
PRODUCT DESCRIPTION

RAINBOW is a one part, low modulus, high quality neutral cure silicone sealant that reacts with the atmospheric moisture, producing a flexible rubber extremely resistant. It does not contain corrosive or strong smell additives.

RAINBOW preserves all properties of elasticity and adherence with no ageing problems, remaining stable in front of atmospheric agents.

RAINBOW contains fungicide additives, which protects the silicone against fungal and bacterial growth.

MAIN BENEFITS

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

PRODUCT CERTIFICATIONS AND ENVIRONMENTAL REGULATIONS

RAINBOW 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: XS1
- Conforms to FDA CFR 21 §177.2600(e).
- French VOC-emission class A+.
- Conforms to LEED® IEQ-credits 4.1 (Indoor Environmental Quality) adhesives and sealants.

FIELDS OF APPLICATION

RAINBOW is specifically recommended for:

- Sealing of expansion joints between porous and non-porous substrates, including concrete, masonry, brick, aluminium, PVC, glass, ceramics and most plastics.
- Sealing of joints (interior and exterior) where mildew may grow.
- Sealing in refrigeration units, cold rooms and food preparation areas.
- Sanitary seals in high humidity domestic areas such as bathrooms and kitchens.
- Conventional glazing and perimeter weathersealing of windows and doors.

TYPICAL TECHNICAL DATA

Basis	Neutral oxime silicone
Consistency	Non-slump paste
Specific gravity (ISO 2811-1)	1,00 - 1,25 g/ml (*)
Tack free time	Approx. 5-10 minutes (at 23°C; 50% R.H.)
Skin forming time	Approx. 10-15 minutes (a 23°C; 50% R.H.)
Curing rate	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 9047)	± 25%
Loss of volume (ISO 10563)	< 7%
Shore A hardness (ISO 7619-1)	18 – 24 (*)
Total VOC content	Approx. 45 g/l
Application temperature	Between +5°C to +40°C
Service temperature	Between -40°C to +150°C
Tensile properties	
ISO 37 (2mm thickness, S2 dumbbells, 7 days 23°C; 50% R.H.)	
E-Modulus 100%	0,35 – 0,45 MPa (*)
Tensile strength	1,30 – 1,50 Mpa (*)
Elongation at break	550%
ISO 8339 (12x12x50 mm joint, 28 days, 23°C; 50% R.H.)	
E-Modulus 100%	0,25 – 0,40 Mpa (*)
Tensile strength	0,40 – 0,60 Mpa (*)
Elongation at break	250 - 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.

(*) Depending on the colour

DIRECTIONS FOR USE

The substrates must be clean, dry and free of dust, grease and other contaminant, which may affect the products adhesion. Mask off the joint edges.

RAINBOW adheres to most common construction materials without primer. 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.

Use closed cell polyethylene backer foam as a back-up material to limit the sealant joint depth and avoid the sealant to adhere to the joint base. Choose the right backing strip diameter (at least 25% wider than the joint width).

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

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 on bituminous substrates or on building materials, which might bleed oils, plasticizers or solvents. (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 cannot be overpainted.

Not intended for structural glazing.

PACKAGING AND COLOURS INFORMATION

RAINBOW is available in 300ml cartridges (24 u/box). Other packaging is available under request.

Colours: More than 80 colours are available on special order.

STORAGE AND SAFETY

The shelf life is 24 months kept in the original unopened packaging, stored in cool dry conditions between +5°C and +25°C and protected from direct sunlight.

Use in well-ventilated areas and avoid skin and eye contact. Keep out of the reach of children.

The information regarding the safety of the product is available on safety data sheet (SDS). Before using the product, we recommend to read carefully the SDS and the safety labels.

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. 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 guarantee the irrefragable quality of our products in accordance with our General Conditions of Sales and Supply.