TECHNICAL DATASHEET

Polyurethane FC40

Description & Uses
Cromar Alpha Chem Polyurethane FC40 is a single component, fast curing, polyurethane based elastomeric sealant used for joints where a highly elastic strong bond is required, with excellent chemical, mechanical and weather resistance.

Specially developed for bonding various building materials and for sealing of expansion joints. As a sealant it adheres, without a primer, to the substrates such as wood, concrete, stone, anodized aluminium, polyester, glass, ceramics, baked clay. Overpaintable*

Suitable for use with PROGRP, Flexiglass and Elastathane Extreme Roofing systems.

Ideal for:
- All sealing and bonding applications in the building and construction industry
- Sealing expansion joints in concrete floors
- Trafficked floor joints

CE Marked to EN15651 F-EXT-INT-CC and EN15651-4 PW-EXT-INT-CC

Available in: White, Grey and Black in 300ml cartridges and 600ml foils.

Priming
- Adheres without primer on most commonly used substrates such as wood, anodized aluminium, polyester, glass, concrete, baked clay, stone and ceramic tiles.
- For difficult materials such as plastics (PVC, ABS, PMMA) or materials such as raw aluminium or lacquered metal perform preliminary tests to determine whether surface preparation is necessary.

Substrate Preparation
- Ensure surfaces to be bonded are clean, sound, dry and free from dust, grease or other contaminants which could harm the bonding process. If the substrates need to be cleaned use methylethylketone (MEK) or acetone. For surfaces sensitive to ketones use ethanol. Make sure to check their compatibility with the substrates first.
- If necessary, apply a primer.
- It is recommended to rub down concrete, particularly cement film residue, with a metal brush. After scraping remove the dust.

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- If necessary, rub down metallic surfaces beforehand (especially in presence of oxidation). After rubbing down, clean them with a solvent and allow to dry for at least 10 minutes.
- Note: when using solvents, extinguish all sources of ignition and carefully follow the safety and handling instructions given by the manufacturer.

Application

- Cut thread and then the nozzle to the required size.
- Apply with an Alpha Chem professional heavy duty sealant gun.
- For tooling down, apply light pressure, using a wetted spatula or gloved finger.
- When bonding, ensure the bond is made before a skin has formed.
- Excess uncured product may be cleaned with Cromar Alpha Chem Grafters Wipes. Cured product can be removed mechanically.
- It is the user's responsibility to dispose of all packaging correctly.

Please note: This product should be used within 24 hours which follow the opening of the packaging; otherwise, the sealant could cure.

Storage

The product should be stored unopened in a dry condition at a temperature of 5-25°C. In cold weather store the product at around 20°C before use. Keep out of the reach of children.

Shelf Life

12 months when stored as directed.

Limitations

- Do not apply at a temperature below 5°C.
- For difficult materials, including plastics such as PVC, ABS, PMMA, or materials such as raw aluminium or lacquered metal, perform preliminary tests to determine whether a surface preparation is necessary.
- Avoid any contact with non-cured MS, hybrid PU or silicone sealants as well as with alcohols or ammonia during curing.
- *We recommend on solvent based paints that tests are carried out before hand to ascertain compatibility.
- It is the user's responsibility to ensure suitability for use.
- Read the label prior to use it contains essential health and safety information, further information can be found on the Safety Data Sheet available on request.

Technical Data

Appearance	Paste
Density at 20°C	Black 1.15 ± 0.02 Other Colours: 1.16 ± 0.02
Sagging (ISO 7390)	< 3mm
Application Temperature	5 to 35°C
Skin formation time at 23°C and 50% RH	Approx. 50 mins**
Cure time at 23°C and 50% RH	> 3mm after 24 hr
Shore A hardness (internal method IT-20 after ISO 868 – 3 seconds)	Approx. 40 after 14 days
Modulus at 100% (ISO 8339)	Approx. 0.4 MPa
Elongation at break (ISO 8339)	>400%
Modulus at 100% (ISO 37)	Approx. 0.3 MPa
Modulus at break (ISO 37)	Approx. 1.4 MPa
Elongation at break (ISO 37)	>600%
Tear Strength (ISO 34)	Approx. 8.5 N/mm
Temperature resistance	-40 to +80°C (on cured sealant)
Resistance to dilute acids and bases	Average
UV resistance	Good
Weatherability	Excellent
Compatibility with paints	On cured sealant: Water Based Paints: Yes Solvent Based Paints: Carry out tests beforehand
Movement Capability	± 50% according to ASTM C719 ± 25% according to ISO 11600

** this time depends on the hygrometry and ambient temperature. In order to ensure good adhesive it is mandatory to do the bonding before the skin has formed.

Further Information:
In the event of further queries or problems concerning the use of this product, please contact the address below, e-mail info@cromar.uk.com.

All products should be sold in accordance with the manufacturer's instructions. The manufacturer cannot be held responsible where conditions of use are beyond our control. Cromar Building Products Limited products' are available for sale in accordance with Cromar Building Products Limited standard conditions of sale, which is available upon request. Whilst any information contained herein is to the best of our knowledge true and accurate, no warranty is given or implied in connection

with any recommendations, agents, or distributors, as the conditions of use and any labour involved are beyond our control. Our warranty is therefore limited to the quality of supplied product.