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RTV-2 Silicones Since 1974

GI-300 Series

Product Information

General Information

GI-300 series RTV silicone rubbers are two-component, tin-catalyzed systems that cure at room temperature. They are versatile products that are excellent for electrical potting and encapsulation. They can also be used for prototype or production molds to cast polyester, polyurethane or epoxy parts where flexing is not required. They are low viscosity compounds with a variety of hardnesses. The **GI-300 series** rubbers are not sensitive to inhibition, meaning they will cure at room temperature over virtually any surface. The speed at which the rubbers harden can be accelerated with special activators. **The GI-300 series** rubbers are especially useful in those applications where outstanding heat resistance and chemical resistance are required.

Typical Properties

Uncatalyzed Base	GI-300B	GI-311B	GI-312B	GI-320B	GI-360B	GI-380B
Color	Beige	Beige	Beige	Red	Beige	Beige
Viscosity (± 5,000 cps)	18,000	14,000	35,000	50,000	70,000	30,000
Mixing Ratio (B/A)						
By weight:	100/10	100/10	100/10	100/10	100/10	100/10
By volume:	100/14.2	100/11.6	100/14.8	100/14.9	100/15.3	100/15.9
Mixed Viscosity (± 5,000 cps)	10,000	8,000	20,000	30,000	40,000	20,000
Working Time (Hours)	1 to 2	1 to 2	1 to 2	1 to 2	1 to 2	1 to 2
Cure Time (Hours)	16 to 18	16 to 18	16 to 18	16 to 18	16 to 18	16 to 18
Shelf Life (Months)	6	6	6	6	6	6

Vulcanized (cured) Properties (7 days @ 70° F / 50% relative humidity)

Shore A Hardness (±4)						
One day / 7 Days:	45 / 50	42 / 44	57 / 60	43 / 50	60 / 64	68 / 74
Tear Resistance (ASTM D624)	25 ppi	20 ppi	25 ppi	30 ppi	20 ppi	20 ppi
Tensile Strength (ASTM D412)	600 psi	325 psi	450 psi	600 psi	650 psi	650 psi
Elongation (ASTM D412)	160%	150%	100%	125%	100%	70%
Service Temperature, ° F	-60 to 425	-60 to 425	-60 to 425	-60 to 575	-60 to 425	-60 to425
Shrinkage	0.20%	0.25%	0.15%	0.15%	0.15%	0.15%
Specific Gravity	1.35	1.14	1.45	1.41	1.49	1.56
Coverage, in^3 / lb	20.5	24.3	19.1	18.9	18.6	17.8
Arc Resistance, seconds	125	90	125	125	125	125
Dielectric Strength, volts/mil	575	575	575	575	575	575
Dielectric Constant @ 100 HZ	3.2	3.0	3.7	3.8	3.7	3.7
Dissipation Factor @ 100 HZ	2×10^{-2}	1×10^{-2}	3×10^{-2}	5×10^{-2}	3×10^{-2}	3×10^{-2}
Volume Resistivity, ohms/cm	1×10^{13}	1×10^{13}	1×10^{13}	4×10^{13}	1×10^{13}	1×10^{13}
Thermal Cond., $cal/cm^2/°C/sec/cm$	6×10^{-4}	5×10^{-4}	7×10^{-4}	7×10^{-4}	7×10^{-4}	7×10^{-4}
Coef. of Thermal Exp., cm/cm/°C	9×10^{-4}	11×10^{-4}	10×10^{-4}	10×10^{-4}	10×10^{-4}	10×10^{-4}