

S I L E X²

S I L I C O N E S₀



Certificate No. 0372

DATA SHEET – NGP 70

HIGH QUALITY PLATINUM CURED EXTRUSION GRADE

Characteristics

NGP 70 silicone rubbers are addition-curing, two part compounds (batch grades) for the manufacture of extruded standard articles. The vulcanizates show good transparency and good mechanical properties. Properly postcured vulcanizates of NGP 70 comply with BfR and FDA food contact regulations.

Application

NGP 70 is intended for peroxide free fabrication of extruded standard articles such as tubing, profiles etc.

Processing

NGP 70 may not be cured with peroxides, but only with the catalyst batch PT 1. NGP 70 and Curing Agent PT 1 are mixed homogeneously on a roll mill in a ratio of 100 : 1.5. Care must be taken to keep the mill and compound as cool as possible during mixing.

The temperature of the rubber should not exceed 35 °C, since otherwise there is a risk of partial curing, which would seriously reduce the pot life. Crosslinking begins when Curing Agent PT 1 has been added. The rate and degree of crosslinking depend on the storage time and temperature. At 23 °C, the mixture has a pot life of about 24 h. This can be extended by storing the catalyzed mixture at a lower temperature.

Storage

NGP 70 should be stored under 25 °C in the originally sealed container. The 'Best use before end' date of each batch appears on the product label. Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

Property data (postcured)

Property	Test method	Unit	NGP 70
Hardness Shore A	DIN 53 505		70
Appearance			Translucent
Specific gravity	DIN EN ISO 1183-1A	[g/cm ³]	1.17
Tensile Strength	DIN 53 504 S1	[N/mm ²]	9.6
Elongation at break	DIN 53 504 S1	[%]	600
Tear resistance	ASTM D 624 B	[N/mm ²]	30
Impact resistance	DIN 53 512	[%]	56
Compression set	DIN ISO 815-B (22h/175°C)	[%]	20
<p>Cure conditions 15min/165°C in press, postcuring for 4h/200°C in ventilated air. (These figures are only intended as a guide and should not be used in preparing specifications.)</p>			

Temperature range: -40 to +200°C

FDA, BFR approved