

TECHNICAL BULLETIN

COROFLAKE® ADHESIVE 40

- Product Description:** COROFLAKE® Adhesive 40 is a two component paste bonding cement based on a vinyl ester resin. This bonding cement incorporates a flexiliser to relieve shrinkage stresses during cure and service stresses caused by thermal expansion, pressure cycling and vibration. Although designed primarily for bonding reinforced plastics, Adhesive 40 also forms a strong bond to other construction materials.
- Recommended Uses:** COROFLAKE® Adhesive 40 was developed to join reinforced plastic laminates used in corrosive service. Other successful uses for Adhesive 40 include bonding or repair of;
- Concrete to plastics
 - Concrete to steel
 - Metals to plastics
 - Wood or plywood
- Chemical Resistance:** COROFLAKE® Adhesive 40 exhibits good resistance to acid and alkali solutions, many solvents and sea water.
- Temperature Resistance:** + 70 °C wet + 120 °C dry
- Generic Type:** Bisphenol Vinyl Ester
- Solvent:** Styrene (reactive)
- Design:** EN 14879 1:2005. Further information can be taken from our specification sheets.
- Preparation:**
- Concrete**
Contaminants such as oil or grease must be removed prior to the application. The best preparation is abrasive blast to open holes covered with cement and to roughen the surface. Use plastic sheet method (ASTM 4263) to ensure the moisture content is less as 4%. The cured concrete should have a minimum compressive strength of 25 N/mm² and a minimum surface strength of 1.5 N/mm².
- Steel**
Steel substrates, which have previously been in service, require a chemical check for the presence of invisible traces of iron sulphate and or iron chloride. If the check is positive, the total surface area needs to be washed down thoroughly with de-ionised water. In each case, steel substrate shall be prepared by abrasive blasting to obtain a Sa 2½ surface, as defined in DIN EN ISO 12 944-4 and a minimum surface profile @ 60 µm .
- When Adhesive 40 cannot be applied immediately to the prepared surface, priming with Coroflake N Primer is recommended.



Mixing Ratio:	100:2 COROFLAKE® Primer or Adhesive to Hardener No.1 by weight. Mix always hardener into resin-based component, using a low speed mechanical agitator.		
Pot Life:	1 ½ hrs. (+ 10 °C)	1 hrs. (+ 20 °C)	½ hrs. (+ 30 °C)
Application Equipment:	Primer: Brush and Roller, Adhesive: trowel and spatula.		
Application:	Primer is normally applied by brush or roller. Adhesive should be applied by trowel, spatula or putty knife to adequately cover the surface to be bonded at the required thickness. The substrate and air temperature shall be @ + 10 °C to + 36 °C (3 K above dew point). Primer may be overcoated after initial set, which will occur normally after 4 hours, first coat must be applied within seven days. <i>Note:</i> During application the coated surface must be shaded from direct or indirect sunlight. Otherwise intercoat disbondment may occur.		
Consumption:	Coroflake N Primer;	0.15 kg/m ² for steel substrate	
	Coroflake N Primer;	0.30 kg/m ² for concrete substrate	
	Coroflake Adhesive 40;	1.7 kg/m ² @ 1.5mm thickness	
Cleaning:	Solvent T-100		
Shelf Life:	The shelf life is 3 months when stored @ + 20 °C. COROFLAKE® Resins and Hardener No. 1 should be stored at a cool and dry place.		
Flash Point:	COROFLAKE® Adhesive 40	+ 32 °C	
	Hardener No. 1	+ 70 °C	
Tensile Modulus:	4 GPa (DIN EN ISO 178) flexural		
Tensile Strength:	12 Mpa (DIN EN ISO 527)		
Compressive Strength;	52 MPa		
Adhesion:	7.0 N/mm ² (EN ISO 4624) to grit blasted C-Steel,		
	1.5 N/mm ² (EN ISO 4624) to concrete		

This Technical Bulletin is for informational purposes only. All data provided herein is based on in-depth research and testing, however no liability whatsoever can be assumed. Since we are constantly endeavouring to up-date and improve our products, we recommend noting the index and issue date indicated on this data sheet and to inquire as to whether any properties have changed in the interim. This Product Information Sheet replaces all prior issues. Please contact our Technical Consultant for detailed information in case of ambiguities.

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