

ELASTOSIL® Solar 1200

RTV-2 SILICONE RUBBER / ADHESIVE

Product description

ELASTOSIL® Solar 1200 is a non-slump, two-part room temperature curing silicone rubber, that yields vulcanisates with primerless adhesion when cured with WACKER® Catalyst T77 or WACKER® Catalyst T78.

Special features

- neutral curing system (alkoxy)
- non-slump and thixotropic
- fast curing
- primerless adhesion to many substrates
- long-term stability against weathering, moisture and UV radiation
- electrically insulating

Application

Fast-curing multi-purpose adhesive for the solar energy industry, e.g. for frame sealing, bonding of junction boxes or fixation of backrails and mirrors.

Processing

ELASTOSIL® Solar 1200 is processed in combination with WACKER® Catalyst T 77 or WACKER® Catalyst T78. The curing time can be easily adjusted to the particular needs by varying the mixing ratio of component A to component B (min. 6:1; max. 14:1). Within the indicated limits the influence of the mixing ratio on the properties of the cured material is almost negligible. During curing a small amount of alcohol is released.

After completion of the vulcanization process the product may continuously be exposed to constantly changing climatic conditions, UV radiation and temperatures as high as 180 °C (356 °F) without damage.

ELASTOSIL® Solar 1200 shows good primerless adhesion to many substrates, in particular to those materials which are typical of the solar industry (glass, anodized aluminium, Tedlar® films, PVF, PVDF, PPO, PPS etc.). We recommend running preliminary tests to optimize conditions for the particular application. Comprehensive processing instructions are given in our leaflet "Wacker RTV-2 Silicone Rubber - Processing".

If removal of silicone rubber from machines or dispensing equipment is necessary, white spirit or similar nonpolar solvents are recommended. However, cleaning ideally should take place before the rubber is fully vulcanized. Cured silicone rubber can be removed mechanically, preferably in combination with a swelling agent (solvent).

Storage

The 'Best use before end' date of each batch is shown 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.

Safety notes

During cure ELASTOSIL® Solar 1200 releases a total of 1.5 % alcohol. These vapours should not be inhaled for long periods or in high concentrations. Hence ventilation of the work place is recommended.

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from WACKER subsidiaries or may be printed via WACKER web site <http://www.wacker.com>.

Product data

Typical general characteristics	Inspection Method	Value
Product data (uncured)		
Component ELASTOSIL® Solar 1200	Component A	
Color		ivory
Viscosity, dynamic (D = 0,5 1/s)	DIN EN ISO 3219	1400000 mPa.s
Viscosity, dynamic (D = 25 1/s)	DIN EN ISO 3219	100000 mPa.s
Density	DIN 53217	1,4 g/cm ³
Component Catalyst T 77	Component B	
Color		black
Viscosity at 23 °C	DIN 53018	150000 mPa s
Density at 23 °C	ISO 2811	1,1 g/cm ³
Component Catalyst T 78	Component B	
Color		black
Viscosity at 23 °C	DIN 53018	350000 mPa s
Density at 23 °C	ISO 2811	1,1 g/cm ³
Product data (catalyzed A + B)		
Pot life 10: 1 mixing ratio with Catalyst T77		20 - 30 min
Tack-free time 10: 1 mixing ratio with Catalyst T77		45 - 60 min
Pot life 10: 1 mixing ratio with Catalyst T78		5 - 10 min
Tack-free time 10: 1 mixing ratio with Catalyst T78		15 - 20 min
Product data (cured), 10:1 mixing ratio		
Color		black
Density at 23 °C in water	DIN EN ISO 1183-1	1,35 g/cm ³
Hardness Shore A	DIN 53505 / ISO 868	35
Tensile strength	DIN 53504 S1 / ISO 37	2,2 N/mm ²
Elongation at break	DIN 53504 S1 / ISO 37	300 %
Tear strength	ASTM D 624 B	5,5 N/mm

Curing conditions: 2 mm, 14 days storage at 23 °C and 50 % RH.

These figures are only intended as a guide and should not be used in preparing specifications.

The data presented in this leaflet are in accordance with the present state of our knowledge, but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this leaflet should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. The recommendations do not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the products for a particular purpose.

The management system has been certified according to DIN EN ISO 9001 and DIN EN ISO 14001

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

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