

# Rainbow Custom Coloured Silicone

## TECHNICAL DATA SHEET

**Colour matched for the perfect finish every time**

### PRODUCT DESCRIPTION

Rainbow Custom Coloured Silicone is a one-part, high quality neutral cure silicone sealant, that reacts with the atmospheric moisture producing a flexible rubber extremely resistant.

Colour matched to colour systems including, but not limited to, RAL, Dulux, BS, and Farrow & Ball, for the perfect finish every time.

Rainbow silicone contains fungicide additives which protects the silicone against fungal and microorganisms growth, allowing the product to be applied in sanitary domestic places.



### MAIN BENEFITS

- Fast curing.
- Low modulus and high elasticity.
- High movement capacity.
- Anti-mildew protection. No staining or colour changes.
- Excellent adhesion to a wide range of substrates without priming.
- UV radiation, weather and ageing resistant.
- Low odour and non-corrosive.
- Extremely long service life.

### PRODUCT CERTIFICATIONS

Rainbow Custom Coloured Silicone meets the following specifications:

- ISO 11600-F&G 25LM
- CE Marking: EN 15651-1 F-EXT-INT-CC  
EN 15651-2 G-CC  
EN 15651-3 S, class XS1
- Conformity to FDA CFR 21 §177.2600 (e). (Report IANESCO-15/14124)
- Global migration below legal limits set by Regulation (EU) 10/2011 on materials intended to come into contact with food. (Report IANESCO-15/14123, conformity to EN1186)

### ENVIRONMENTAL REGULATIONS

- French VOC-emission class A+.

### PACKAGING

The product is available in 310 ml. cartridges (24 u./box).

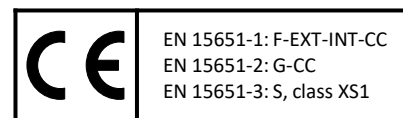
### COLOURS

Colour match service to any colour system including RAL, Dulux, BS, Farrow & Ball

*Excludes pearls, metallics, and fluorescents*

### STORAGE

The shelf life is 18 months in the original unopened packaging, in dry conditions and protected from direct sunlight at temperatures between +5°C and +30°C.



\* Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant de A+ (très faibles émissions) à C (fortes émissions).

## FIELDS OF APPLICATION



Sanitary seals in high humidity domestic areas (bathrooms and kitchens). Sealing of bath screens.

Sealing of joints (interior and exterior) between porous and non-porous substrates, where mildew may grow.

Conventional glazing and perimeter weathersealing of windows and doors.

Sealing in refrigeration units and cold rooms.

## TYPICAL TECHNICAL DATA

Basis:		Neutral oxime silicone
Consistency:		Thixotropic paste
Specific gravity:	(ISO 2811-1)	Approx. 1,00 g/ml
Tack free time:	(OQ.06-internal)	Approx. 5 minutes (at 23°C; 50% R.H.)
Skin forming time:	(OQ.16-internal)	5-15 minutes (at 23°C; 50% R.H.)
Curing rate:	(OQ.18-internal)	Approx. 3 mm/24 h
Resistance to flow:	(ISO 7390)	0 mm (at 5°C and 50°C)
Elastic recovery:	(ISO 7389)	> 80% (at 100% elongation)
Movement capability:	(ISO 11600)	± 25%
Loss of volume:	(ISO 10563)	< 6%
Shore A Hardness:	(ISO 868)	Approx. 18
Total VOC content:	(SCAQMD rule 1168)	Approx. 45 g/l
Application temperature:		+5°C to +40°C
Service temperature:		-40°C to +150°C

### Tensile properties:

#### **ISO 37 (2 mm thickness, S2 dumbbells, 7 days, 23°C; 50% R.H.)**

E-Modulus 100%	0,35 MPa
Tensile strength	1,30 MPa
Elongation at break	550%

#### **ISO 8339 (12x12x50 mm joint, 28 days, 23°C;50% R.H.)**

E-Modulus 100%	0,25 MPa
Tensile strength	0,40 MPa
Elongation at break	300%

These values may vary depending on environmental factors such as temperature, moisture, and type of substrates. The time until complete curing may be extended at lower temperature, lower humidity or increasing film thickness.

## DIRECTIONS FOR USE

### Surface preparation and sealant application

#### A. Cleaning and joint preparation:

Substrates (joint flanks) must be clean, dry, and free of dust, grease and other contaminant which may affect the adhesion. Non-porous surfaces (such as aluminium, glass, etc.) should be cleaned with a suitable solvent and thoroughly dried with a clean cloth. Porous substrates (such as concrete, brickwork, etc.) must be mechanically cleaned from loose particles. If necessary, the adjacent surfaces of the joint should be protected with masking tape to avoid staining.

#### B. Primer:

Rainbow silicone adheres without primer to glass, ceramic, anodized aluminum and vitrified surfaces, however, a preliminary adhesion test is recommended on every surface. Sometimes, it may be necessary to treat the joint surfaces with a primer to obtain better adhesion performances.

#### C. Silicone sealant application:

After substrate preparation, apply the sealant in the joint by repeatedly and evenly with a professional caulking gun. Observe the eventually used primer's open time before filling the joint.

#### D. Tooling and finishing:

The joint should be tooled and smoothed before skin formation. Press the sealant and smooth it ensuring good contact with the surfaces to seal. Use neutral soapy water as a tooling agent. Remove masking tape. Uncured product may be easily removed with solvents such isopropyl alcohol or "white spirit". Cured sealant must be removed mechanically.

### Remarks

Do not use Rainbow Custom Silicone on bituminous substrates or on building materials which might bleed oils, plasticizers, solvents or release by-products that may inhibit cure, affect adhesion or discolours the sealant (e.g. natural rubber, chloroprene, EPDM, ...).

There is no adhesion to PE, PP, PTFE (Teflon®). Due to the wide variety of possible substrates, we recommend a preliminary compatibility test.

Rainbow Custom Silicones cannot be overpainted.

It must not be used to seal laminated glass, as it could attack the PVB (butyral) interlayer. It is not suitable for contact with secondary sealant of insulating glass units.

Not intended for structural glazing, for sealing aquariums nor for gluing mirrors.

## Coverage

Estimated consumption in linear meters per 310 ml. cartridge (approx.):

Joint width (a):	5 mm	6 mm	8 mm	10 mm	12 mm	15 mm	20 mm	25 mm	30 mm
Joint depth (b):									
5 mm	12	10	8	6	5	4	3	2,5	2
8 mm	8	6	5	4	3	2,5	1,8	1,5	1,2
10 mm	6	5	4	3	2,5	2	1,5	1,2	1
12 mm	5	4	3	2,5	2	1,6	1,2	1	0,8
15 mm	4	3,5	2,5	2	1,6	1,3	1	0,8	0,6

Gray shades determine the width to depth recommended ratio

## Safety

The uncured product must be used in well-ventilated areas, avoiding contact with skin and eyes. Keep out of the reach of children.

Information relating to the safety of the product is available on the safety data sheet (SDS) Before using the product, we advise you to carefully read the SDS and the safety labels on the packaging.

## **GUARANTEE INFORMATION**

AB Building Products warrants that its product complies, within its shelf life, to its specification.

If any responsibility were to be considered ours, this would be only for any damages and for the value of the merchandise supplied by us and used by the customer. It is over understood that we warranty the irreproachable quality of our products in accordance with our General Conditions of Sales and Supply.

## **Liability**

The information in this document, in particular recommendations regarding the application and final use of our products, are given in good faith based on our knowledge and is the result of tests and experience and are intended as guidelines. It is the responsibility of the user to determine whether the product is suitable for the application. Due to the great variety of materials and conditions, which are beyond our knowledge and control, we recommend carrying out sufficient previous trials.

The property rights of third parties must be respected.

**Distributor:**