

Solid Silicone Elastomer Supported Sheeting

[FA]

Grades

kSil™FA60 kSil™FA70

Specifications

kSil™FA has been specifically formulated for supported sheeting applications. It can be applied to fabrics such as glass fibre, polyester, and kevlar® both cured and uncured or on polythene liners in a catalysed uncured state.

Availability

Mouldings



Sheeting



Gaskets



Cables



Extrusions



Compound



Tubing



General Characteristics

Test	Result	Standard
Brittle Point	-80°C (-112 °F)	ASTM D746
Limiting Oxygen Index	24.0 %	BS 2782 Part 1
Thermal Conductivity	0.24 W.m ⁻¹ .K ⁻¹	VDE 0304
Radiation Resistance	>10 ⁵ Grays (10 ⁷ Rads) typical	
Dielectric Strength	23 kV.mm ⁻¹	VDE 0303
Dielectric Constant	2.9	VDE 0303
Dissipation Factor	3x10 ⁻⁴	VDE 0303
Volume Resistivity	3x10 ¹⁵ Ω.cm	VDE 0303

Typical Applications

Automotive Hose Building, Heater Pads

Temperature Range

-60°C (-76°F) to 230°C (446°F)
and up to 250°C (482°F) intermittent

Environment Resistance

Silicone rubber products have an excellent resistance to ozone, oxidation, ultraviolet light, corona discharge, cosmic radiation, ionising radiation and weathering in general.

Availability

- Supplied in continuous roll lengths.
- Widths of up to 1000mm.
- Supplied in a variety of constructions
Cured and uncured with fabric insertion or polythene liners
- Capability to colour match.

Compound Mechanical Properties

Property	Units	kSil™FA60		kSil™FA70		Test Method
		Spec Limits	Typical Value	Spec Limits	Typical Value	
Hardness	Shore A	60±5	61	70±5	71	ASTM D2240 DIN 53505
Tensile Strength	MPa psi	5.5 min. 798 min.	7.1 1030	5.5 min 798 min	7.0 1015	BSISO 37 ASTM D412 die C
Elongation to Failure	%	200 min.	255	200 min	300	BSISO 37 ASTM D412 die C
Tear Strength	N/mm lb./in.	10.0min. 57 min.	14.7 84	10.0 57 min	14.1 80.5	ASTM D624 die B
Adhesion strength	N/25mm	9 min	12	9 min	12	SEWI 596

Fabric – Glass Cloth Properties

Property	Units	Value
Composition	Warp Weft	Glass Glass
Weight	g/m ²	204
Warp Count	d'tex	680
Weft Count		680
Weave		Plain
Thickness	mm	0.18
Reference		EKC161

Finished Article Properties

Specification	Construction (mm) (Sil+Glass+Sil)	Thickness (mm)	Width (mm)
1.5mm	0.65 + 0.2 + 0.65	1.5 +/- 0.2	1000 max
2.0mm	0.9 + 0.2 + 0.9	2.0 +/- 0.2	1000 max
3.0mm	1.4 + 0.2 + 1.4	3.0 +/- 0.2	1000 max
4.0mm	1.9 + 0.2 + 1.9	4.0 +/- 0.2	1000 max

Extra Information

In-house capabilities for extensive industry specific testing available on request.