

Materials List for:

Metal-silicate Partitioning at High Pressure and Temperature: Experimental Methods and a Protocol to Suppress Highly Siderophile Element Inclusions

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Materials

Name	Company	Catalog Number	Comments
G10 Epoxy/Fiberglass Sheet	Accurate plastics, Inc.	GEES.020N.3648	
Powdered starting materials- - Oxides, metals, carbonates	Alfa Aesar	Specific to desired experiment	
Castable 2-part MgO ceramic	Aremco	Ceramcast - 584	
PTFE Dry Lubricant	Camie-Campbell	2000 TFE-Coat	
Graphite resistance heaters	Carbone of America (Now owned by Mersen USA)	Custom Order	
Barium Carbonate	Chemical Products Corporation	Custom Order	Calcined free-flowing (CFF) grade
C-Type Thermocouple Wire (W26%Re, W5%Re)	Concept Alloys		~0.25 mm diameter is suitable for most experiments
Zirconia Cement	Cotronics; Resbond 940 2-part cement		Use 100 parts powder for every 25 to 28 parts activator
Polyvinyl Acetate (PVA) Glue	e.g., Bostik		Often sold as 'white glue'
Cyanoacrylate Glue	e.g., Krazy Glue/Loctite		
Piston cylinder pressure vessel and WC piston	Hi-Quality Carbide Tooling Inc.	Custom Order	
Silica Glass Tubing	Quartz Plus	Custom Order	
Crushable ZrO ₂ tubes	Saint-Gobain	Custom Order	
Crushable MgO rods and tubes	Saint-Gobain	Custom Order	
WC cubes for multi-anvil experiments	Tungaloy	Custom Order	Cubes are grade-F WC alloy
Single hole alumina tube for multi-anvil thermocouple	Vesuvius McDanel	AXS071730-04-06	
4-hole alumina tube for piston cylinder thermocouple	Vesuvius McDanel	AXF1159--07-12	
4-hole alumina tube for multi-anvil thermocouple	Vesuvius McDanel	AXF1159-04-06	