

Deadener & Hardener for PlatSil® Gels

Technical Bulletin

PLATSIL® GELS: PlatSil Gels are 1A:1B (by weight or volume) platinum-cured silicone systems with five to six-minute working and 30 to 60-minute demold times depending on the system used. PlatSil Gel-0020 cures to a Shore hardness of 0020, PlatSil Gel-00 and PlatSil Gel-0030 cure to a Shore hardness of 0030, PlatSil Gel-10 cures to a Shore hardness of A10, and PlatSil Gel-25 cures to Shore hardness of A25. PlatSil Gels can be used as mold rubbers, to create prosthetic appliances, or for life casting. Refer to the **PlatSil® Silicone Gels Technical Bulletin** for more information.

DEADENER: Polytek offers an array of accessory products for PlatSil Gels. Smith's Theatrical Prosthetic Deadener and PlatSil® Deadener LV (Low-Viscosity) can be added to soften and eliminate the snappy, synthetic look and feel of ordinary silicone rubbers. "Deadened" PlatSil Gels can be made to look, feel and move like living tissue. Unlike silicone fluid, Deadener does not leach from the cured rubber/appliance, so bonding and use are far easier. Refer to the **PlatSil® Silicone Gels Technical Bulletin** for additional information.

USING DEADENER: Add Deadener to Part A prior to mixing with Part B. A test cure should be performed to determine the proper amount of Deadener to add for individual applications. Refer to the tables below for the effects of deadener on PlatSil Gels. Adding over the recommended percentages of deadener per product will result in a non-paintable, sticky, cured gel. **Polytek does not recommend adding Deadener to PlatSil Gel-0020 or PlatSil Gel-0030.**

PLATSIL® GEL-25

Add up to 100% (by weight of A +B) Smith's Theatrical Prosthetic Deadener or PlatSil Deadener LV to PlatSil® Gel-25.

SMITH'S THEATRICAL PROSTHETIC DEADENER & PLATSIL® GEL-25					
Mix Ratio	1A:1B	1A:1B:0.25D	1A:1B:0.5D	1A:1B:1D	1A:1B:2D
Pour Time (min)	6	6	5.5	7.5	9
Demold Time	1 hr	1 hr	45 min	45 min	1 hr
Shore Hardness	A25	A17	0035	00040	00030
Tack	No	No	Slight	Yes	Very

PLATSIL® DEADENER LV & PLATSIL® GEL-25					
Mix Ratio	1A:1B	1A:1B:0.25D	1A:1B:0.5D	1A:1B:1D	1A:1B:2D
Pour Time (min)	6	5.5	7.5	10	12
Demold Time	1 hr	1 hr	45 min	45 min	1 hr
Shore Hardness	A25	A17	0035	00044	00030
Tack	No	No	Slight	Yes	Very

PLATSIL® GEL-10

Add up to 200% (by weight of A +B) Smith's Theatrical Prosthetic Deadener or PlatSil Deadener LV to PlatSil® Gel-10.

SMITH'S THEATRICAL PROSTHETIC DEADENER & PLATSIL® GEL-10					
Mix Ratio	1A:1B	1A:1B:0.5D	1A:1B:1D	1A:1B:2D	1A:1B:4D
Pour Time (min)	8	6.5	7	8.5	10
Demold Time	30 min	30 min	30 min	30 min	1 hr
Shore Hardness	A8	0041	0030	00052	00020
Tack	No	No	Slight	Yes	Very

PLATSIL® DEADENER LV & PLATSIL® GEL-10					
Mix Ratio	1A:1B	1A:1B:0.5D	1A:1B:1D	1A:1B:2D	1A:1B:4D
Pour Time (min)	8	9.5	10	13	15
Demold Time	30 min	30 min	30 min	30 min	1 hr
Shore Hardness	A8	0039	0028	00049	00025
Tack	No	No	Slight	Yes	Very

PLATSIL® GEL-00

Add up to 100% (by weight of A +B) Smith's Theatrical Prosthetic Deadener or PlatSil Deadener LV to PlatSil® Gel-00.

SMITH'S THEATRICAL PROSTHETIC DEADENER & PLATSIL® GEL-00				
Mix Ratio	1A:1B	1A:1B:0.5D	1A:1B:1D	1A:1B:2D
Pour Time (min)	7.5	6.5	9	11
Demold Time	40 min	40 min	40 min	45 min
Shore Hardness	0030	0017	00050	00016
Tack	No	No	Yes	Very

PLATSIL® DEADENER LV & PLATSIL® GEL-00				
Mix Ratio	1A:1B	1A:1B:0.5D	1A:1B:1D	1A:1B:2D
Pour Time (min)	8	10	15	18.5
Demold Time	40 min	40 min	40 min	45 min
Shore Hardness	0030	0011	00045	00015
Tack	No	No	Yes	Very

HARDENER: PlatSil® Part H Hardener can be used to increase the Shore hardness for any of the PlatSil Gels. Add Deadener to Part A prior to mixing with Part B. Do not exceed a 1A:1B:1H mix ratio.

PLATSIL® PART H HARDENER & PLATSIL® GEL-25

Mix Ratio	1A:1B	1A:1B:1H
Pour Time (min)	6	8
Demold Time	1 hr	2.5 hr
Shore Hardness	A25	A40
Tack	No	No

PLATSIL® PART H HARDENER & PLATSIL® GEL-10

Mix Ratio	1A:1B	1A:1B:1H
Pour Time (min)	8	9.5
Demold Time	30 min	1.5 hr
Shore Hardness	A8	A25
Tack	No	No

PLATSIL® PART H HARDENER & PLATSIL® GEL-00

Mix Ratio	1A:1B	1A:1B:1H
Pour Time (min)	7.5	6.5
Demold Time	40 min	1.5 hr
Shore Hardness	OO30	A17
Tack	No	No

PLATSIL® PART H HARDENER & PLATSIL® GEL-0030

Mix Ratio	1A:1B	1A:1B:1H
Pour Time (min)	45	30
Demold Time	4 hr	3.5 hr
Shore Hardness	OO30	A13
Tack	No	No

PLATSIL® PART H HARDENER & PLATSIL® GEL-0020

Mix Ratio	1A:1B	1A:1B:1H
Pour Time (min)	40	40
Demold Time	2 hr	4 hr
Shore Hardness	OO20	A15
Tack	No	No

SAFETY: Before use, read product labels and Safety Data Sheets. Follow safety precautions and directions. Use with adequate ventilation. Avoid contact with mucous membranes and eyes. Best method of clean up is by wiping with disposable paper towels and washing with waterless hand cleaner, then soap and water. If solvents must be used, denatured ethyl alcohol is best, but should be handled with respect for health and flammability hazards. Smith's Theatrical Prosthetic Deadener, PlatSil® Deadener LV and PlatSil® Part H Hardener conform to ASTM D4236.

SHELF LIFE: For best results, store products in unopened containers at room temperature (60-90°F/15-32°C). Use products within six months.

DISCLAIMER: The information in this bulletin and otherwise provided by Polytek® is considered accurate. However, no warranty is expressed or implied regarding the accuracy of the data, the results to be obtained by the use thereof, or that any such use will not infringe any patent. Before using, the user shall determine the suitability of the product for the intended use and user assumes all risk and liability whatsoever in connection therewith.

PACKAGING

Product(s)	Size (lb)	Volume
Smith's Theatrical Prosthetic Deadener, PlatSil® Deadener LV	1.8	1 quart
	8.0	1 gallon
	40	5 gallons
PlatSil® Part H Hardener	2.0	1 quart
	8	1 gallon
	40	5 gallons

*Volume measurements are approximate.

OTHER ACCESSORIES FOR USE WITH PLATSIL® GELS

PlatSil® Part X Accelerator
PlatSil® Part R Retarder
Silicone Color Pigments
Silicone Fluid cSt

Pol-Ease® 2500 Release Agent
Pol-Ease® 2350 Sealer & Release Agent
PolyCoat Semi-Permanent Sealer & Release Agent
Poly PVA Solution (Green or Clear)

PlatThix Thickener
TinThix Thickener
Fumed Silica