

# expansil™

## Silicone Sponge Extrusions

GP200

Silicone  
Engineering Ltd

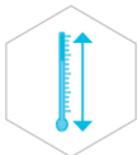
The expansil™GP range is a general purpose, closed cell silicone sponge, ideal for extrusions.

Formulated for use in extreme temperature applications and where environmental resistance is needed.

expansil™GP range is commonly used for joined gaskets, gap fillers and flexible sealing solutions.



### BENEFITS



#### Temperature range

-60°C to 230°C  
(-76°F to 446°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, RIOX 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

WRAS  
Approved  
N° 2311550

Water Regulations  
Advisory Scheme

Capable of meeting: ASTM D1056 2A1, ASTM 6576 Grades B & C (Soft)

Silicone  
Engineering Ltd

# expansil™

## Silicone Sponge Extrusions

GP200

Silicone  
Engineering Ltd

### MECHANICAL PROPERTIES

| Property   | Units                                   | Typical Value | Test Method |
|--|---|---------------|-------------|
| Density (*Measured on 25mm cord sample)            | kg/m <sup>3</sup> (lb/ft <sup>3</sup> ) | 200 (12.5)    | ISO 845     |
| Hardness   | Shore OO (Sh A)                         | 35 (<5)       | ASTM D2240  |
| Compression Force Deflection 40%                   | KPa (psi)                               | 50 (7.3)      | ISO 3386    |
| Compression Force Deflection 25%                   | KPa (psi)                               | 28 (4)        | ASTM D1056  |
| Tensile Strength                                   | MPa (psi)                               | 0.6 (87)      | ISO 1798    |
| Elongation to Failure                              | %                                       | 140           | ISO 1798    |
| Compression Set 50%, 24hrs recovery, 22hrs @ 70°C  | %                                       | 5.0           | ISO 1856    |
| Compression Set 50%, 24hrs recovery, 22hrs @ 100°C | %                                       | 6.7           | 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.