

TECHNICAL DATASHEET

3110

(Super RTV Silicone – black)

Description

Neutral cure one-component RTV silicone formulated for use in a wide range of industrial applications. 3110 Super RTV Silicone BLACK is low odour and non-corrosive because the by-products of cure are chemically neutral. The product is characterized by its high temperature resistance, mechanical strength and resistance to vibration as well as its excellent weather and chemical resistance.

3110 Super RTV Silicone BLACK is an adhesive and sealant that achieves optimum seals, protection and adhesion to a wide variety of materials. It is typically used in situations that require bonds or seals to surfaces in heating or cooling devices, or in applications where electronic components require protection from external forces (vibration, impact, moisture and chemicals): Bonding and sealing parts in household appliances (e.g. ovens and ceramic hobs), seals in electronic components (e.g. accumulators), seals in automotive applications (e.g. intake manifolds, oil pumps, oil pans, camshaft bearing covers, gearbox covers and front covers) and door seals.

Advantages

- Pasty, does not flow during mounting
- Very low-odour
- Neutral and acid-free cross-linking (non-corrosive)
- High temperature resistance
- Excellent resistance to weathering and chemicals

Physical properties (liquid product)

Chemical base	Modified oxime silicone
Curing System	Moisture curing
Appearance	Black, thixotropic paste
Shelf life in cartridges	12 months at room temperature
Shelf life in metal tube or can	24 months at room temperature
Density at 20 °C	~ 1.21 g/ml
Viscosity at 25 °C (EN 12092, Cone-plate-system)	
Shear rate	10 s ⁻¹
100 s ⁻¹	60'000 – 80'000 mPa•s
	15'000 – 25'000 mPa•s
Extrusion rate at 25 °C with 5.5 bar and 3 mm opening	150 – 250 g / 15 seconds

Curing properties

Skinning time at 23 °C and 50% r.h.	5 – 10 minutes
Curing process at 23 °C and 50% r.h. after 24 h	2 – 3 mm
Volume shrinkage	5 – 7 %
Loss of weight	1 – 3 %

Physical properties (cured product)

Thermal range	-60°C up to +260°C shortly up to +300°C
Tensile strength (ISO 527/S2)	~ 2 N/mm ²
Elongation at break (ISO 527/S2)	~ 550 %
Recoverability (DIN EN 27389)	~ 90 %
Shore A Hardness (DIN 53505)	~ 31
Coefficient of elongation (ASTM EB-31)	~ 20 • 10 ⁻⁵ K ⁻¹
Dielectric constant @ 1 MHz (ASTM D-150)	~ 2.8

Precautions

For your own safety, please refer to the information of the concerned MSDS.

The information in this data sheet is based on the results of our research and experience. However, the suggestions herein concerning the use, application, and processing of the products (collectively, „the methods“) **are non-binding recommendations only**. It is the user's sole responsibility to determine the suitability and safety of these methods, based on the user's particular purpose in using the products. Before relying on the reliability and safety of any parts that are bonded using the products, it is extremely important that the user test the reliability and safety of the parts that are bonded. Failure to do so could result in serious personal injury. Because of the use of the products are within the purchaser's sole control, Kisling Corporation specifically disclaims all warranties, express or implied, including warranties of merchantability or fitness for a particular purpose, arising from the sale or use of the products described herein. Kisling Corporation specifically disclaims any liability for consequential, incidental, or other damages of any kind, including lost profits. Kisling Corporation's liability for damages shall not exceed the purchase price of the products used.

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