

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.

Key benefits

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

Typical properties**1. Properties before curing**

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

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

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

4. Thermal properties

Temperature range for continuous service, °C <i>(on 2 mm thickness film, 1000 h)</i>	- 60 to + 225
Maximum recommended peak temperature, °C <i>(on 2 mm thickness film, 72 h)</i>	+ 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.

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)

Shear strength, MPa	0.25
Type of failure	Adhesive

On other surfaces:

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

Dielectric strength, kV/mm <small>(Standards NF C 26225 - ASTM D 419)</small>	20
Dielectric constant at 1 MHz <small>(Standards NF C 26230 - ASTM D 150)</small>	2.5
Dielectric dissipation factor at 1 MHz <small>(Standards NF C 26230 - ASTM D 150)</small>	7.10-3
Volume resistivity, Ohm .cm <small>(Standards NF C 26215 - ASTM D 257)</small>	1. 1015

8. Miscellaneous

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

Please note: The typical properties are not intended for use in preparing specifications. Please contact our local Sales Department for assistance in writing specifications.

Instruction of use	Processing is particularly easy since the product is delivered ready to use. Application can be carried out manually or using robotized 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.
Regulation	Please consult your local ELKEM SILICONES sales office.
Limitations	Please consult your local ELKEM SILICONES sales office.
Packaging	<ul style="list-style-type: none"> • CAF 7037 is available in <ul style="list-style-type: none"> ○ Pallet of 250 KG (551.25 LB) ○ Piece of 0.1 KG (0.22 LB)
Storage and shelf life	When stored in its original packaging: CAF 7037 may be stored at temperatures between 2°C / 36°F and 30°C / 86°F for up to 12 months from its date of manufacturing. Comply with the storage instructions and expiration date marked on the packaging. Beyond this date, Elkem Silicones no longer guarantees that the product meets the sales specifications.
Safety	Please consult the Safety Data Sheet of: CAF 7037

CAF 7037

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Visit our website www.silicones.elkem.com

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