

# Platinum Cure Silicone

## JEHBSIL® PLAT Series

### Technical Datasheet



## Material Overview

Jehbsil Platinum Silicone is our highest specification grade of solid silicone rubber. It is particularly suited for food contact, medical grade, drinking water contact and pharmaceutical applications. It can be extruded into any shape, is available in many hardness grades (40-90 Shore A). Platinum cure silicone also exhibits superior elongation, tensile strength, tear strength and compression set compared to GP silicone.

All platinum cured silicones are FDA, WRAS, RoHS and USP class VI certified, and Plat-60 and Plat-70 grade tubing are AS 4020 approved. Platinum silicone can be used at extremely high and low temperatures, and are chemically resistant to UV light and a wide variety of substances.

Custom grades of silicone can also be engineered on request to match specific mechanical property requirements, typically by combining different peroxide grades (eg. 55 Shore A). All Jehbsil silicones can be made to match any colour on demand.



## Technical Specifications

Property	Typical Values							Inspection Method
	Unit	Jehbsil Platinum Material Codes						
		Plat-30	Plat-40	Plat-50	Plat-60	Plat-70	Plat-90	
Hardness	Shore A	30	40	50	60	70	90	DIN 53505
Density	g/cm <sup>3</sup>	1.11	1.11	1.15	1.16	1.18	1.2	ISO 1183-1A
Tensile Strength	N/mm <sup>2</sup>	8.9	10.2	9.6	9.5	9.1	6.4	DIN 53504 S1
Elongation at Break	%	800	880	825	830	600	150	DIN 53504 S1
Compression Set <sup>1</sup>	%	20	25	20	20	14	30	DIN ISO 815B
Tear Strength	N/mm	31	20	38	40	39	17	ASTM D624B
Rebound Resilience	%	54	58.0	50	49	56	65	DIN 53512
Autoignition Temp.	°C	>400						DIN 51794
Service Temp.	°C	-60 to +200						ASTM D2000
FDA Food Contact		Yes						CFR 21§177.2600
WRAS Water Contact		Yes						WRAS
AS 4020 Drinking Water		Certified for Plat-60 and Plat-70						AS 4020
US Pharmacopeia		Class VI Certified						USP Class VI
RoHS		Compliant						RoHS 2015

<sup>1</sup> Compression Set Measured at 22 hrs at 175°C.