

BLUESILTM

RTV 3436 A & B – RTV 3436 TL A & B

Description The **BLUESIL RTV 3436 A&B** – is a two component, silicone elastomer which cures at room temperature by a polyaddition reaction (10:1 ratio).
 The product is available in two color versions:
BLUESIL RTV 3436 A&B: Red
BLUESIL RTV 3436 TL A&B: Colorless

Examples of applications This product is specifically formulated for the production of flexible moulds to be kept for long periods or where particularly accurate reproduction is required (ceramics, figurines, model-makers, etc.).

Advantages

- High fluidity.
- Easy processing and curing.
- Excellent mechanical properties.
- Low linear shrinkage (when cross-linked at room temperature).

Characteristics 1. Characteristics of the non cured product

<i>Properties</i>	RTV 3436		RTV 3436 TL	
	Part A	Part B (Pt)	Part A	Part B (Pt)
Aspect	viscous fluid			
Viscosity <i>(At 23°C, mPa.s, ISO 3219, approx.)</i>	20.000	6.000	20.000	6.000
Color	colorless	red	colorless	colorless
Specific gravity <i>(g/cm³)</i>	1.1	1.1	1.1	1.1

2. Polymerization

BLUESIL RTV 3436 A 100 parts
BLUESIL RTV 3436 B 10 parts

<i>Properties</i>	RTV 3436 A&B	RTV 3436 TL A&B
Color	red	colorless
Pot life <i>(At 23°C, 50 % relative humidity, minutes)</i>	120	150
Demolding Time <i>(At 23°C, 50 % relative humidity, hours)</i>	16	16

Remark: Higher temperatures reduce pot life, lower temperatures prolong pot life.
 If curing is accelerated by heat the properties of both versions of **BLUESIL RTV 3436 A&B** are not modified.
 However dimensional changes do occur during post curing of which must be taken into account.

BLUESIL™ RTV 3436 A&B – RTV 3436 TL A&B**Characteristics (cont')****3. Characteristics of the cross linked product**

Measured after curing 24 hours at 23°C

Properties	BLUESIL RTV 3436 A&B BLUESIL RTV 3436 TL A&B
Hardness (Shore A)	35
Tensile strength at break (MPa)	5
Elongation at break (%)	400
Tear strength (KN/m)	18
Linear shrinkage (%)	0.1

Processing

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

The instructions below are valid for both versions of the product (referred to as **BLUESIL RTV 3436 A&B**).**1. Mixing of the two components**Add 10 parts of **BLUESIL RTV 3436 B** to 100 parts of **BLUESIL RTV 3436 A**.

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. DegassingAfter mixing **BLUESIL RTV 3436 A&B**, it is recommended to eliminate entrapped air. If the mixing is carried out by means of a machine, both parts have to be degassed before mixing.The **BLUESIL RTV 3436 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.*

BLUESIL™ RTV 3436 A&B – RTV 3436 TL A&B**Processing (cont')****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 rate. It is recommended not to polymerize the product at temperatures below 20°C; under these conditions, the final product performance levels will be difficult to achieve.

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

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 additional 24 hours before using them.

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.

Packaging

BLUESIL RTV 3436 A&B is delivered in 25 Kg pails (part A) and 2.5 Kg pails (part B).

BLUESIL RTV 3436 TL A&B is delivered in 200 Kg drums (part A) and 20 Kg pails (part B).

Storage and shelf life

When stored in their original unopened packaging at a temperature of between – 5°C and + 30°C, both versions of **BLUESIL RTV 3436 A&B** may be stored for up to 12 months from the date of manufacture clearly marked on the packaging.

Beyond this date, Bluestar Silicones no longer guarantees that the products meet sales specifications.

Safety

Please consult the Safety Data Sheets of **BLUESIL RTV 3436 A&B** and **BLUESIL RTV 3436 TL A&B**.

BLUESILTM RTV 3436 A&B – RTV 3436 TL A&B

Visit our website www.bluestarsilicones.com

 **EUROPE**

Bluestar Silicones France
21 Avenue Georges Pompidou
F69486 Lyon Cedex 03
FRANCE
Tel. (33) 4 72 13 19 00
Fax (33) 4 72 13 19 88

 **NORTH AMERICA**

Bluestar Silicones USA
2 Tower Center Boulevard
Suite 1601
East Brunswick, NJ 08816-1100
United States
Tel. (1) 732 227-2060
Fax. (1) 732 249-7000

 **LATIN AMERICA**

Bluestar Silicones Brazil Ltda.
Av. Maria Coelho Aguiar, 215
Bloco G – 1º andar
05804-902-Sao Paulo – SP-
Brazil
Tel. (55) 11 37477887

 **ASIA PACIFIC**

Bluestar Silicones Hong Kong
Trading Co. Ltd
29th Floor, 88 Hing Fat Street
Causeway Bay
Hong Kong
Tel. (852) 3106 8200
Fax (852) 2979 0241

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. BLUESTAR 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. 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 BLUESTAR SILICONES is at their disposal to supply any additional information.