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DATA SHEET

## Fortafix High Temperature Adhesives

### Product: HT FLEXSEAL 300 – FORTAFIX RTV SILCONE SEALANT/ ADHESIVE

#### Principal Characteristics

**Flexible elastomeric adhesive sealant to 300°C. Bonds to a wide range of substrate materials.**

Flexseal HT300 is a Temperature Rated Silicone Adhesive and Sealant used for applications where sealing or fixing of materials is required - to form a high heat resistant joint or bond.

Suitable for bonding, gasketing, thick sections, potting & encapsulation.

Highly flexible - suitable for gap filling applications and jointing materials of different thermal expansions

Product offers adhesion to many engineering & building materials substrates - including glass and other glazed surfaces, PVCu, most plastics, ceramics, metals, wood and concrete.

Excellent water/weather resistance.

Resistant to weathering and ageing – can be used externally.

Supplied ready to use in 300 ml cartridges

Maximum Service Temperature: 300°C.

HT Flexseal 300 (White) is FDA compliant 'food safe' adhesive sealant

#### Typical Applications

- Flues
- Ducting
- Electrical Insulation
- Fixing Ceramic Rope
- Gasketing
- Jointing Metals, Glass, Ceramics and Polymers

#### Health and Safety / Environmental Information

- See separate MSDS sheet. (MSDS – HT Flexseal 300 RTV Silicone Sealant/ Adhesive).
- RoHS Compliant
- HT Flexseal 300 (White) – FDA compliant 'food safe' adhesive sealant

#### Storage

Once opened this product is moisture sensitive avoid continuous exposure to air.

Product should be stored in original packaging between 5 - 30°C.

Shelf life – 24 months.

## Guidelines for Use

### Application

Thoroughly clean and degrease surfaces to be bonded or sealed.

A light surface abrasion of the material to be bonded will increase the surface area available for adhesion and improve mechanical key.

Apply the sealant as supplied to all surfaces to be bonded and complete tooling within 5-10 minutes.

Apply moderate pressure to ensure even anchorage and solid contact of the surfaces to be bonded, so that all surfaces are fully wetted.

Clean any unwanted silicone immediately using xylene and a cloth.

Curing starts at the surface and works inward.

Humidity and ambient temperature can alter curing rate.

### Curing Schedule

The curing of this product may vary depending on temperature, humidity, porosity of substrates, glue line thickness and area etc.

A rough guide for typical applications at room temperature and average humidity would be approximately 36-48 hours.

Typical rate of cure: 3-5 mm depth per 24 hours

Typical maximum cure depth: 10 mm

Once cured, the strength of the silicone will continue to increase for up to 7 days.

Curing may be accelerated by the application of gentle heat (do not exceed 70°C).

### Characteristics:

#### Uncured Product:

Property	Test Method	Value
Colour:		White/Black
Appearance:		White/Black paste
Tack Free Time:	* measured at 23+/-2°C and 65% RH.	2 minutes *
3mm Cure Through:	* measured at 23+/-2°C and 65% RH.	7 hours*
Extrusion Rate:		225g / minute



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**Cured Product: (after 7 days cure at 23+/-2°C and 65% relative humidity)**

Property	Test Method	Value
Tensile Strength:	BS903 Part A2	2.31 MPa
Elongation at Break:	BS903 Part A2	240 %
Youngs Modulus:		0.75 MPa
Modulus at 100% Strain:	BS903 Part A2	1 MPa
Tear Strength:	BS903 Part A3	6.1 kN/m
Hardness:	ASTM D 2240-95	40° Shore A
Specific Gravity:	BS 903 Part A1	1.08
Linear Shrinkage:		<1.0%
Thermal Conductivity:		0.2 W/mK
Coefficient of Thermal Expansion:	Volumetric Linear	876 ppm / °C 292 ppm / °C
Min. Service Temperature:		-60 °C
Max. Service Temperature:	AFS 1540B	300 °C

### Electrical Properties

Property	Test Method	Value
Volume Resistivity:	ASTM D-257	3.21E+15Ω.cm
Surface Resistivity:	ASTM D-257	3.46E+14Ω
Dielectric Constant at 1MHz:	ASTM D-150	3.6
Dissipation Factor at 1MHz:	ASTM D-150	0.8E-3