



Silicones, Inc.

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Product Information

XP-537

Specialty platinum cured silicone designed for animatronics where small, precise movements of the robotics are required. This material is not designed for most animatronic applications. Please refer to other Silicones, Inc. silicones for a wider range of materials.

The XP-537 will require a paint coating to alleviate tackiness. We are currently working on a compatible paint system.

Mixing Directions

XP-537 is mixed 10 parts base to one part activator by weight. Deviations from this ratio will cause changes in the physical properties. Choose a container with a volume that is two to three times greater than that of the rubber. Weigh the components carefully and mix thoroughly. After the color is evenly mixed into the base, scrape the sides and bottom of the container to ensure that there is not unmixed portion. Place the container in a vacuum chamber and deaerate at 28 to 29 inches of mercury vacuum until the mass of rubber rises and then collapses.

Cure Sensitivity

XP-537 may have its cure inhibited at the interface between the mold and the master. Models that have come in contact with the tin catalyzed rubbers (the GI-series) may show cure inhibition at the face of the mold. This can usually be prevented by thoroughly cleaning the model with naphtha or methylene chloride, releasing and checking the area by brushing on a small amount of catalyzed XP-537. After twenty-four hours this film must be cured and non sticky. In the event that the contamination still exists, the model should be cleaned again and a thin film of acrylic or nitrocellulose lacquer or base coat should be applied. This should serve as a barrier coat and allow a completely cured mold to be prepared. Other substrates such as clays containing sulfur, amine or tin contaminated materials will cause surface inhibition and in all cases a test should be run as outlined above to determine compatibility.

Typical Properties

Color, base	translucent
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Base viscosity (cps)	4800 \pm 200
Activator viscosity (cps)	1,000
Working time (hours)	1:30 \pm :15
Cure time (hours)	16 - 18
Demold time (hours)	2:15 - 2:45
Specific gravity	1.08
Shore 00 hardness	
Demold	10
3 hour	20
1 day	20
Modulus (psi)	
50%	9
100%	9
200%	11

The information contained in this product information sheet is based on sources believed to be accurate. It is offered in good faith, but without guarantee since the conditions of use are beyond our control. All risks of use are assumed by the user.