

BLUESIL RTV 3460 A-B

Description	The BLUESIL RTV 3460 A&B – is a two component silicone elastomer which cures at room temperature by a polyaddition reaction (10:1 ratio). It is designed as a high durometer rubber offering high mechanical strength and a long mold life.
Examples of applications	This product is specifically formulated for use with casting materials and urethane foams for architectural, prototyping and furniture molding applications. BLUESIL RTV 3460 A&B is also used in high pressure applications (PU Foam, RIM).
Key benefits	<ul style="list-style-type: none"> • Outstanding mechanical resistance at high durometer. • Resistance to common casting resins. • Low density. • Excellent details reproduction.

Typical properties

1. Characteristics of the non cured product

Properties	BLUESIL RTV 3460 A	BLUESIL RTV 3460 B
Aspect	viscous fluid	viscous fluid
Viscosity (At 23°C, mPa.s, ISO 3219, approx.)	95 000	5 000
Colour	beige	black

2. Polymerization

BLUESIL RTV (Pt catalyst):100 parts

BLUESIL RTV 3460 B:10 parts

Properties	RTV 3460 A&B
Colour	Grey
Pot life (At 23°C, minutes)	210
Mixed viscosity (At 23°C, mPa.s, ISO 3219, approx.)	65 000
Demolding Time (At 23°C, hours)	16

Remark: Higher temperatures reduce pot life, lower temperatures prolong pot life. If curing is accelerated by heat the properties of **BLUESIL RTV A&B** are not modified. However dimensional changes do occur during post curing of which must be taken into account.

3. Characteristics of the cross linked product

Measured after curing 60 minutes at 175°C

Properties	RTV 3460 A&B
Hardness (Shore A)	58
Tensile strength at break (MPa)	6.0
Elongation at break (%)	230
Tear strength (KN/m)	25
Linear shrinkage (%)	< 0.1
Density (g/ml)	1.20

BLUESIL RTV 3460 A-B

Please note: The typical properties are not intended for use in preparing specifications. Please contact our local Sales Department for assistance in writing specifications.

Instruction of use

Remix each of the two components (parts A and B) every time before using.

1. Mixing of the two components

Add 100 parts of BLUESIL RTV 3460 A to 10 parts of BLUESIL RTV 3460 B.

The two components may be intimately mixed either by hand or using a low-speed electric or pneumatic mixer to minimize the introduction of air into the mixture.

2. Degassing

After mixing **BLUESIL RTV 3460 A&B**, it is recommended to eliminate entrapped air. If the processing is done with the help of a mixing machine both parts are degassed before mixing.

The BLUESIL RTV 3460 A&B is degassed under a vacuum of 30 to 50 mbar. Under vacuum, the product expands 3 at 4 times its initial volume and forms bubbles on its surface. These bubbles will disappear gradually and the mixture will sink back down to its initial volume within 5 minutes. Release the vacuum and repeat the operation a few minutes later.

Remark: release the vacuum several times improves the degassing. For easier degassing only fill a recipient to 1/3 of its height.

3. Cross linking

The best curing conditions are at 23°C. The use of products at higher temperatures will reduce the pot life and increase the setting rate. As opposed to this, lower temperatures will increase the pot life and decrease the setting time. It is recommended not to use the product at temperatures below 20°C; under these conditions, the final product performance levels will be difficult to achieve.

At 23°C, the moulds can be demoulded after 16 hours. In order to achieve the best possible performance levels from the moulds; it is preferable to wait for 24 hours before using them.

Room temperature curing assures the lowest possible shrinkage, if accelerated cure is desired, mild heat should be preferred. To minimize shrinkage cure the elastomer at maximum temperature of 60°C for 3-4 hours, higher temperatures will cause higher shrinkage.

Conversely at lower temperature polymerization is much slower, at 20°C 36 hours may be necessary to complete cross-linking.

Be aware that contact with certain materials can inhibit the curing of this RTV:

- Natural rubbers vulcanized with sulphur
- Polycondensation RTV catalysed with metal salts
- PVC stabilizing agents
- Amine cured epoxies
- Sulphur containing clays.

If doubts exist it's recommendable to run a quick test with a small quantity of material in order to assess compatibility. Take duly note that cross contamination due to not well cleaned tools or devices is frequently the main cause of inhibition. The best way is to use only dedicated gear when processing polyaddition RTVs.

Regulation	Please consult your local ELKEM SILICONES sales office.
Limitations	Please consult your local ELKEM SILICONES sales office.
Packaging	<ul style="list-style-type: none"> • BLUESIL RTV 3460 A is available in <ul style="list-style-type: none"> ○ Pail of 20 KG (44.1 LB) ○ Drum of 200 KG (441 LB) • BLUESIL RTV 3460 B BLACK is available in <ul style="list-style-type: none"> ○ Pail of 20 KG (44.1 LB) ○ Pail of 2 KG (4.41 LB)

BLUESIL RTV 3460 A-B

Storage and shelf life	<p>When stored in its original packaging:</p> <p>BLUESIL RTV 3460 A may be stored at a temperature below 40°C / 104°F for up to 18 months from its date of manufacturing.</p> <p>BLUESIL RTV 3460 B BLACK may be stored at a temperature below 40°C / 104°F for up to 18 months from its date of manufacturing.</p> <p>Comply with the storage instructions and expiration date marked on the packaging. Beyond this date, Elkem Silicones no longer guarantees that the product meets the sales specifications.</p>
Safety	<p>Please consult the Safety Data Sheet of: BLUESIL RTV 3460 A and BLUESIL RTV 3460 B BLACK</p>

Visit our website www.elkem.com/silicones/

Warning to the users

The information contained in this document is given in good faith based on our current knowledge. It is only an indication and is in no way binding, particularly as regards infringement of or prejudice to third party rights through the use of our products. ELKEM SILICONES guarantees that its products comply with its sales specifications. This information must on no account be used as a substitute for necessary prior tests which alone can ensure that a product is suitable for given use. Determination of the suitability of product for the uses and applications contemplated by users and others shall be the sole responsibility of users. Users are responsible for ensuring compliance with local legislation and for obtaining the necessary certifications and authorisations. Users are requested to check that they are in possession of the latest version of this document and ELKEM SILICONES is at their disposal to supply any additional information.