



CAF[®] 7037

Coating Range – Coating Protection

Description

CAF 7037 is a one-component silicone elastomer that cures at room temperature:

- OXIME
- FLUID
- BRICK RED
- HIGH RELEASE CAPACITY

It is particularly suited to coating, protection and assembly applications.

Examples of applications

- Continuous coating of conveyor belts.
- Insulating of electrical motors.
- Sealing of iron bases.
- Sealing of air filters.
- Silk screening of gaskets.

Advantages

- Low viscosity for coating applications.
- Non-corrosive.
- Long pot life.
- Good temperature resistance (250°C peak).
- Good dielectric properties.

Characteristics

1. Properties before curing

<i>Properties</i>	CAF 7037
Appearance	Fluid paste
Colour	Brick red
Cure type	Oxime
Specific gravity at 25°C <i>(Standards ISO R 1183, DIN 53479, NM 703)</i>	1.10
Brookfield viscosity, mPa.s <i>(Standard NF T 76105, ASTM D 445, NM 99)</i>	50 000

Characteristics (cont')

2. Curing

CAF 7037 starts to cure as soon as the product is brought into contact with atmospheric humidity.

Skin formation time*, min.....	30
Cure rate of 2 mm thickness*, h.....	6
Cured thickness after 24 h*, mm.....	3.5

*Temperature 23 °C - relative humidity 50%

The cure rate increases with temperature and hygrometry.

Comment: it is recommended to apply the product to clean, dry surfaces.

3. Properties after curing

3.1 Specific gravity at 25 °C 1.10
(Standards ISO 2781, BS 903 Part A1 - ASTM D 297)

3.2 Mechanical properties after 7 days at room temperature

Properties	CAF 7037
Shore A hardness (Standards ISO R 868-DIN 53505-ASTM D 2240 NF T 46003 - NM 471)	22
Modulus at 100% elongation, MPa (Standards ISO R 37 (H2), DIN 53504, ASTM D 412, NF T 46002 (H2), NM 470)	0.5
Tensile strength, MPa (Standards ISO R 37 (H2), DIN 53504, ASTM D 412, NF T 46002 (H2), NM 470)	2.0
Elongation at break, % (Standards ISO R 37 (H2), DIN 53504, ASTM D 412, NF T 46002 (H2), NM 470)	300
Tear strength, kN/m (Standards ASTM D 624 specimens A, NM 492)	3.3

4. Thermal properties

Properties	CAF 7037
Temperature range for continuous service, °C (on 2 mm thickness film, 1000 h)	- 60 to + 225
Maximum recommended peak temperature, °C (on 2 mm thickness film, 72 h)	+ 250

N.B. These thermal values are not absolute limits. They represent the range within which initial mechanical properties are not modified by more than 50 %.

Furthermore, notably for peak usage, the maximum recommended temperature is inversely proportional to the total exposure time.

Characteristics (cont')

5. Thermal conductivity

Thermal conductivity at 25 °C, W/m.K..... 0.33
(Standard NF X 10021)

6. Adhesion properties

On aluminium AG3 (joint 1 mm thick, NM 748)

Properties	CAF 7037
Shear strength, MPa	0.25
Type of failure	Adhesive

On other surfaces:

Glass, enamel, ceramics, epoxy paint..... Primerless self-adhesion

Metals (aluminium, stainless steel)..... Primers 131 or PM 820

Polyamide (filled with 30% glass fibre)..... Primer 131

Polyester (filled with 30% glass fibre)..... Primers PM 824 or PM 820

ABS Primers PM 824 or PM 820

7. Dielectric properties

Properties	CAF 7037
Dielectric strength, kV/mm (Standards NF C 26225 - ASTM D 419)	20
Dielectric constant at 1 MHz (Standards NF C 26230 - ASTM D 150)	2.5
Dielectric dissipation factor at 1 MHz (Standards NF C 26230 - ASTM D 150)	7.10 ⁻³
Volume resistivity, Ω.cm (Standards NF C 26215 - ASTM D 257)	1. 10 ¹⁵

8. Miscellaneous

Self-combustion temperature, °C..... 428
(Standards ASTM E 659 D 2155 - DIN 51794)

CAF® 7037

Processing

Processing is particularly easy since the product is delivered ready to use. Application can be carried out manually or using robotize application equipment.

The bead of **CAF 7037** is applied onto one of the two joint surfaces. Assembly must be carried out before the product has formed a skin.

It is recommended not to exert an immediate strain on the assembly.

Packaging

- 100 g tubes on pallets of 1600 units.
- 25 kg metal tins on pallets of 10 units.

Storage and shelf life

When stored in its original unopened packaging at a temperature of between +2°C and +30°C, **CAF 7037** can be used for up to 12 months from its date of manufacture (expiry date).

Comply with the storage instructions and expiry date marked on the packaging.

Past this date, Bluestar Silicones no longer guarantees that the product meets the sales specifications.

Safety

Consult the safety data sheet for **CAF 7037**.

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