ELASTOSIL® RT 722 RB A/B

Room Temperature Curing Silicone Rubber (RTV-2)

ELASTOSIL® RT 722 RB A/B is a thixotropic, thermally curable, addition-curing two-component silicone sealing adhesive that cures to an elastomer.

Properties

Fast curing at moderate temperature
Thixotropic, pasty
Medium hardness
Primerless adhesion on many substrates
High tensile strength and high elongation
D4-D8 < 350ppm

Technical data

Properties Uncured

Property	Condition	Value	Method
Viscosity, dynamic A [D=0,5 s^{-1}]	25 °C	300000 mPa·s	DIN EN ISO 3219
Viscosity, dynamic A [D=25 s^{-1}]	25 °C	35000 mPa·s	DIN EN ISO 3219
Viscosity, dynamic B [D=25 s^{-1}]	25 °C	35000 mPa·s	DIN EN ISO 3219
Viscosity, dynamic B [D=0,5 s^{-1}]	25 °C	250000 mPa·s	DIN EN ISO 3219

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

Properties Uncured

Property	Condition	A	B	Method
Color	-	gray	translucent	-
Density	23 °C	1.1 g/cm^3	1.1 g/cm^3	DIN EN ISO 1183-1 A
Platinum catalyst in component	-	A	-	-

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

Properties Catalyzed A+B

Property	Condition	Value	Method
Viscosity, dynamic [D=0,5 s^{-1}]	25 °C	300000 mPa·s	DIN EN ISO 3219
Viscosity, dynamic [D=25 s^{-1}]	25 °C	35000 mPa·s	DIN EN ISO 3219
Mix ratio	-	1:1 pbw	-
Pot life(1)	-	min. 6 h	-
Kick-off temperature(2)	-	85 °C	ISO 6502

[1]DIN EN ISO 3219

[2]Torque Measurement, 10 K/min, onset 4%

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Properties Cured

Property	Condition	Value	Method
Color	-	gray	-
Density	23 °C	1.1 g/cm^3	DIN EN ISO 2811-2
Hardness Shore A[(1)]	-	45	DIN ISO 48-4
Tensile strength[(2)]	-	6 N/mm^2	ISO 37 - S2 (2 mm film)
Elongation at break[(3)]	-	300 %	ISO 37 - S2 (2 mm film)
Modulus at 100 % elongation	-	2 N/mm^2	ISO 37
Al-Al (0,2 mm)[(4)]	-	4 N/mm^2	-
Al-PBT (0,2 mm)[(5)]	-	4 N/mm^2	-

[1][from 6 mm plate, pressed at 165°C/15 min]
[2][pressed sheet, 165°C/15 min]
[3][pressed sheet, 165°C/15 min]
[4]acc. to DIN EN 1465 [AlMgCu 2pl, pickled]; 115°C / 75 min
[5]acc. to DIN EN 1465 [AlMgCu 2pl (pickled); ULTRADUR BG 4300 GF 30; 75 min / 115 °C]

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Application details

Sealing adhesive for electronic control units
FIPG applications for plastic and metal housings
Dam material for dam-and-fill applications
Sealing and gasketing of housings

Processing

General Considerations

ELASTOSIL® 722 RB A/B shows good primerless adhesion to many substrates.
We recommend running preliminary tests to optimize conditions for the particular application.
Comprehensive processing instructions are given in our leaflet „ Room Temperature Vulcanizing (RTV) Silicones (Materials and Processing Guidelines)” which can be downloaded from WACKER Chemie AG website.

Substrate Surface

All equipment and surfaces must be clean and free of contaminants that will prevent adhesion and/or inhibit the cure of ELASTOSIL® 722 RB A/B
Separation layers on bonding substrated may be formed from residues of previous processes, from migrating additives or unintended contaminations. Examples of separating molecules among others can be processing fluids or deforming agents that are not able to built chemical links to reactive and accessible anchor groups of the substrate surface or to the silicone elastomer.
Examples of inhibiting contaminants are sulfur containing materials, plasticizers, urethanes, amine containing materials and organometallic compounds – especially organotin compounds.
If a substrate's ability to inhibit cure or built up adhesion is unknown, a small scale test should be run to determine compatibility.
ELASTOSIL® 722 RB A/B shows good primerless adhesion to many substrates. We recommend to run preliminary tests to optimize conditions for the particular application.
Safeguarding of reproducable and suitable surface quality is recommended. State of the art methods include in-line surface pretreatments like plasma processes or laser pretreatment.

Dispensing

Because of the high thixotropy (shear thinning effect)
ELASTOSIL® 722 RB A/B can be dispensed easily with all dispensing equipments using static mixing tubes or dynamic mixing.
Since silicones dissolve notable amounts of air, an in-line degassing is recommended.

Curing

ELASTOSIL® 722 RB A/B works best when cured at 115 °C or more.
Curing time should be adapted to the size and heat sink properties of the components and parts.
The term "curing" time describes the time needed for solidification of the material.
For typical substrates adhesion built-up is accomplished within this time, which can be observed by cohesive failure upon adhesion test.
However, depending on the surface quality of the bonding surfaces, time to adhesion might differ from given curing profiles.
In the interest of robust processing it is highly recommended that for selected curing temperatures & times aging tests on specific customers parts are carried out to safeguard the process.

Property	Value
Platinum-catalyst in component	A
Mixing ratio, parts by weight	A:B 1 : 1
Pot life at 23°C	6 h
Curing time 2 mm thickness	90°C / 45 min
Curing time 2 mm thickness	100°C / 30 min
Curing time 2 mm thickness	125°C / 15 min

Packaging and storage

Storage

The 'Best use before end' date of each batch appears 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

Detailed safety information is contained in each material data safety sheet, which can be obtained from our sales offices.

QR Code ELASTOSIL® RT 722 RB A/B

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

Wacker Chemie AG, Hanns-Seidel-Platz 4, 81737 Munich, Germany
info@wacker.com, www.wacker.com