

# Clear-Flex® 50

Polyurethane  
Smooth-On, Inc

## Message:

Clear Flex® 50 and Clear Flex® 95 are water white clear urethane liquid rubber compounds designed for applications that require absolute clarity and resistance to sunlight. Low viscosity ensures easy mixing and pouring. Clear Flex® 50 and 95 cure at room temperature with negligible shrinkage. Cured castings are clear, flexible and UV Resistant. Vibrant colors and color effects are achieved by adding pigments. Applications include making clear-cut molds, model reproductions, decorative cast pieces, special effects, prototype parts.

General Information			
Features	Good Colorability		
	Good Flexibility		
	Good UV Resistance		
	High Clarity		
	Low Shrinkage		
	Low Viscosity		
	Sunlight Resistant		
Uses	Decorative Parts		
	Modeling Material		
	Prototyping		
Appearance	Clear/Transparent		
Forms	Liquid		
Processing Method	Casting		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.04	g/cm <sup>3</sup>	ASTM D1475
Specific Volume	0.968	cm <sup>3</sup> /g	
Cure Time	16.0	hr	
Molding Shrinkage - Flow	0.15	%	ASTM D955
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A, 23°C)	50		ASTM D2240
Elastomers	Nominal Value	Unit	Test Method
Tensile Strength (Break, 23°C)	1.72	MPa	ASTM D412
Tensile Elongation (Break, 23°C)	500	%	ASTM D412
Tear Strength <sup>1</sup> (23°C)	4.38	kN/m	ASTM D624
Optical	Nominal Value		
Refractive Index			
-- <sup>2</sup>	1.486		
-- <sup>3</sup>	1.488		
Thermoset	Nominal Value	Unit	Test Method

Thermoset Components			
Part A	Mix Ratio by Weight: 1.0		
Part B	Mix Ratio by Weight: 2.0		
Pot Life	25	min	ASTM D2471
Thermoset Mix Viscosity	250	cP	ASTM D2393
NOTE			
1.	Die C		
2.	25°C		
3.	20°C		

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#### Recommended distributors for this material

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