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Technical Data Sheet

RAU-SIK Adhesive SI-1512
Made by RAUMEDIC

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2

RAUMEDIC SI-1512 is a condensation-curing RTV-1 silicone rubber, curing at room temperature under the influence of atmospheric moisture and the release of acetic acid. After vulcanization, the mechanical properties and the chemical structure are comparable to standard silicone elastomers.

SI-1512 consists of poly(dimethylsiloxane), acetoxy silane crosslinker, titanium catalyst system, fillers and additives.

General Properties

- 1-component system
- Vulcanization at room temperature under the influence of atmospheric moisture
- Condensation curing under release of acetic acid
- Self-levelling
- Adhesion to silicone rubber and other materials, e.g. glass, stainless steel, several plastics
- Suitable for coating processes

Technical Properties

Properties	Value	Unit	Test method
Properties, uncured			
Viscosity	425.000	mPa·s	RAUMEDIC method
Skin formation time	15	Min	RAUMEDIC method
Tack-free time	30	Min	RAUMEDIC method
Properties, cured Standard test specimen 2mm, vulcanized at 23° C / 50% rH / 14 days			
Shore hardness A	35	-	ISO 48-4
Density	1,1	g/cm^3	ISO 1183
Tear strength	4	MPa	ISO 527
Elongation at break	400	%	ISO 527
Tear resistance	8	N/mm	ASTM-D 624 B

These values are for guidance only.
Please contact your sales partner to obtain the technical specification.

Application Instructions

4

The vulcanization of SI-1512 starts with contact to atmospheric moisture with skin formation on the surface of the rubber. The crosslinking process gradually progresses into the silicone rubber.

Due to the release of acetic acid during vulcanization the typical vinegar vapours are produced. Adequate ventilation should be ensured during processing.

Typical Curing Conditions

- Curing in 24 h at 23°C / 50 % rH: about 3 mm
- Curing time increases with increasing layer thickness
- Typical service temperature is approximately -40°C to 180°C.
- Short-term applications up to 200°C possible.

The surfaces to be bonded or coated must be clean, grease-free, and dry. Contaminations on the surfaces, such as release agents, dust, grease, etc., can impair adhesion and must be avoided.

For coating purposes, SI-1512 can be diluted with suitable solvents, such as xylene or n-heptane.

RAUMEDIC silicone adhesive SI-1512 can be stored for 9 months starting at production date. The shelf life is either indicated by stamping on the tube or printed on the secondary cartridge label. The shelf life becomes invalid once the primary packaging (tube or metallized film wrap) is opened. The processability time of the adhesive after opening must be validated by the customer in accordance with the specific application requirements.

Regulatory Information

Based on our experience and current knowledge about the materials and production processes the material formulation complies with/does not contain:

- Bisphenol A (BPA)
- Latex or Natural rubber latex or Natural rubber or Dry natural rubber
- Phthalates (Directive 2005/84/EC)
- Endocrine disruptors
- Ozone depleting substances (Regulation (EC) No 1005/2009)
- Perfluorinated chemicals (PFCs) (PFOA, PFOS)
- Persistent Bioaccumulative Toxins (PBTs)
- Persistent Organic Pollutants (POPs) (Regulation (EU) 2019/1021)
- Genetically Modified Organisms (GMO)
- Animal derived materials (Materials which present BSE/TSE risks)
- Conflict minerals (Dodd-Frank Act, Section 1502)
- Safe Drinking Water and Toxic Enforcement Act of 1986 (California Proposition 65) issued 22.05.2023
- RoHS (Directive 2011/65/EU, Directive (EU) 2015/863)
- Heavy Metals (CONEG, Directive 94/62/EC)
- CMR substances (Regulation (EC) No 1272/2008)
- Substances of Very High Concern (SVHC) as identified under Article 33 of Regulation (EC) No 1907/2006 (REACH) or substances listed in Annex XIV and Annex XVII
- Nanomaterials (acc. to the definition Medical Device Regulation (EU) 2017/745)
- D4, D5 and D6 siloxanes (possible content < 0,1%)

as intentionally added components above threshold limits stated in aforementioned Regulations, Directives or Laws.

However, the raw materials used, and our final product(s) are not analyzed for the presence of traces of the above-mentioned substances.

RAUMEDIC AG
Hermann-Staudinger-Str. 2
95233 Helmbrechts
+49 9252 359-0
contact@raumedic.com

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raumedic.com