

504.

Material Safety Data Sheet

May be used to comply with
 OSHA's Hazard Communication Standard,
 29 CFR 1910.1200. Standard must be
 Consulted for specific requirements

U.S. Department of Labor

Occupational Safety and Health Administration
 (Non-Mandatory Form)
 Form Approved
 OMB No. 1218-0072

Identity (As used on Label and List)

**Orton Pyrometric Cones / Bars / TempChecks /
 Plaques**

Note: Blank spaces are not permitted. If any item is not
 applicable, or no information is available, the space must be
 marked to indicate that.

Section I – Product Identification

Manufacturer's Name The Edward Orton Jr. Ceramic Foundation	Emergency Telephone Number (614) 895-2663
Address (Number, Street, City, State, & Zip Code) 6991 Old 3C Highway, P.O. Box 2760, Westerville OH 43086 – 2760	Telephone Number for Information (614) 895-2663
Date Prepared 7/14/99	Signature of Preparer (Optional)

Section II – Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity: Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	(%) (Optional)
Plaques, TempChecks, and Cone and Bar Numbers				
022, 021, 020, 019, 018, 017, 016, 015, 014, 013, 012, 011, 010, 09, 08, 07, 06, 05½, 05, 04, 03, 02, 01, 1, 2, 3, 4, 5, 5½, 6, 7, 8, 9, 10, 11, 12, 12½, 13, 13½, 14, 14½, 15, 15½, 16, 17, 18, 19, 20, 21, 23, 26, 27, 28, 29, 30, 31, 31½, 32, 32½, 33, 34, 35, 36 37, 38, 39, 40, 41 (Contain 2-65% Silica)				
Silica as dust		10 mg/m ³		

Section III – Physical/Chemical Characteristics

Boiling Point	N/A	Specific Gravity (H₂O = 1)	1.8 – 2.0
Vapor Pressure (mmHg)	N/A	Melting Point	N/A
Vapor Density (Air = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	N/A
Solubility in Water Nil			
Appearance and Color Solid-Shape of pyramid or rectangular shape – some products contain organic colors for aid in identification			

Section IV – Fire And Explosion Hazard Data

Flash Point (Method Used) N/A	Flammable Limits N/A	LEL N/A	UEL N/A
Extinguishing Media N/A			
Special Fire Fighting Procedures All products except those labeled Fast Fire or PCE contain 4-6% organic material that will oxidize above 300°F			
Unusual Fire and Explosion Hazards N/A			

Section V – Reactivity Data

Stability	Unstable		Conditions to Avoid
	Stable	X	
Incompatibility (Materials to Avoid) N/A			
Hazardous Decomposition or Byproducts N/A			
Hazardous Polymerization	May Occur		Conditions to Avoid
	Will not Occur	X	

Section VI – Health Hazard Data

Route(s) of Entry:	Inhalation? N/A	Skin? None Anticipated	Ingestion? None Anticipated
Health Hazards (Acute and Chronic) Product is non-hazardous when used as intended. Product should not be ground into dust or ingested. Product may contain crystalline silica, which may cause cancer, when inhaled, based on animal testing.			
Carcinogenicity:	NTP? No	IARC Monographs? No	OSHA Regulated? No
Signs and Symptoms of Exposure N/A			
Medical Conditions Generally Aggravated by Exposure N/A			
Emergency and First Aid Procedures If swallowed, get professional medical help			

Section VII – Precautions for Safe Handling and Use

Steps to be taken in Case Material is Released or Spilled No specific precautions	
Waste Disposal Method Disposal must meet existing federal, state, and local environmental control for low soluble glass frit - titanium dioxide - silica	
Precautions to Be Taken in Handling and Storing Keep out of reach of children. Wash hands after handling.	
Other Precautions Organic components may produce harmful gases during firing, if not fully oxidized. Also other gases may be produced during firing, therefore, provide adequate ventilation to kiln or kiln area.	

Section VIII – Control Measures

Respiratory Protection (Specify Type)		
N/A		
Ventilation	Local Exhaust	Special
	N/A	N/A
	Mechanical (General)	Other
	N/A	N/A
Protective Gloves	Eye Protection	
N/A	N/A	
Other Protective Clothing or Equipment		
No special requirements		
Work/Hygienic Practices		
Wash hands after handling		