

TETRA Technologies, Inc.
MATERIAL SAFETY DATA SHEET



CALCIUM CHLORIDE SOLID

1. PRODUCT AND COMPANY IDENTIFICATION

TETRA Technologies, Inc. 25025 I-45 North The Woodlands, TX 77380	CHEMTREC (24-Hr Emergency Response):	(800) 424-9300
	Poison Control:	(800) 222-1222
	Nonemergency Customer Service:	(281) 367-1983
Substance:	Calcium Chloride Solid	
Synonyms:	Briners Grade, EXPRESS [®] , EXPRESS [®] RM, FCC Dry Food Grade Calcium Chloride, Ice Blaster [®] , TETRA 75 [™] C, TETRA 80 [™] , TETRA 80 [™] C, TETRA 80 [™] HP, TETRA 80 [™] P, TETRA 94 [™] , TETRA Flake, TETRA SG [™] , WaterShield [™] , Winter Thaw [™]	
Chemical Family	Inorganic Salt	
MSDS Creation Date:	07 Feb 94	
MSDS Revision Date:	15 Nov 04	

2. COMPOSITION, INFORMATION ON INGREDIENTS

CAS Number	Wt %	Component Name	RTECS Number
10043-52-4	74-100%	Calcium Chloride	EV9800000
Probable Contaminants: Calcium Carbonate, Calcium Hydroxide, Calcium Oxide, Alkali Metal Chlorides, Alkaline Earth Metal Chlorides			

3. HAZARDS IDENTIFICATION

NFPA Ratings (Scale 0-4):	Health – 1 Fire – 0 Reactivity – 1
Emergency Overview:	Odorless, white pellets/flake. Causes eye irritation. Avoid breathing dust. Avoid contact with eyes, skin and clothing. Keep container tightly closed. Wash thoroughly after handling. Reacts with water to liberate heat.
Potential Health Effects:	
Inhalation:	Dust may cause irritation to mucous membranes and respiratory system.
Skin Contact:	May cause irritation.
Eye Contact:	May irritate or burn eyes.
Ingestion:	Ingestion may cause nausea.
Carcinogen Status:	OSHA – No NTP – No IARC – No

4. FIRST AID MEASURES

Eye Contact:	Flush eyes thoroughly with large amounts of water. If irritation or adverse symptoms develop, seek medical attention.
Skin Contact:	Remove contaminated clothing and shoes. Wash affected area with soap or mild detergent.
Inhalation:	Remove from exposure area to fresh air.
Ingestion:	Get medical attention.
Notes to Physician:	Treat symptomatically and supportively.

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5. FIRE FIGHTING MEASURES

Flash Point:	Not applicable
Extinguishing Media:	Dry chemical, carbon dioxide, water spray or regular foam. For larger fires, use water spray, fog or regular foam (1996 North American Emergency Response Guidebook, RSPA P 5800.7).
Fire Fighting:	Move container(s) from fire area if you can without risk. Apply cooling water sides of containers that are exposed to flames until well after fire is out. Extinguish fire using agent suitable for type of surrounding fire and/or chemicals. Do not use water directly on material. Avoid breathing corrosive vapors; keep upwind. Dike area to prevent runoff and contamination of water sources.
Fire and Explosion Hazard:	Negligible fire hazard when exposed to heat or flame
Products of Combustion:	Not applicable

6. ACCIDENTAL RELEASE MEASURES

Evacuation and Safety:	Wear appropriate protective gear for the situation. See personal protection information in Section 8.
Containment of Spill:	For dry spills place material in covered, clean, dry container for disposal.
Cleanup and Disposal:	For dry spills place material in covered, clean, dry container for disposal.

7. HANDLING AND STORAGE

Handling:	Avoid skin and eye contact and breathing dusts. Wash thoroughly after handling. Launder contaminated clothing before re-use.
Storage:	Observe all federal, state, and local regulations when storing this product. Store in a covered, clean and dry container away from incompatible material

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:	Provide local exhaust ventilation system. Where there is possibility of exposure, eye wash fountain and safety shower should be provided within the immediate work area for emergency use.
Exposure Limits:	No occupational exposure limits established by OSHA/ACGIH/NIOSH.
Eyes:	Wear safety glasses with splash shields or safety goggles/shield.
Body:	Wear appropriate protective (impervious) clothing. Leather work boots and/or leather products will dehydrate with resultant shrinkage and possible destruction.
Respiratory:	A respirator is not indicated under normal operating conditions. Use of a NIOSH approved respirator should be based upon the presence of nuisance dust. When warranted, use a face mask particulate respirator with a NIOSH N95 rating such as Moldex 2800N95, MSA 816581 or 3M 8576PN5 or equivalent.
Hands and Feet:	Wear appropriate non-leather protective gloves and boots.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Description:	White pellets/flakes
Odor:	Odorless
Boiling Point:	Not applicable
Melting Point:	369°F (187°C) - 1424°F (773°C)
Molecular Weight:	111.0 – 150.0
Specific Gravity:	2.15 @ 77°F (25°C)
Water Solubility:	40% @ 68°F (20°C) with evolution of heat
Solvent Solubility:	Soluble in alcohol, acetic acid and acetone
Vapor Pressure:	Not available
Viscosity:	Not applicable

10. STABILITY AND REACTIVITY

Stability and Reactivity:	Reacts exothermically with water.
Incompatibilities:	Strong oxidizing agents.
Hazardous Decomposition:	None under normal conditions.
Polymerization:	Does not occur under normal temperatures and pressures.
Conditions to Avoid:	None.

11. TOXICOLOGICAL INFORMATION

Toxicity Data (anhydrous calcium chloride):	
TDLo:	112g/kg, oral, 20 weeks, rat
LDLo:	274 mg/kg, subcutaneous, dog
LD50:	1000 mg/kg, oral, rat
LD50:	264 mg/kg, intraperitoneal, rat
Mutagenic Data and Tumorigenic Data:	See Registry of Toxic Effects of Chemical Substances (RTECS) file.
Carcinogen Status:	None
Local Effects:	Eye, mucous membrane and skin irritant.
Health Effects:	Moderately toxic by ingestion, slightly toxic by dermal absorption.

12. ECOLOGICAL INFORMATION

Environmental Summary:	No data available.
Degradability:	Product will not biodegrade or accumulate.

13. DISPOSAL INFORMATION

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

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14. DEPARTMENT OF TRANSPORTATION (DOT) TRANSPORT INFORMATION

Shipping Name:	Not regulated
ID Number:	Not applicable
Hazard Class or Division:	Not applicable
Packing Group:	Not applicable
Labeling Requirements:	Not applicable
Packing Authorizations:	
Exceptions:	Not applicable
Non-bulk Packing:	Not applicable
Bulk Packing:	
Quantity Limitations:	
Passenger Aircraft or Railcar:	Not applicable
Cargo Aircraft Only:	Not applicable
Vessel Stowage Requirements:	Not applicable
Emergency Guide Number:	Not applicable

15. REGULATORY INFORMATION

Workplace Classification:	
SARA Title III:	Section 311: Acute Hazard, Reactivity Hazard
TSCA Status:	Yes
EINECS Status:	Yes
CERCLA:	No
OSHA Process Safety:	No
California Proposition 65:	No ingredients found on the Proposition 65 list
WHMIS Classification:	Not determined

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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.