

# expansil™

## Silicone Sponge Extrusions

THT530

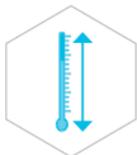
Silicone  
Engineering Ltd

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 2A5; ASTM 6576 Grades A, B & C (Firm)

Silicone  
Engineering Ltd



# Silicone Sponge Extrusions

THT530



## MECHANICAL PROPERTIES

Property	Units	Typical Value	Test Method
Density (*Measured on 25mm cord sample)	kg/m <sup>3</sup> (lb/ft <sup>3</sup> )	530 (33)	ISO 845 (ASTM D1056)
Hardness	Shore OO (Sh A)	86 (30)	ASTM D2240
Compression Force Deflection 40%	KPa (psi)	470 (68)	ISO 3386
Compression Force Deflection 25%	KPa (psi)	240 (34.8)	ASTM D1056
Tensile Strength	MPa (psi)	2 (290)	ISO 1798 (ASTM D412)
Elongation to Failure	%	130	ISO 1798 (ASTM D412)
Compression Set 50%, 24hrs recovery, 22hrs @ 70°C	%	4	ISO 1856
Compression Set 50%, 24hrs recovery, 22hrs @ 100°C	%	10	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 <sup>-2</sup> W.m <sup>-1</sup> .K <sup>-1</sup>	BS 874 Part 2
Radiation Resistance	>10 <sup>5</sup> Grays (10 <sup>7</sup> Rads) typical	

This information and our technical advice, whether verbal, in writing or by way of trials, is given in good faith but without warranty. This also applies where proprietary right are involved. Our advice does not release you from the obligations to check its validity and to test our products as to their suitability for the intended use. The storage, application and use of our products are beyond our control and, therefore entirely your own responsibility. Our products are sold in accordance with our General Conditions of Sale. The information contained within this data sheet is subject to change without notice.