**10B** 

Technical Data Sheet (10/03)

# One component, odourless, ready-to-use, neutral silicone elastomer

Single component, neutral-curing, ready-to-use silicone elastomer suitable for weather-sealing and bonding seals in construction applications.

# **Description**

The **Ceresit 10B** is a one component, odourless, ready-touse, neutral silicone elastomer (alcoxy type) intended to produce sealing and bonding joints.

It cures at room temperature in the presence of air moisture to give a flexible and strong seal with low modulus of elasticity.

# **Particular Properties**

The **Ceresit 10B** combines the advantages of a primerless adhesion elastomer and neutrality on most construction materials, including porous surfaces. Since it has low modulus of elasticity, it therefore generates low strain on bonding surfaces and gives longer life to seals.

The Ceresit 10B accepts movements of 25% at most in continuous service within a wide range of temperatures.

The **Ceresit 10B** can be used on clear glass, layered glass and all other glazed surfaces, metals, wood (painted or otherwise), PVC, polycarbonates, polymethacrylates, ABS, concrete, cellular concrete, granite, marble, etc.

The **Ceresit 10B** does not generally stain surfaces. However, specific testing is necessary with sensitive surfaces and particularly porous surfaces (marble, stone, etc.).

Once cured, the **Ceresit 10B** has good resistance to diluted bases and to salt mist. We can also observe good behaviour to the temporary action of common solvents and hydrocarbons with for the latter, slight swelling of the sealant during exposure. However, we can note modification to a greater or lesser extent of its characteristics under the action of acids and chemical oxidants. Its mechanical and adhesive properties are not affected by solar radiation, rain, snow or ozone and enable it to perform its function over many years.

## **Applications**

The **Ceresit 10B** is specially intended to produce sealing and bonding joints in the construction and glazing industries, notably for:

- Traditional construction (expansion and stability joints).
- Light prefabrication (curtain walls, metal coving).
- Flooring joints (concrete slabs, motorways, airport runways).
- Caravan joints.
- Bonding of decorative panels.
- Perimeter seals in aluminium, wooden, PVC frames, etc.
- Elastic seals in glazing applications, on aluminium, wooden, PVC frames, etc.
- Heavy prefabrication (terrace, parapet wall and facade panel joints).
- Ventilation ducts, piping passages, guttering and downpipes.
- Bonding of materials subject to vibrations.

# **Characteristics**

#### 1. Before curing

Cure system: Alcoxy.

Appearance: Non flowing paste.

Specific gravity, approx: 1.38

(standards ISO R 1183, DIN 53474)

Flow resistance (EN 27390), mm: 2

Extrusion g / mn (standard NMRPS 495A 3mm/3bars), approx: 50

Viscosity at a strain of 3000 N / mÇ, at 20°C, Pa.s, approx: 200

#### 2. Curing

The sealant starts to cure as soon as the product comes into contact with air humidity.

Skin formation time\*, mn, approx: 10

Cured thickness\* after 24 hours, mm: 3.0

72 hours, mm: 5.0

Application temperature, °C: +5 to +40

#### 3. After curing

Shore A hardness (ASTM D 2240), approx: 25
Elastic recovery (ISO 7389), %, approx: 80
Joint movement capability, %: 25

Operating temperature (continuous), °C: -50 to +150

# 3.1 Mechanical properties on a 2 mm thick film (NF T 46002)\*

Modulus at 100% elongation, MPa, approx:

Tensile strength, MPa, approx:

1.40
Elongation at break, %, approx:

590

## 3.2 Mechanical properties on glass slabs (EN 28339)\*

Modulus at 100% elongation, MPa, approx:

Tensile strength, MPa, approx:

Elongation at break, %, approx:

270

#### Standards

## Conformity:

The following SNJF Label qualification certificates have been awarded to the Ceresit 10B:

- Category 1 elastomer, primerless on glass, polished aluminium and concrete.
- Elastic seal, primerless on glass and polished aluminium (used according to DTU 39).

#### Aptitude:

• ISO 11600 - F&G - 25LM - glass, polished aluminium and concrete (primerless).

<sup>\*</sup> Temperature 23°C, relative humidity 50%

 $<sup>^{\</sup>star}$  Temperature 23°C, relative humidity 50%

<sup>\*</sup> Temperature 23°C, relative humidity 50%

#### **Processing**

#### Surface preparation:

All surfaces must be dry and clean, free from any dust and grease or anything which may be detrimental to correct adhesion of the sealant.

Degreasing is performed using a pad soaked in solvent, followed by wiping with a clean cloth. Dust is removed using oil-free compressed air.

- Glass and all glazing materials: degrease with alcohol or methylethyl ketone.
- Aluminium, light alloys, stainless steel: same procedure.
- Other metals: lightly abrade the surface then degrease.
- Wood, lightly abrade the surface then remove dust.
- Plastics : degrease using an agent recommended by the supplier.
- Concrete and other alkaline surfaces: brush and dust.

#### Primer:

The Ceresit 10B does not require a primer on most usual surfaces.

In the case of joints likely to be immersed and especially for porous surfaces, the application of a specific primer (RHODORSIL primer 12076) is recommended, please consult us.

**Comment:** This choice will always be made following preliminary tests carried out on the surface in question. It should preferably be applied using a soft haired brush; generally, in the case of an highly absorbent surface, a second coat will be applied after the first has dried.

#### Joint dimensions:

Expansion joints are generally subject to local regulations. Unless otherwise required, the following rule-of-thumb should be complied with: width of twice the thickness (taking account of the acceptable deformation for the sealant).

#### Applying the sealant:

Once an appropriate seal backing has been put in place (closed cell polyethylene foam with surface skin or open cell polyurethane foam) the sealant should be applied taking care to ensure that the joint is completely filled. Smoothing off the seal ensures good contact between the sealant and the bonding surfaces. It should be carried out using a dry spatula before the surface skin is formed.

Areas soiled with fresh sealant may be cleaned with a dry pad or a pad soaked in a solvent. If the sealant is already cured it can be removed by scraping (e.g. using a razor blade) or using a special silicones remover.

For more information, please consult us.

#### **Limits of Use**

The Ceresit 10B must not be used :

- To produce aquariums.
- To produce swimming pool joints.
- In food grade applications.

Joints produced with the **Ceresit 10B** can be painted. However, paints do not generally have enough elasticity to follow joint deformation, without the risk of cracking. Prior compatibility tests are also recommended, considering the variety of paints that exist.

Particular attention should be paid to application on materials which can exude certain components over time (butyl sealant, EPDM rubbers, polychloroprenes, etc.)

Moreover, the following features should also be considered:

- Horizontal joints: in pedestrian zones or when there is a risk of excessive abrasion, the sealant joint must be sunk slightly below the adjacent surface; in the case of outdoor application, a primer will be used to ensure perfect adhesion of this joint considering the risks of prolonged immersion (see paragraph on primers).
- For any other application where the joint is immersed, please consult us.
- For any applications on sensitive surfaces, particularly porous surfaces (marble, granite, stone, etc.) carry out preliminary testing to check that the sealant does not stain.

## **Colours**

PVC White, beige, grey, stone grey, teak, bronze brown, black, buff, brick red, Portland, anthracite.

#### **Packaging**

The Ceresit 10B is available in 310 ml cartridges and 223 litre drums.

## Storage and Shelf Life

The **Ceresit 10B** has a shelf life of 12 months, guaranteed by Ceresit, from its date of manufacture (the expiry date is shown on the packaging) when stored at a temperature between -20°C and +30°C in its original unopened packaging.

# Safety

Please consult the safety datasheet for the Ceresit 10B.

## Warning to 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. CERESIT 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 a 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 CERESIT are at their disposal to supply any additional information.

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