facepiece, helmet or hood operated in continuous-flow mode;
- Any self-contained breathing apparatus with a full facepiece operated in pressure-demand or other positive -pressure mode.

FOR FIREFIGHTING AND OTHER IMMEDIATELY DANGEROUS TO LIFE OR HEALTH CONDITIONS: Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode. Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained breathing apparatus operated in pressure-demand or other positive-pressure mode.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

DESCRIPTION: Odorless, viscous liquid
SPECIFIC GRAVITY: 1.0 - 1.8
WATER SOLUBILITY: Miscible with water in all proportions
DISPERSION (water): Complete
pH: 7 - 9

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY: Stable under normal temperatures and pressures.
CONDITIONS TO AVOID: No reports found.
INCOMPATIBILITIES: Strong oxidizers and strong acids.
HAZARDOUS DECOMPOSITION: Thermal decomposition products may include toxic fumes of halogenated compounds, sodium oxide, calcium oxides and carbon oxides.
POLYMERIZATION: Hazardous polymerization has not been reported to occur under normal temperatures and pressures.

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICITY DATA:
No data are available for TETRA TDSP III Spacer.
Mutagenic and tumorigenic data - see Registry of Toxic Effects of Chemical Substances (RTECS) file.
CARCINOGEN STATUS: None.
LOCAL EFFECTS: Irritant- inhalation, skin, eye.
ACUTE TOXICITY LEVEL: Moderately toxic by inhalation and ingestion; slightly toxic by dermal absorption.
INHALATION:
Acute Exposure: May cause irritation to the nose and throat.
Chronic Exposure: No data available.
SKIN CONTACT:
Acute Exposure: May cause mild irritation unless the contact is intensive which may result dermatitis.
Chronic Exposure: Same as acute exposure.
EYE CONTACT:
Acute Exposure: May cause redness, pain, irritation, and a stinging sensation on contact.
Chronic Exposure: Repeated and prolonged contact with irritants may cause conjunctivitis.
INGESTION:
Acute Exposure: May cause nausea, vomiting, thirst, fever, convulsions, and prostration. Dehydration and congestion may occur in most internal organs. Central nervous system disturbances such as confusion and coma may result.
Chronic Exposure: Diets high in sodium chloride may cause elevated blood pressure, especially in predisposed individuals. Reproductive effects have been reported in animals.

SECTION 12: ECOLOGICAL INFORMATION

ENVIRONMENTAL IMPACT RATING (0-4): No data available.
ACUTE AQUATIC TOXICITY: No data available.
DEGRADABILITY: No data available.
LOG BIOCONCENTRATION FACTOR (BCF): No data available.
LOG OCTANOL/WATER PARTITION COEFFICIENT: No data available.

SECTION 13: DISPOSAL INFORMATION:

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

SECTION 14: TRANSPORT INFORMATION

DOT Shipping Name-ID Number: Non-regulated.

SECTION 15: REGULATORY INFORMATION

	TSCA STATUS:	Yes
	DSL STATUS:	Yes
40 CFR 302.4	CERCLA SECTION 103:	No
40 CFR 355.30	SARA SECTION 302:	No
40 CFR 355.40	SARA SECTION 304:	No
40 CFR 372.65	SARA SECTION 313:	No
29 CFR 1910.119	OSHA Process Safety:	No
	California Proposition 65:	No
40 CFR 370.21	SARA HAZARD CATEGORIES, SARA SECTIONS 311/312	
	ACUTE HAZARD:	Yes
	CHRONIC HAZARD:	No
	FIRE HAZARD:	No
	REACTIVITY HAZARD:	No
	SUDDEN RELEASE HAZARD:	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 material designated and may not be valid for such material 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 user's 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 material 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.