



MATERIAL SAFETY DATA SHEET

Form WI04-11A Rev. 1

Part Number(s):
620200, 620201

Product Name: Tylok ® Plus™ Radiopaque
Polycarboxylate Cement

Release Date: March 15, 2006

1. Product and Company Identification

Trade Name & Synonyms Tylok ® plus Radiopaque polycarboxylate cement	MSDS Code Number 620200-620201
Chemical Name NA	Manufacture / Distributor GAC International Inc.
C.A.S. Number 1314-13-2	Address 355 Knickerbocker Ave. Bohemia, NY USA 11716
Grades or Minor Variant Identities NA	Information Telephone Number 1-631-419-1700
Product Use (for Canada) NA	Emergency Telephone Number 1-631-419-1700

2. Composition of Ingredients

Hazardous Components	OSHA PEL	ACGIH TLV	C.A.S. Number	Exposure Limits	%
Zinc oxide	10 mg/mm3	10 mg/mm3	1314-13-2	NA	Greater than 75
Polyacrylic acid	NA	NA	9003-01-4	NA	<10
Stannous fluoride	2.5mg/m3	2.5mg/m3	7783-47-3	NA	<15

3. Hazard Identification

Emergency Overview NA					
Routes of Exposure	Signs and Symptoms	Single, Repeated, or Lifetime Exposure	Severity (Mild, Moderate, Severe)	Acute and Chronic Health Effect(s)	Target Organ(s)
Eye	Redness or irritation of eyes.	NA	NA	Severe irritation caused by reaction of powder with water.	NA
Skin	Redness or irritation of skin.	NA	NA	NA	NA
Inhalation	NA	NA	NA	May adhere to tissue. May dry the skin causing irritation.	NA
Ingestion	NA	NA	NA	Ingestion may cause local irritation to soft tissue.	NA
Other	NA	NA	NA	NA	NA
Medical Conditions Aggravated by Exposure Open wounds or sores of the skin.					
Carcinogenicity (IARC, NTP) NTP: Not listed. IARC Monographs: Not listed. OSHA REGULATED: No					
Potential Environmental Effects NA					

4. First Aid Measures

Routes of Exposure	First Aid Instructions	Immediate Medical Attention	Delayed Effects
Eye	In case of eye contact, flush with flowing water for 15 minutes.	Call physician.	NA
Skin	Flush with flowing water for 15 minutes, and then wash area with mild soap and water.	Call physician.	NA
Inhalation	NA	NA	NA
Ingestion	NA	NA	NA
Other	NA	NA	NA
Note to Physicians (Treatment, Testing, and Monitoring) NA			



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5. Fire and Explosion Data

Flashpoint & Method: °C / °F N/A	Flammable (Explosive) Limits in Air LEL: N/E UEL: N/E	Autoignition Temperature NA	Other NA
Flame Propagation or Burning NA	Properties Contributing to Fire Intensity NA	Flammability Classification Health-, Flammability-, Reactivity-NA	
Extinguishing Media Sand, foam, carbon dioxide, or dry chemical.		Extinguishing Media to Avoid NA	
Protection and Procedures for Firefighters Fire fighter should wear full protective clothing including a self-contained breathing apparatus.			
Unusual Fire and Explosion Hazards During a fire, irritating gases from the decomposition of the polyacrylic acid may be present.			

6. Accidental Release Measures

Containment Techniques NA
Spill/Leak Clean-Up Procedures and Equipment Sweep up spilled powder and place in an appropriately marked container.
Evacuation Procedures NA
Special Instructions NA
Reporting Requirements NA

7. Handling and Storage

Handling Practices and Warnings Observe normal warehouse handling procedures.
Storage Practices and Warnings Store away from food and beverages.

8. Exposure Control/Personal Protection

Ventilation Local exhaust.	Other Engineering Controls NA	
Routes of Entry:	Personal Protective Equipment (PPE) for Normal Use:	PPE for Emergencies:
Eye/Face	Close fitting protective goggles.	NA
Skin	Rubber gloves	NA
Inhalation	None required during normal use of this product. Local ventilation or approved nuisance dust mask, of in large quantities.	NA



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General Hygiene Considerations and Work Practices Observe normal care when working with chemicals.
Protective Measures During Repair and Maintenance of Contaminated Equipment NA
Other Protective Measures and Equipment Rubber apron.

9. Physical and Chemical Characteristics

Appearance Light pink, free flowing powder	Odor Free acidic odor.	
Normal Physical State: <input type="checkbox"/> Liquid <input type="checkbox"/> Gas <input checked="" type="checkbox"/> Solid <input type="checkbox"/> ____ (Other)	Boiling Point °C / °F N/A Melting Point °C / °F N/A Freezing Point °C / °F NA	
Specific Gravity or Density (H₂O=1) 4.5 g / cm ³	Solubility in Water Slightly soluble	pH NA
Vapor Pressure (mm Hg @ 20°C) N/A	Vapor Density (AIR= 1) N/A	Evaporation Rate (Butyl Acetate = 1) N/A
Other NA		

10. Stability and Reactivity Data

Incompatibility (Materials to Avoid) Strong acids, strong oxidizing agents.		
Hazardous Products Produced During Decomposition Oxides of Zinc.		
Hazardous Polymerization? <input type="checkbox"/> May Occur <input checked="" type="checkbox"/> May Not Occur	Conditions to Avoid °C / °F Strong acids and water.	
Stability? <input checked="" type="checkbox"/> Stable <input type="checkbox"/> Unstable	Conditions to Avoid °C / °F Strong acids, water or moisture. (relative humidity > 50%) will cause the material to harden.	

11. Toxicological Information

Toxicity Data, Epidemiology Studies, Carcinogenicity, Neurological Effects, Genetic or Reproductive Effects, or Structure Activity Data NA
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12. Ecological Information

Toxicity, Environmental Fate, Physical/Chemical Data, or Other Data Supporting Environmental Hazard Statements NA

13. Disposal Considerations

Regulations Waste disposal method: Dispose of in accordance with federal, state and local regulations.
Properties (Physical/Chemical) Affecting Disposal NA



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14. Transport Information

Regulated for shipping? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Proper Shipping Name Tylok Plus	Packing Group NA	
Do changes in quantity, packaging, or shipment method change product classification? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Hazard Class NA	Identification Number NA
Other NA				

15. Regulatory Information

Federal Regulations NA
International Regulations NA
Other NFPA HAZARD CLASSIFICATIONS: Health 1 Flammability 0 Reactivity 1 Specific hazard N/A NFPA- National Fire Protection Association

16. Other Information

Supplier Number: 2 / 53	Supplier Release: December 3, 2000
N/A = not applicable. NA = not available, N/E = not established. N/D = not determined.	