

CAF 30

Description	<p>CAF 30 is a one-component silicone elastomer that cures at room temperature:</p> <ul style="list-style-type: none"> • ACETIC • NON-FLOWING • WHITE, BLACK, TRANSLUCENT (standard), RED (on request) • ADHESIVE
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Examples of applications	<p>It is mainly intended for professional customers as a flexible bonding agent to provide sealing, bonding and protection, etc.</p> <p>Its high elongation/break properties allow it to absorb significant differential expansion movement.</p> <ul style="list-style-type: none"> • Bonding/sealing in the industrial sector. • Sealing of side windows on trains. • Sealing of heat sources (ovens, heat exchangers, steam circuits, water heaters). • Bonding of HCR silicones. • General servicing and maintenance applications in various sectors: automotive, aeronautical, railways, chemicals, industry, etc.
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Key benefits	<ul style="list-style-type: none"> • Choice of colors. • Good heat stability. • Good dielectric properties. • Adhesion to many surfaces. • Resists water and humidity. • Quick curing. • High elongation at break.
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Typical properties	<p>1. <u>Processing/Curing</u></p> <p>Processing is particularly easy since the product is delivered ready to use. Application can be carried out manually or using robotize application equipment.</p> <p>The CAF 30 bead is applied onto one of the two joint surfaces. Assembly must be carried out before the product has formed a skin.</p> <p>It is recommended not to exert an immediate strain on the assembly.</p>
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Curing

CAF 30 starts to cure as soon as the product is brought into contact with atmospheric humidity.

- Skin formation time*, min.....6
- Cure rate of 2 mm thickness*, h6
- Cured thickness after 24 h*, mm4.2

*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.

2. Properties before curing

Appearance	non-flowing paste
Colors: standard on request	white, black, translucent red, grey, blue
Cure type	acetic
Flowability, in mm	≤ 2

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(Standards BOEING S 7502 - NMRPS 459)	
Extrusion, g/min. (Standard NMRPS 495 A, 3 mm / 3 bars)	40
Specific gravity at 25 °C (Standard ISO R 1183, DIN 53479, NMRPS 703)	1,04

3. Properties after curing

3.1. **Specific gravity at 23 °C** 1.05
(Standards ISO 2781, BS 903 Part A1, ASTM D297)

3.2. Mechanical properties after 7 days

- **Shore A hardness**..... 20
(Standards ISO R 868, DIN 53505, ASTM D 2240 BS 903 Part A7, NFT 46003, NMRPS 471)
- **Modulus at 100 % elongation, MPa** 0,6
(Standards ISO R 37 (H2), DIN 53504, ASTM D 412 BS 903 Part A2, NFT 46002 (H2), NMRPS 470)
- **Tensile strength, MPa** 2,2
(Standards ISO R 37 (H2), DIN 53504, ASTM D 412 BS 903 Part A2, NFT 46002 (H2), NMRPS 470)
- **Elongation at break, %** 500
(Standards ISO R 37 (H2), DIN 53504, ASTM D 412 BS 903 Part A2, NFT 46002 (H2), NMRPS 470)
- **Strength, kN/m**..... 5,0
(Standards ASTM D 624 specimen A, NMRPS 492)

3.3 Thermal properties or heat stability

	CAF 30 Black	CAF 30 Other colors
Lower temperature limits: brittle point (measured using differential calorimetric analysis)	- 60 °C	- 60 °C
Upper temperature limits: maximum recommended service temperature - continuous (on thick film, 1000h)	+ 250 °C	+ 250 °C
- peak	+ 300°C	+ 250 °C

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, for peak usage, exposure for less than 72 hrs authorizes higher maximum temperatures.

3.4. Adhesion properties

- **Shear strength on aluminum, MPa**1.5
(Aluminum G3 specimens, joint 1 mm thick, Standard NMRPS 748)

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- **Type of failure; cohesive, %**100
- **Primerless self-adhesion on:** glass, enamel, ceramics, epoxy paint, polyester, certain metals. Outside of humid heat conditions on metal and polyester.
- **Adhesion with a primer:**
 - Stainless steel, aluminium.....primer PM 820
 - ABSprimer PP 878
 - Polymethyl methacrylateprimer 131
 - Composites filled with 30 % glass fiber.....primer PP 878 (polyamide, polyester, polypropylene)

3.5. Dielectric properties

- **Dielectric strength, kV/mm**20
(Standards NFC 26225, ASTM D 419, IEC 243)
- **Dielectric constant at 1 MHz**3
(Standards NFC 26230, ASTM D 150, IEC 250)
- **Dielectric dissipation factor at 1 MHz**..... 3×10^{-3}
(Standards NFC 26250, ASTM D 150, IEC 250)
- **Volume resistivity, W.cm**..... 2×10^{15}
(Standards NFC 26215, ASTM D 257, IEC 193)

3.6. Heat stability

Classification according to standard NF F 16 101:

Fire classification..... | 4 according to standard NF T 51071

Smoke classification

- Opacity (according to standard NF X 10 702) F2
- Combustion gas (according to standard NF X 70-100) F2
- Smoke index F2

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	Please consult your local ELKEM SILICONES sales office.
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 30 BLACK is available in <ul style="list-style-type: none"> ○ Drum of 210 KG (463.05 LB) ○ Piece of 0.322 KG (0.71 LB) ○ Drum of 25 KG (55.13 LB) • CAF 30 RED is available in <ul style="list-style-type: none"> ○ Drum of 210 KG (463.05 LB) • CAF 30 TRANSLUCENT is available in <ul style="list-style-type: none"> ○ Drum of 210 KG (463.05 LB) ○ Drum of 25 KG (55.13 LB) ○ Piece of 0.322 KG (0.71 LB) • CAF 30 WHITE is available in <ul style="list-style-type: none"> ○ Drum of 210 KG (463.05 LB) ○ Piece of 0.325 KG (0.72 LB)
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Storage and shelf life	When stored in its original packaging: CAF 30 BLACK may be stored at temperatures between 2°C / 36°F and 30°C / 86°F for up to 24 months from its date of manufacturing. CAF 30 RED may be stored at temperatures between 2°C / 36°F and 50°C / 122°F for up to 30 months from its date of manufacturing.
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CAF 30 TRANSLUCENT may be stored at temperatures between 2°C / 36°F and 30°C / 86°F for up to 30 months from its date of manufacturing.

CAF 30 WHITE may be stored at temperatures between 2°C / 36°F and 30°C / 86°F for up to 24 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 30 BLACK, CAF 30 RED, CAF 30 TRANSLUCENT and CAF 30 WHITE

Visit our website www.elkem.com/silicones/

Warning to the users

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