



# TECHNICAL BULLETIN

## COROFLOOR 23 Vinyl Ester Flooring System

**Product Description:** The COROFLOOR 23 system is designed with heavy duty, vinyl ester surface texture material. This flooring system consists of one primer, one base coat and one topcoat. Abrasive grits are broadcast into the base coat to provide traction, durability and wear. It can be used with locally obtained 20 to 40 mesh silica sand or equal to minimize material cost. The finished surface is textured, yet non-porous. Unlike conventional systems that must be replaced, the COROFLOOR 23 system is a permanent application that can be easily refurbished by cleaning and reapplying the topcoat.

**Recommended Uses:** COROFLOOR 23 system is used in areas subjected to inorganic acids, organic solvents and mild alkali solutions. The dense, seamless surface prevents penetration of corrosives while allowing for easy cleaning. It has been used in protecting against corrosive conditions encountered in metal processing, oil production, and chemical processing.

**Temperature Resistance:** + 50 °C

**Generic Type:** Novolac Vinyl Ester

**Filler:** Silica Sand, Granite or Mineral Slag

**Solvent:** Styrene (reactive)

**Design:** EN 14879-1 or TIP TOP "Concrete Specification and Preparation". Concrete should be thoroughly cured for at least 28 days. 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/mm<sup>2</sup> and a minimum surface strength of 1.5 N/mm<sup>2</sup>.

**Preparation:** Contaminants such as dirt, oil, wax 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. The resulting surface should be at least as rough as 40 grit sand paper.

			<b>Coverage</b>
<b>Build-up of the system:</b>	COROFLAKE -N- Primer	1 x 80-120 µm	300 g/m <sup>2</sup>
	COROFLAKE 23 Liquid	2 x 500-700 µm	2200 g/m <sup>2</sup>
	Smoothing Liquid F-12		110 g/m <sup>2</sup>
	Silica Sand		5000 g/m <sup>2</sup>

**Mixing Ratio:** 100:2; COROFLAKE -N- Primer or COROFLAKE 23 Liquid to Hardener No.1 by weight. Mix always hardener into resin based component, using a low speed mechanical agitator.



**Pot Life:** 1½ hrs (+10°C) 1 hr (+20°C) ½ hr (+30°C)

**Application Equipment:** Conventional Spray, Brush and Roller

**Application:** The substrate- and air temperature shall be @ +10°C to +36°C (3°K above dew point). COROFLAKE® -N- Primer is normally applied by brush or roller. Primer may be recoated after initial set, which will occur normally after 4 to 8 hours, base coat must be applied within seven days. After priming, roll, brush or spray the base coat of catalysed COROFLAKE 23 resin 500 to 700 µm onto surface. Broadcast sand onto surface while base coat is still tacky. Brush off excess sand after base coat has completely set. Topcoat may be recoated after initial set, which will occur normally after 8 hours and not later than seven days.

**Thinning:** Add 10 % Smoothing Liquid F – 12 to the base coat liquid before mixing.

**Cleaning:** Solvent T/100

**Shelf Life:** The shelf life is 6 months when stored below + 20°C. COROFLAKE 23 Liquid, COROFLAKE -N- Primer and Hardener No.1 should be stored at a cool and dry place.

**Density:** 1.2 kg/l (mixed)

**Viscosity:** 3000 mPas +/- 250

**Flash Point:** COROFLAKE N Primer and COROFLAKE 23 +32°C  
Hardener No.1 +70°C

**Flexural Modulus:** 2,500 MPa (ASTM D 790)

**Tensile Strength:** 13 MPa (ASTM C 307)

**Compressive Strength:** 57 MPa (ASTM C 579)

**Coefficient of Expansion:** 27-30x10<sup>-6</sup> 1/°C (VDE 0304) linear

**Abrasion:** 40 mg (ASTM D 4060)

**Adhesion to Concrete:** 1.5 N/m<sup>2</sup> (EN ISO 4624)

**Hardness:** 35 Barcol (DIN EN 59)

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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