

Materials List for:

Conducting Elevated Temperature Normal and Combined Pressure-Shear Plate Impact Experiments Via a Breech-end Sabot Heater System

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Materials

Name	Company	Catalog Number	Comments
99.999% commercial purity polycrystalline aluminum	Goodfellow	AL007970	Material for flyer plate (sample)
H13 tool steel	Fabrication Center of CWRU	N/A	Material for the sample holder
Solution treat & age Inconel 718 alloy	High Temp Metals	N/A	(1.005/1.015)" Dia x 24", Material for target plate
Photoresist S1805	MicroChem	N/A	Material of the photoresist for holographic grating
Developer CD-26	MicroChem	N/A	Developer to the photoresist for holographic grating
Aluminum 6063 tube	McMaster-Carr	4568T19	Material for the ring in target assembly
Black Delrin (R) Acetal Resin Rod (4-1/2" Dia.)	McMaster-Carr	8576K81	Material for the Delrin holder in target assembly
White Delrin (R) Acetal Resin Rod (1/4" Dia.)	McMaster-Carr	8572K51	Material for the Delrin pins in target assembly
Aluminum 6061 tube	McMaster-Carr	9056K24	Material for the body in projectile assembly
Aluminum 6061 rod	McMaster-Carr	8974K88	Material for the cap in projectile assembly
Teflon sheet	McMaster-Carr	8711K98	Material for the key
LAVA-FF - Alumina Silicate disc	Technical Products	CWR-033116-1	
LAVA-FF - Alumina Silicate tube	Technical Products	ALR11515	
Alumina Pan Slotted Head Bolt	Ceramco	A83200PANSLT0.500	
409 N70 Buna-N O-ring	The O-ring Store	B70409	
Loctite Hysol 9412 adhesive	Loctite	83107	
High Temperature Cements	OMEGA Engineering	OB-300	
Extra fast-set epoxy	Ellsworth	4001	
Mylar sheet	McMaster-Carr	8567K94	