ELASTOSIL® R plus 4305/50

PLATINUM CATALYZED SOLID SILICONE RUBBER-BATCH GRADE FOR EXTRUSION

Product description

ELASTOSIL® R plus 4305/50 HCR silicone rubbers are addition-curing, two part compounds (batch grades). The vulcanizates show excellent transparancy and good to very good mechanical properties. Properly postcured vulcanizates of ELASTOSIL® R plus 4305/50 comply with BfR and FDA food contact regulations. The material also passes USP XXIII Class VI and ISO 10993 certification is available.

Application

ELASTOSIL® R plus 4305/50 is intended for fabrication of extruded articles that afford high transparency and very good tear resistance values.

Processing

ELASTOSIL® R plus 4305/50 may not be cured with peroxides, only with the catalyst batch ELASTOSIL® AUX PT1.

ELASTOSIL® R plus 4305/50 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 or risk partial curing and reduced pot life.

Crosslinking begins when Curing Agent PT 1 has been added. The rate and degree of crosslinking depends on the storage time and temperature.

At 23°C, the mixture has a pot life of about 24 hours. This can be extended by storing the catalyzed mixture at a lower temperature.

Storage

The "Best use before end date" of each batch is shown on the Certificate of Analysis. Storage beyond the date specified on the Certificate of Analysis 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.

ELASTOSIL® R plus 4305/50 should be stored at less than 25°C in the originally sealed container.

Safety notes

For specific information regarding safe handling of this material, please refer to the Material Safety Data Sheet.

Specifications

Typical property values are not intended for use in the preparation of specifications. Please contact Wacker Silicones for assistance and recommendations before writing specifications on this product.

Contact:

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Product data

Typical general characteristics	Inspection Method	Value
Hardness Shore A	ASTM D 2240	50
Appearance	WSTM 1279	Transparent
Density , 25°C		1.10 - 1.14 g/cm³
Tensile Strength	ASTM D 412	11.5 MPa
Tensile Strength	ASTM D 412	1666 psi
Elongation at break	ASTM D 412	850 %
Tear strength die B	ASTM D 624	40 kN/m
Tear strength die B	ASTM D 624	228 ppi
Compression Set (22 h / 175 °C)	WSTM 1114	15 %
Pot life	WSTM 2299	24 Hours
USP XXIII, Class VI		Passed
ISO 10993		Available

*Properties obtained after mixing ELASTOSIL® R plus 4305/50 and Curing Agent PT1 in a ratio of 100: 1.5; press cured 15 min/165°C, and postcured 4 hours/200°C in vented air.

For technical, quality, or product safety questions, please contact:

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