



## DATA SHEET

### Fortafix High Temperature Adhesives

#### **FORTAFIX FLAMEBOND G4 and G9 – Fire Resistant Adhesive**

- Water based Thixotropic Inorganic Adhesive.
- **Fire Protection** - Will comply with BS 476: Part 4: Non combustibility test for materials & EN 13501-1: Fire Test to Building Material - Class A1
- **Can be used safely as an adhesive where resistance to the spread of flame is required**
- Designed for bonding and jointing most types of fire resistant boards and materials
- A maximum continuous operating temperature of 1000°C – 1100°C (Depending on Grade)
- Available in a **range of viscosities**: FlameBond G4 - Medium viscosity, FlameBond G9 - High viscosity.

#### **Typically Used For**

- **Fire protection applications**
- FlameBond G4 - Medium viscosity; spray, brush or spreader applied for gluing or lamination
- FlameBond G9 - High viscosity; cartridge applied product for use as an adhesive or sealant
- For bonding to inorganic wall boards, ceramics, glass, metals, concrete, stone, silicate fibre materials and many other surfaces.

#### **Principal Characteristics**

- Suitable for Coating and Bonding.
- Maximum Continuous Service Temperature:  $\geq 1000^{\circ}\text{C}$  –  $1100^{\circ}\text{C}$  (dependent on Grade).
- Available as a viscous cream paste (viscosity varies according to Grade).
- Possesses good wetting and penetration.
- Ready to use (Viscosity may be adjusted if required using Fortafix FlameBond G1 Thinner/Primer)

<b>Coverage</b>	4-6m <sup>2</sup> /L	<b>Acid Resistance</b>	Excellent – Except hydrofluoric	<b>Melting Temperature</b>	$\geq 1050^{\circ}\text{C}$ Depending on grade
<b>Softening Temperature</b>	$\geq 1000^{\circ}\text{C}$ Depending on Grade	<b>Packaging</b>	250ml, 1, 5 L and 25 L tins	<b>Expansion</b>	
<b>pH</b>	13	<b>Oxidation Resistance</b>	Excellent	<b>Shelf Life</b>	12 Months
<b>Viscosity</b>		<b>GR 4</b>	30,000/10,000cP	<b>GR 9</b>	Paste

## Health and Safety / Environmental Information

- See separate MSDS sheet. (MSDS – FORTAFIX FLAMEBOND G4 or G9).
- RoHS Compliant.

## Guidelines for Use

### Application

- Stir contents of the container prior to use, to ensure product is thoroughly mixed (FlameBond G4).
- If viscosity adjustment is required “FlameBond G1 thinners” may be used without loss of adhesion.
- Thoroughly clean and remove dust from 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 adhesive/sealant as supplied (using a serrated spreader or mastic gun) 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.
- Secure components and allow the adhesive to set.
- All application equipment should be cleaned with warm water immediately after application.

**Note:** In very warm atmospheres setting can be retarded by the addition of up to 5% clean water according to conditions prevailing at the time of application but it must be noted that the adhesive hardens by loss of moisture and too much added water will reduce the viscosity and may prolong hardening if the temperature reduces.

### Curing Schedule

- As this product is water based, and sets by water loss from the glue line - it is necessary to fully dry and dehydrate the adhesive for use.
- The curing of this product may vary depending on temperature, humidity, porosity of substrates, volume of adhesive and area etc.
- A rough guide for typical applications at room temperature and average humidity would be approximately 36-48 hours.
- Curing may be accelerated by the application of gentle and progressive heat (do not exceed 100°C during curing as this may lead to product failure).

### Storage

- Once opened this product is moisture sensitive avoid continuous exposure to air.
- Product should be stored in original packaging between 5 - 30°C.
- Cartridges should be stored in an upright position at all times.
- Shelf life – 12 months.