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Product Information

Preliminary Data Sheet - XP-429 Platinum Gel

DESCRIPTION

Silicones, Incorporated's XP-429 Platinum Gel is an extremely soft, tacky, transparent, resilient silicone rubber gel. It is a two component, addition cure material that is sensitive to cure inhibition when in contact with sulfur, nitrogen or organo-tin containing materials. XP-429 has a low viscosity that allows for easy mixing, deairing, and pouring. It is used for potting or encapsulating electrical parts where visual inspection is required. It has excellent electrical insulating properties and provides superior damping characteristics. XP-429 has greater mechanical properties than traditional gels and can be used in conjunction with platinum cured special effect silicones to produce realistic simulations of living tissue.

MIXING INSTRUCTIONS

Mix 100 parts by weight of XP-429 Base with 100 parts by weight of XP-429 Activator in a container that will hold about two times the volume of the rubber being mixed. Stir thoroughly either by hand or by mechanical means, taking care to scrape the sides and bottom of the container. Immediately after mixing, place the container in a vacuum chamber capable of 28 inches of mercury vacuum. The rubber will expand as it is being deaired. After the rubber collapses, maintain the vacuum for an additional two minutes and release. Carefully pour the catalyzed silicone rubber gel into the mold cavity. Be sure to seal anything that may cause inhibition.

TYPICAL PROPERTIES

Color, base	Transparent
Color, activator	Transparent
Base viscosity (cps)	7,000
Activator viscosity (cps)	7,000
Working Time (hrs)	2 to 4
Cure Time (hrs)	18 to 24
Specific Gravity, cured rubber	1.00
Penetrometer Measurement (mm)	
1 day	40 - 60
7 days	50 - 70
Shrinkage (%)	*nil*
Tensile Strength (psi)	< 100
Elongation (%)	>500
Dielectric Strength (volts/mil)	500
Dielectric Contant @ 100 Hz	2.9
Dissipation Factor @ 100 Hz	0.003
Volume Resistivity (ohmx/cm)	1×10^{15}
Shelf Life (uncured material)	6 months