

# Task® 7 - Flame Out®

Polyurethane  
Smooth-On, Inc

## Message:

Flame Out® is a low viscosity, fast set casting resin that meets UL 94 V-O requirements for flame resistance. It does not contain mercury, TDI or MOCA. Mix ratio is 1A:1B by volume. Pot life is 2.5 min. and demold time is 10 min. at 73°F / 23°C (depending on mass). Fully cured Flame Out® material is tough, durable, machinable and paintable. It has much higher physical and performance properties than any other flame rated urethane available anywhere. Vibrant colors and color effects are possible by adding SO-Strong® color tints. Applications for Flame Out® include making flame resistant prototype and architectural models, model toys, theme park and stage elements, durable miniatures and special effect props. Material can also be used for potting and encapsulation applications.

General Information	
Features	Durable
	Flame Retardant
	Good Colorability
	Good Toughness
	Low Viscosity
	Machinable
	Paintable
Uses	Decorative Parts
	Modeling Material
	Prototyping
	Toys
Appearance	White
Processing Method	Casting
	Encapsulating
	Potting

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.20	g/cm <sup>3</sup>	ASTM D1475
Specific Volume	0.835	cm <sup>3</sup> /g	ASTM D1475
Mixing Ratio	1A:1B by volume		
Molding Shrinkage - Flow	1.1	%	ASTM D2566
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	73		ASTM D2240
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1040	MPa	ASTM D638
Tensile Strength (Break)	23.4	MPa	ASTM D638
Tensile Elongation (Break)	15	%	ASTM D638
Flexural Modulus	1030	MPa	ASTM D790

Flexural Strength	37.6	MPa	ASTM D790
Compressive Modulus	397	MPa	ASTM D695
Compressive Strength	35.4	MPa	ASTM D695
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Unannealed)	55.0	°C	ASTM D648
Thermoset	Nominal Value	Unit	Test Method
Pot Life (23°C)	2.5	min	ASTM D2471
Thermoset Mix Viscosity	200	cP	ASTM D2393
Demold Time <sup>1</sup> (23°C)	10	min	
NOTE			

1. Cure Time

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#### Recommended distributors for this material

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