

expansil™

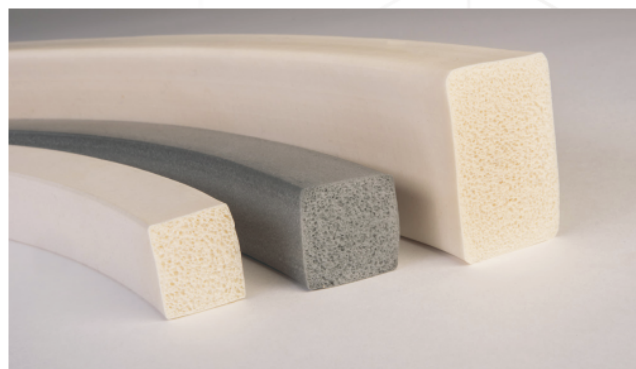
Silicone Sponge Extrusions

THT350

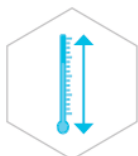
Silicone
Engineering Ltd

expansil™THT is a closed cell, lightweight, silicone sponge with additional high temperature resistance up to 270°C (518°F).

Formulated for use in extreme temperature applications and where high heat resistance is needed. expansil™THT range is commonly used for flexible sealing solutions, gap fillers and thermal insulation.



BENEFITS



Temperature range

-60°C to 270°C
(-76°F to 518°F)



Environmental resistance

Ozone, UV and weather resistant



Flame retardant

UL94HB
FAR 25/JAR 25



Long life service

vs
other elastomers

AVAILABILITY

Tubes, Cords, Profiles, Strips & Sections

Pressure Sensitive Adhesive (PSA)

Joined Rings & Gaskets

Standard Colours: Black, White, Red Iron Oxide (RIO) and Grey

ACCREDITATIONS

UL94HB

UL94 Horizontal Burn
Flammability Test
(Not Listed)

FMVSS 302

Federal Motor Vehicle
Safety Standard

**FAR 25
(Horizontal)**

Flame Test for Aerospace
Applications

Capable of meeting: ASTM D1056 2A3 & 2D3; ASTM 6576 Grades B & C (Medium)

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The logo for expansil, with 'expansil' in a lowercase, sans-serif font and a trademark symbol.

Silicone Sponge Extrusions

THT350

The logo for Silicone Engineering Ltd, featuring the word 'Silicone' in a stylized blue font and 'Engineering Ltd' in a smaller, sans-serif font below it.

MECHANICAL PROPERTIES

Property	Units	Typical Value	Test Method
Density (*Measured on 25mm cord sample)	kg/m ³ (lb/ft ³)	310 (19)	ISO 845 (ASTM D1056)
Hardness	Shore OO (Sh A)	57 (15)	ASTM D2240
Compression Force Deflection 40%	KPa (psi)	120 (17.4)	ISO 3386
Compression Force Deflection 25%	KPa (psi)	55 (8)	ASTM D1056
Tensile Strength	MPa (psi)	0.8 (116)	ISO 1798 (ASTM D412)
Elongation to Failure	%	120	ISO 1798 (ASTM D412)
Compression Set 50%, 24hrs recovery, 22hrs @ 70°C	%	1	ISO 1856
Compression Set 50%, 24hrs recovery, 22hrs @ 100°C	%	5	ISO 1856
Water Absorption	%	< 5	ASTM D1056

CAPABILITIES

Thickness mm (inches)	Width mm (inches)	Length m (ft)

GENERAL CHARACTERISTICS

Test	Typical Value	Standard
Brittle Point	-80°C (112°F)	ASTM D746
Limiting Oxygen Index	24%	BS 2782 Part 1
Thermal Conductivity	6.4x10 ⁻² W.m ⁻¹ .K ⁻¹	BS 874 Part 2
Radiation Resistance	>10 ⁵ Grays (10 ⁷ Rads) typical	

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