

BLUESIL FR 8700 U SERIES

Description	<p>Heat cure rubber BLUESIL FR 8700 U SERIES are silicone rubbers which cure after addition of a vulcanising agent (chosen as a function of the production process).</p> <p>BLUESIL FR 8700 U SERIES is available in three hardnesses: 50, 60 and 75 Shore A.</p> <p>That series is specially designed to manufacture rubber parts for fire resistance applications.</p>
Examples of applications	Production of profiles (doors, windows, walls) and panels used in rolling stocks, and any flexible moulded articles which need to combine high fire performances with low smoke emission.
Key benefits	<ul style="list-style-type: none"> • Easy processing. • Good heat stability up to 200°C. • Excellent fire resistance. • LSFOH: Low Smoke Free Of Halogen. • Non toxic and non corrosive smokes. • Tested according to EN 45545 Part 2 (fire protection of railway vehicles).

Typical properties

1. Mechanical properties

After addition of 1.25% dichloro-2,4 benzoyl peroxide (at 50%) and vulcanization for 8 min at 115°C, measurement on 2 mm thickness ASTM slab after post curing for 4 hours at 200°C.

<i>Properties</i>	FR 8750 U	FR 8760 U	FR 8775 U
Natural colour	creamy	creamy	creamy
Specific gravity (at 25°C, approx.)	1.24	1.43	1.28
Shore A Hardness (approx.)	51	58	73
Tensile strength (MPa approx.)	8.6	6.7	10.2
Elongation at break (% , approx.)	460	430	320
Tear strength (kN/m, approx.)	15	21	19
Volume resistivity (CEI 60093, Ohm.cm, approx.)	6.7 10 ¹⁵	1.8 10 ¹⁵	8.1 10 ¹⁵
Dielectric constant at 1 MHz (IEC 60250, approx.)	2.9	3.1	3.0
Dielectric dissipation factor at 1 MHz (IEC 60250, approx.)	3.9 10 ⁻³	3 10 ⁻³	3 10 ⁻³

2. Fire resistance

On ASTM slabs post-cured for 4 hours at 200°C:

	FR 8750 U	FR 8760 U	FR 8775 U
<i>Vertical burning IEC 60695-11-10</i>			
Classification	V0 On 3 mm	V0 On 3 mm	V0 On 3 mm
<i>Burning Behaviour ISO 4589-2/ISO 4589-2</i>			
Limit Oxygen Index %			

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	41%	46%	43%
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On slabs of thickness 2 mm post cured for 4 hours at 200°C:

EN 45 545 Part 2	FR 8750 U	FR 8760 U	FR 8775 U
Classification		R1 HL3 R7 HL3	R1 HL2 R7 HL2
	R22 HL3 R23 HL3	R22 HL3 R23 HL3	R22 HL3 R23 HL3

Additional classification for **BLUESIL FR 8775 U**:

- NF 16 101: Class I2 F0
- BS 6853: Category A1 and LOI of 37%.

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"> • BLUESIL FR 8750 U is available in <ul style="list-style-type: none"> ○ Carton of 500 KG (1102.5 LB) • BLUESIL FR 8760 U is available in <ul style="list-style-type: none"> ○ Carton of 500 KG (1102.5 LB) • BLUESIL FR 8775 U is available in <ul style="list-style-type: none"> ○ Carton of 500 KG (1102.5 LB)
Storage and shelf life	When stored in its original packaging: BLUESIL FR 8750 U may be stored at a temperature below 40°C / 104°F for up to 18 months from its date of manufacturing. BLUESIL FR 8760 U may be stored at a temperature below 40°C / 104°F for up to 18 months from its date of manufacturing. BLUESIL FR 8775 U may be stored at a temperature below 40°C / 104°F for up to 18 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: BLUESIL FR 8750 U, BLUESIL FR 8760 U and BLUESIL FR 8775 U

Visit our website www.elkem.com/silicones/

Warning to the users

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