

expansil™

Silicone Sponge Extrusions

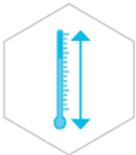
FDA MEDIUM

Silicone
Engineering Ltd

expansil™FDA MEDIUM is an extruded food grade, closed cell silicone sponge. Formulated for the food and beverage sectors, expansil™FDA is fully compliant with the Food & Drug Administration (FDA) for use in contact with food. Common applications include gaskets, seals and joined rings for food processing machinery, thermal insulation for liquid pipelines, gap filling and vibration dampening.



BENEFITS



Temperature range

-60°C to 230°C
(-76°F to 446°F)



Environmental resistance

Ozone, UV and weather resistant



Flame retardant

UL94HB (not listed)
FAR 25/JAR 25



Long life service

vs other elastomers

AVAILABILITY

Tubes, Cords, Profiles, Strips & Sections

Pressure Sensitive Adhesive (PSA)

Joined Rings & Gaskets

Standard Colour: White

ACCREDITATIONS

FDA
Approved

Food & Drug Administration

BfR XV
Empfehlung

German Regulation for Food Contact Materials

EC
1935/2004

EU Regulation for Food Contact Materials

UL94HB
(Not Listed)

UL94 Horizontal Burn Flammability Test

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MECHANICAL PROPERTIES

Property	Units	Typical Value	Test Method
Density (Measured on 25mm cord sample)	kg/m ³ (lb/ft ³)	390 (24)	ISO 845 (ASTM D3574)
Hardness	Shore OO	65	ASTM D2240
Compression Force Deflection 25%	kPa (psi)	65 (9.5)	ASTM D1056
Tensile Strength	MPa (psi)	1.4 (205)	ISO 1798 (ASTM D412)
Elongation to Failure	%	270	ISO 1798 (ASTM D412)
Compression Set 50%, 24hrs recovery, 22hrs @ 70°C	%	< 1	ISO 1856
Compression Set 50%, 24hrs recovery, 22hrs @ 100°C	%	3	ASTM D1056
Water Absorption	%	< 5	ASTM D1056

CAPABILITIES

Thickness mm (inches)	Width mm (inches)	Length m (ft)
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Extrusion capabilities vary throughout the range of products, & grades. For specific capabilities, please discuss with your Silicone Engineering representative.

GENERAL CHARACTERISTICS

Test	Typical Value	Standard
Brittle Point	-80°C (112°F)	ASTM D746
Limiting Oxygen Index	24%	BS 2782 Part 1
Thermal Conductivity	0.095 W.m ⁻¹ .K ⁻¹	BS 874 Part 2
Radiation Resistance	>10 ⁵ Grays (10 ⁷ Rads) typical	

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