3093 LD

Self-levelling polysiloxane



Technical data sheet

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1. Properties

- self-levelling silicone based on neutral alkoxy
- RTV1 compound
- UV, ageing and weather resistant
- excellent adhesion to various materials
- non-corrosive
- temperature resistance at long term exposure from -50 °C to +150 °C
- EMICODE® EC 1PLUS ,very low emission'

2. Areas of application

- For application in hard-to-reach areas thanks to its special, flowable formula.
- For use as a casting compound for moisture-sensitive components in mechanical and plant engineering.
- For use as a casting compound in the electrical industry for electronic components and battery cells.

3. Technical data

CTM*	Standard	Feature	Unit	Value	
		Base		Alkoxy neutral cure	
		Curing mechanism		RTV 1	
		Skin formation time at +23 °C 50 % RH	mins	~ 30	
		Full curing time at +23 °C 50 % RH	mm/24 hrs	~ 2.80	
	EN ISO 1183-1	Density	g/cm³	~ 1.01	
	DIN EN ISO 868	Shore A hardness		~ 10	
	EN ISO 10563	Volume shrinkage	%	~ 3.00	
	DIN 53504-S2	Elongation at break	%	N/A**	
	DIN 53504-S2	Tensile strength	N/mm²	N/A**	
	DIN 53504-S2	Modulus of elasticity 100%	N/mm²	N/A**	
	DIN ISO 34-1	Tear resistance	N/mm	N/A**	
		Temperature resistance (long term exposure)	°C	-50 to +150	
		Processing temperature	°C	+5 to +35	
f-1-0/g-1-0		Shear stress 51/s	Pa	~ 870	
f-1-0/g-1-0		Viscosity 51/s	Pa∙s	~ 17	
		Electrical conductivity (volume resistance)	Ω·cm	> 1 x 10 ¹⁰	
		Thermal conductivity	W/(m·K)	~ 0.17	
		Colours	Transparent	Transparent	
		Packaging	Barrel, hobb	Barrel, hobbock, 400 & 600 ml film bag	
		Shelf life	6 months (when stored in a	6 months (when stored in a cool and dry place in the original container)	

^{*} Corporate Test Method | CTM copies available on request

^{**} not available

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4. Substrate preparation

The adhesive surfaces must be dry, stable and free of dust, oil and grease. On non-absorbent substrates, pre-cleaning with 828 Basic Cleaner is recommended. For sensitive surfaces, compatibility should be checked in advance to avoid surface damage. If necessary, carefully pre-treat the adhesive surfaces with a suitable primer. Sanding with fine abrasive fleece can further improve adhesion on smooth surfaces. Due to the many different coating systems, an adhesion test is recommended before application on painted surfaces.

5. Processing

General information: 3093 LD can be processed at substrate and ambient temperatures between +5 °C and +35 °C. The viscosity of the uncured material is temperature-dependent, meaning that viscosity increases at low temperatures and decreases at high temperatures. In addition, a variety of external influences, such as humidity, UV exposure, chemical influences, high temperatures, etc., must be taken into account. These and other factors can have a significant effect on the material properties of the product and its shelf life. The expiry date stated on the product must be strictly adhered to, as the product properties can no longer be guaranteed if this date is exceeded. Good ventilation must be ensured during processing and curing.

Processing: Before application, the processor must ensure that all materials that come into contact with the product do not cause any incompatibilities. 3093 LD must be applied sparingly, as excess material may overflow. The compound can be applied in layers within the skin formation time. The final total layer thickness should not exceed 10 mm, as cross-linking slows down considerably with increasing layer thickness.

Removal: Uncured 3093 LD can be removed with 502 Surface Cleaner or 504 Universal Cleaning Wipes, while cured material can only be removed mechanically. If it comes into contact with the skin, it must be cleaned immediately.

6. Application restrictions

- Product cannot be painted over.
- Avoid contact with bituminous and plasticiser-releasing materials such as butyl, EPDM, neoprene, etc.
- Not suitable for filling large, airtight cavities, as room humidity is essential for cross-linking.
- Without pre-treatment, no adhesion to plastics with low-energy surfaces, such as PE, PP or PTFE.

7. Safety notices

All safety notices and instructions are listed in the current safety data sheet available on www.ramsauer.eu.

8. Liability for defects

All information, in particular suggestions for the processing and use of our products, is based on our knowledge and previous experience. Depending on the specific circumstances, in particular with regard to the substrate, processing and environmental conditions, the results may differ from our specifications. Therefore, no guarantee can be given for the quality of the results achieved, which are influenced by the aforementioned circumstances. No legal claims of any kind can be asserted against Ramsauer GmbH & Co KG on the basis of this information or verbal advice, provided that we are not guilty of intent or gross negligence. Ramsauer GmbH & Co KG guarantees that its products will retain their technical properties as specified in the technical data sheets until their expiry date. Product users must observe the latest technical data sheet, which can be downloaded from our website at www.ramsauer.eu. Our current General Terms and Conditions apply. These are also available on our website. With the publication of a new version or revision of a technical data sheet, all previous versions of the respective product lose their validity.

