

**MATERIAL SAFETY DATA SHEET**

TYZOR®217

Revised 18-FEB-2008

1. Product and company identification**Material Identification**

"Tyzor" is a registered trademark of Dorf Ketal Specialty Catalysts.

Tradenames and Synonyms

Aqueous Zirconium Lactate Complex

PHONE NUMBERS

Product Information : 1-800-441-7515 (outside the U.S.
302-774-1000)

Transport Emergency : CHEMTREC 1-800-424-9300(outside U.S.
703-527-3887)

Medical Emergency : 1-800-441-3637 (outside the U.S.
302-774-1000)

2. Hazards identification**Potential Health Effects**

Eye contact with "Tyzor" 217 may cause eye irritation with discomfort, tearing, or blurring of vision.

Skin contact may cause skin irritation with discomfort or rash. Repeated skin contact to zirconium compounds may cause granulomas (inflammatory injury with knotlike swellings) of the skin.

Inhalation may cause respiratory tract irritation or bronchiolitis.

Ingestion may cause nonspecific discomfort, such as nausea, headache, or weakness.

Carcinogenicity Information

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

3. Composition/information on ingredients			
	# Components		
	Material	CAS Number	%
	Sodium Zirconium Lactate	174206-15-6	15-25
	Sodium Chloride	7647-14-5	5-10
	Water	7732-18-5	60-75

4. First aid measures	
	First Aid
	INHALATION
	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.
	SKIN CONTACT
	Flush skin with water after contact. Wash contaminated clothing before reuse.
	EYE CONTACT
	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.
	INGESTION
	If swallowed, do not induce vomiting. Immediately give 2 glasses of water. Never give anything by mouth to an unconscious person. Call a physician.
	Notes to Physicians
	Activated charcoal mixture may be beneficial. Suspend 50 g activated charcoal in 400 mL water and mix well. Administer 5 mL/kg, or 350 mL for an average adult.

5. Fire-fighting measures	
	Flammable Properties
	Not a fire or explosion hazard.
	Extinguishing Media

	<p>Use media appropriate for surrounding material.</p> <p>Fire Fighting Instructions</p> <p>Wear self-contained breathing apparatus. Wear full protective equipment.</p>
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6. Accidental release measures	
	<p>Safeguards (Personnel)</p> <p>NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.</p> <p>Spill Clean Up</p> <p>Soak up with sawdust, sand, oil dry or other absorbent material.</p>

7. Handling and storage	
	<p>Handling (Personnel)</p> <p>Avoid breathing vapors or mist. Avoid contact with eyes, skin or clothing. Wash thoroughly after handling. Wash clothing after use.</p> <p>Storage</p> <p>Keep container tightly closed.</p>

8. Exposure controls/personal protection	
	<p>Engineering Controls</p> <p>Use only with adequate ventilation.</p> <p>Personal Protective Equipment</p> <p>EYE/FACE PROTECTION</p> <p>Wear safety glasses or where splash potential exists wear chemical splash goggles.</p> <p>RESPIRATORS</p>

	<p>Wear NIOSH approved respiratory protection, as appropriate.</p> <p>PROTECTIVE CLOTHING</p> <p>Where there is potential for skin contact have available and wear as appropriate impervious gloves, apron, pants, and jacket.</p> <p>Exposure Guidelines</p> <p>Exposure Limits "Tyzor" 217 PEL (OSHA): None Established TLV (ACGIH): None Established</p>
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9. Physical and chemical properties

	<p>Physical Data</p> <p>Boiling Point: ~100 C (~212 F) @ 760 mm Hg Freezing Point: ~0 C (~32 F) % Volatiles: 60-70 % Solubility in Water: 100 % pH: 7 Odor: None. Color: Colorless. Specific Gravity: 1.2 g/mL @ Room Temperature Form: Slightly Hazy Liquid</p>
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10. Stability and reactivity

	<p>Chemical Stability</p> <p>Stable at normal temperatures and storage conditions.</p> <p>Incompatibility with Other Materials</p> <p>None reasonably foreseeable.</p> <p>Decomposition</p> <p>Decomposition will not occur.</p> <p>Polymerization</p> <p>Polymerization will not occur.</p>
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11. Toxicological information	
	<p>Animal Data</p> <p>"Tyzor" 217:</p> <p>Oral ALD: > 5,000 mg/kg in rats</p> <p>The product is a slight skin irritant and a mild eye irritant in animals. A single ingestion exposure produced no clinical signs of toxicity and no weight loss. No animal test reports are available to define carcinogenic, developmental, mutagenic or reproductive hazards of the product.</p> <p>A single ingestion exposure to sodium chloride caused nonspecific effects such as increased urination frequency, and abnormal thirst; administration of a 25% solution by intubation resulted in gastric lesions. Repeated ingestion exposures caused accelerated development of hypertension, and increased kidney and left ventricle weight. Sodium chloride does not produce genetic damage in bacterial cell cultures but has not been tested in animals.</p>

12. Ecological information	
	<p>Ecotoxicological Information</p> <p>The 96 hour LC50, in fathead minnows: >5,000 mg/L. At 5,000 mg/L no mortalities were observed.</p> <p>The 48 hour EC50, in daphnia magna: >5,000 mg/L. At 5,000 mg/L no immobilities were observed.</p>

13. Disposal considerations	
	<p>Waste Disposal</p> <p>Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.</p>

14. Transport information	
	Shipping Information

	Not regulated as a hazardous material by DOT or IMO.
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15. Regulatory information

	<p>U.S. Federal Regulations</p> <p>TSCA Inventory Status : Listed.</p> <p>TITLE III HAZARD CLASSIFICATIONS SECTIONS 311, 312</p> <p>Acute: Yes Chronic: No Fire: No Reactivity: No Pressure: No</p>
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16. Other information

	<p>NFPA, NPCA-HMIS</p> <p>NPCA-HMIS Rating</p> <p>Health: 2 Flammability: 0 Reactivity: 0</p> <p>Personal Protection rating to be supplied by user depending on use conditions.</p> <p>The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.</p>
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