

# Ecoflex® Supersoft 00-50

Silicone

Smooth-On, Inc

## Message:

Ecoflex® rubbers are platinum-catalyzed silicones that are versatile and easy to use. Ecoflex® rubbers are mixed 1A:1B by weight or volume and cured at room temperature with negligible shrinkage. Rubber also cures without a "tacky" surface. Low viscosity ensures easy mixing and de-airing, or you can choose to mix and dispense using our convenient dispensing cartridges.

Cured rubber is very soft, very strong and very "stretchy", stretching many times its original size without tearing and will rebound to its original form without distortion. Ecoflex® rubbers are water white translucent and can be color pigmented with Silc Pig® pigments for creating a variety of color effects. You can also add Smooth-On's Silicone Thinner® to further lower the viscosity. THI-VEX® silicone thickener can be added by weight to Ecoflex® 5 or Ecoflex® 00-10 for brushable applications. Note: THI-VEX® is NOT compatible with Ecoflex® 00-30 or Ecoflex® 00-50.

Soft, Softer, Softest . . . Ecoflex® rubbers are based on Smooth-On's Dragon Skin® technology and are currently available in four different hardness': Shore A-5, Shore 00-10, 00-30 and 00-50. They are suitable for a variety of applications including making prosthetic appliances, cushioning for orthotics and special effects applications (especially in animatronics where repetitive motion is required).

Ecoflex® 5 has a pot life of 1 minute and a demold time of 5 minutes - Available only in dispensing cartridges.

General Information			
Features	Good Strength		
	Good Stretchability		
	Good Tear Strength		
	Low Shrinkage		
	Low Viscosity		
	Soft		
Uses	Dental Applications		
	Prosthetics		
Appearance	Translucent		
Processing Method	Casting		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.07	g/cm <sup>3</sup>	ASTM D1475
Specific Volume	0.936	cm <sup>3</sup> /g	ASTM D1475
Mixing Ratio	1A:1B by volume		
Operating Temperature	-54 to 232	°C	
Molding Shrinkage - Flow	< 0.10	%	ASTM D2566
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore OO)	50		ASTM D2240
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress (100% Strain)	0.0827	MPa	ASTM D412
Tensile Strength (Break)	2.17	MPa	ASTM D412
Tensile Elongation (Break)	980	%	ASTM D412
Tear Strength <sup>1</sup>	8.76	kN/m	ASTM D624
Electrical	Nominal Value	Unit	Test Method

Dielectric Strength	> 14	kV/mm	ASTM D149
Thermoset	Nominal Value	Unit	Test Method
Pot Life	18	min	ASTM D2471
Thermoset Mix Viscosity	8000	cP	ASTM D2393
Demold Time	180	min	
NOTE			

1. Die B

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