

# 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-OO20 cures to a Shore hardness of OO20, PlatSil Gel-OO and PlatSil Gel-OO30 cure to a Shore hardness of OO30, 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.

**BEFORE USE:** Thoroughly read Safety Data Sheets, product labels and the "SAFETY" section in this Technical Bulletin.

**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-OO20 or PlatSil Gel-OO30.**

## 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	6 min.	6 min.	5.5 min.	7.5 min.	9 min.
Demold Time	1 hr.	1 hr.	45 min.	45 min.	1 hr.
Shore Hardness	A25	A17	OO35	OOO40	OOO5
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	6 min.	5.5 min.	7.5 min.	10 min.	12 min.
Demold Time	1 hr.	1 hr.	45 min.	45 min.	1 hr.
Shore Hardness	A25	A17	OO35	OOO44	OOO10
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	8 min.	6.5 min.	7 min.	8.5 min.	10 min.
Demold Time	30 min.	30 min.	30 min.	30 min.	1 hr.
Shore Hardness	A8	OO41	OO30	OOO52	OOO20
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	8 min.	9.5 min.	10 min.	13 min.	15 min.
Demold Time	30 min.	30 min.	30 min.	30 min.	1 hr.
Shore Hardness	A8	OO39	OO28	OOO49	OOO25
Tack	No	No	Slight	Yes	Very

## PLATSIL® GEL-OO

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

SMITH'S THEATRICAL PROSTHETIC DEADENER & PLATSIL® GEL-OO				
Mix Ratio	1A:1B	1A:1B:0.5D	1A:1B:1D	1A:1B:2D
Pour Time	7.5 min.	6.5 min.	9 min.	11 min.
Demold Time	40 min.	40 min.	40 min.	45 min.
Shore Hardness	OO30	OO17	OOO50	OOO16
Tack	No	No	Yes	Very

PLATSIL® DEADENER LV & PLATSIL® GEL-OO				
Mix Ratio	1A:1B	1A:1B:0.5D	1A:1B:1D	1A:1B:2D
Pour Time	8 min.	10 min.	15 min.	18.5 min.
Demold Time	40 min.	40 min.	40 min.	45 min.
Shore Hardness	OO30	OO11	OOO45	OOO15
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 Hardener 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	6 min.	8 min.
Demold Time	1 hr.	2.5 hr.
Shore Hardness	A25	A40
Tack	No	No

PLATSIL® PART H HARDENER & PLATSIL® GEL-0030		
Mix Ratio	1A:1B	1A:1B:1H
Pour Time	45 min.	30 min.
Demold Time	4 hr.	3.5 hr.
Shore Hardness	0030	A14
Tack	No	No

PLATSIL® PART H HARDENER & PLATSIL® GEL-10		
Mix Ratio	1A:1B	1A:1B:1H
Pour Time	8 min.	9.5 min.
Demold Time	30 min.	1.5 hr.
Shore Hardness	A8	A25
Tack	No	No

PLATSIL® PART H HARDENER & PLATSIL® GEL-0020		
Mix Ratio	1A:1B	1A:1B:1H
Pour Time	40 min.	40 min.
Demold Time	2 hr.	4 hr.
Shore Hardness	0020	A14
Tack	No	No

PLATSIL® PART H HARDENER & PLATSIL® GEL-00		
Mix Ratio	1A:1B	1A:1B:1H
Pour Time	7.5 min.	6.5 min.
Demold Time	40 min.	1.5 hr.
Shore Hardness	0030	A17
Tack	No	No

**SAFETY:** Before use, thoroughly read Safety Data Sheets and product labels. Follow safety precautions and directions. Keep out of reach of children. Use with adequate general or local exhaust ventilation to minimize exposure levels. If needed, a NIOSH-approved respirator with organic vapor cartridge may be used. If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing. Wear impervious gloves, such as butyl rubber or nitrile rubber. Wash skin thoroughly with soap and water after handling. Wear eye protection, such as chemical safety glasses/goggles. If in eyes, rinse cautiously with water for several minutes, removing contact lenses if present and easy to do.

**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® Development Corp. 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.

**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 Sealer & Release Agent  
 Poly PVA Solution

PlatThix Thickener  
 TinThix Thickener  
 Fumed Silica