

#12-83

85512-85529

#098904 to #09923  
#099244 to #09957

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)  
Bell Pyrometric Cones/Bars

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

Manufacturer's Name Bell Research Inc.	Emergency Telephone Number 304 387 2681
Address (Number, Street, City, State, and ZIP Code) 157 Virginia Ave Chester, WV. 26034	Telephone Number for Information 304 387 2681
	Date Prepared 6-1-90
	Signature of Preparer (optional) <i>Elyse M. J. Miller</i>

Section II -- Hazardous Ingredients/Identify Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Numbers 022, 021, 020 contain a low soluble lead frit and titanium dioxide				
lead as a dust		.05mg/m <sup>3</sup>		50% as Pb
titanium dioxide		10mg/m <sup>3</sup>		
Numbers 017, 016, 015, 014, 013, 012, 011, 010, 09, 08 07, 06, 05, 04, 03, 02, 01, 1, 2, 3, 4, 5, 6, 7 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 23, 26, 27, 28, 29, 30, Contain Silica				
silica as dust		10.0mg/m <sup>3</sup> (Time weighted)		10-65%

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Section III -- Physical/Chemical Characteristics

Boiling Point	N/A	Specific Gravity (H <sub>2</sub> O = 1)	1.8 to 2
Vapor Pressure (mm Hg)	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 Odor  
Solid - Shape of pyramid or rectangular bar - No odor.

Section IV -- Fire and Explosion Hazard Data

Flash Point (Method Used)	N/A	Flammable Limits	LEL N/A	UEL N/A
Extinguishing Media	N/A			

Special Fire Fighting Procedures  
All numbers except those labeled PCE contain 4-6% organic material  
that will burn above 300°F.

Unusual Fire and Explosion Hazards  
N/A

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**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 based on animal data.

Carcinogenicity: NTP? IARC Monographs? OSHA Regulated?

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 regulations for low soluble lead 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	N/A	Special	N/A
	Mechanical (General)	N/A	Other	N/A

Protective Gloves N/A Eye Protection N/A

Other Protective Clothing or Equipment No special requirements

Work/Hygiene Practices Wash hands after handling