



## DATA SHEET

### Fortafix High Temperature Adhesives

#### **2-PART CHEMICAL SETTING ADHESIVE – CHROMIX (FILLER/BINDER)**

- 2 part Filler/Binder system, which forms a ceramic based adhesive/cement.
- Water based.
- Chemical setting action.
- Designed for bonding, assembling, sealing, jointing or repairing glass, ceramics, metals, quartz etc.
- Possesses excellent thermal, electrical and mechanical properties.
- Higher tensile and compressive strength than other 2-part adhesive/cements.
- A maximum continuous operating temperature of 1400°C.

#### **Typically Used For**

- Heat resistant filler for flaws in castings and mouldings.
- High temperature gas tight seals.

#### **Principal Characteristics**

- Suitable for Bonding, Thin Films/Coatings, Thick Sections and Potting/ Encapsulation.
- Maximum Continuous Service Temperature: 1400°C.
- Available as a Filler and Binder Pack which when mixed forms a viscous black/brown paste.

<b>Softening Temperature</b>	1300°C	<b>Melting Temperature</b>	1400°C	<b>pH</b>	13
<b>Oxidation Resistance</b>	Excellent	<b>Acid Resistance</b>	Excellent, except Hydrofluoric	<b>Alkali Resistance</b>	Good
<b>Expansion</b>		<b>Binder solids by weight</b>	38.54%	<b>Packaging</b>	1 litre - binder 1 kg - filler

#### **Health and Safety / Environmental Information**

- See separate MSDS sheets. (MSDS - 2 Part Chemical Set: Chromix Filler + Chromix Binder).
- RoHS Compliant.

## Guidelines for Use

### Mixing Instructions

- Mix binder and filler in a ratio of 2 part (by weight) filler: 1 part (by weight) binder.
  - Weigh quantities precisely.
  - Add powder filler to liquid binder and mix for a *minimum. 3-5 minutes*, until a smooth homogeneous paste is formed.
  - Mixing apparatus, tools and brushes should be washed out immediately after use with water before adhesive hardens.

**Note** – The above consistency should provide a mix satisfactory for most applications. If required the binder content may be increased by up to 20% to meet special requirements, however, additional binder will increase setting time and may slightly reduce maximum service temperature.

### 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.
- Secure components and allow the adhesive to set.
- All application equipment should be cleaned with warm water immediately after application.

### Curing Schedule

- As this product is water based, it is necessary to fully dry and dehydrate the adhesive.
- 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.
- 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

- Product should be stored in original packaging between 5 - 30°C.
- Shelf life - 12 months.