

ELASTOFLOOR SL

Aliphatic Flooring System



DESCRIPTION

ELASTOFLOOR SL is a high performance, rapid curing flooring product based on the latest polyaspartic / polyurea technologies. **ELASTOFLOOR SL** provides excellent colour and gloss retention and is resistant to most fuels, oils, solvents and cleaners. **ELASTOFLOOR SL** can be consistently applied using low pressure airless spray equipment or using short haired rollers. With a tack free time of 30 – 60 minutes re-use times are incredibly short saving customers valuable production time. **ELASTOFLOOR SL** can be installed in extremely high or low temperature. It is ideal when fast turnaround and non-yellowing system are essential.

ELASTOFLOOR SL can be pigmented or applied as a clear anti-yellowing top coat over CMCI decorative floor coatings (Contact Technical Department for advice)

FEATURES & BENEFITS

- Extremely fast cure and re-use times
- Excellent colour and gloss retention
- Cures to a very clear finish when not pigmented
- Excellent abrasion resistance
- Self priming
- Excellent adhesion to concrete substrates
- Excellent chemical resistance
- Resistant to most chemicals, solvents, acids and caustics
- Can be used for in-door and out door applications
- Stable over a wide temperature range
- Displays good flexibility and impact resistance compared to standard epoxies

TYPICAL USES

- Pharmaceutical
- Manufacturing plants
- Restrooms
- Clean rooms
- Auto showrooms

- Basement
- Locker rooms
- Ramps
- Loading dock
- Schools

PROCESSING PROPERTIES	DATA
Mixing ratio of Comp. A to Comp. B	1:1 by volume
Material consumption L / m ²	0.25L @ 250 μm (Will vary based on substrate)
Recommended thickness [μm]	150 - 1000
Numbers of coats	Depends on application requirements
Pot life at 20°C [min.]	30 – 60
Waiting time between the single layers* [h]	1
Tack free time* [h]	1
Pedestrian traffic after* [h]	Light: 2 - 4 Heavy: 5 - 8
Curing* (Normal loading) [h]	8 - 12
Temperature range for application (ambience) [°C]	+5 - +50
Temperature range for application (substrate) [°C]	+5 - +50
Over coat window (hrs)	8
Maximal relative air humidity for application [%]	98

PHYSICAL PROPERTIES	DATA	
Chemical Base	-	Comp. A: HDI-Prepolymer Comp. B: Mod. Polyaspartics/Polyurea
VOC-content [%]	DIN EN ISO 11890-1 / ASTM D-1259	15
Solids content [%]	DIN EN 827 / ASTM D-2697	85

Colour	-	Comp. A: HDI-Prepolymer Comp. B: Mod. Polyaspartics/Polyurea
VOC-content [%]	DIN EN ISO 11890-1 / ASTM D-1259	15
Viscosity [mPa*s] @ 25°C	DIN EN ISO 2884-2 / ASTM D-4878	Comp. A: 50 - 100 Comp.B: 1200 – 1800 Mix: approx. 250
Density [g/cm ³] @ 20°C	DIN EN ISO 2811-1 / ASTM D-1217	Comp. A: 1.18 – 1,22 Comp. B: 1.07 – 1.11 Mix: 1.15
Density [g/cm ³]	EN ISO 1183 / ASTM D-792	1.23 ± 0.02
Tensile strength [MPa]	ISO 37-2005 / ASTM D-638	≥ 13
Elongation at tear [%]	ISO 37-2005 / ASTM D-638	≥ 87
Hardness [Shore D]	ISO 868-2003 / ASTM D-2240	After 3 sec.: 60 ± 5 After 15 sec.: 19
Rebound resilience [%]	ISO 4662 / ASTM	≥ 5
Tear growth resistance[N/mm]	ISO 34-1 method A	≥ 8
Taber Abrasion [mg]	ASTM D-4060	< 30 (Wheel CS17 / 1.000g / 1000 cycles)
Colour fastness T= 100°C 60 W/m ² 15000 kJ/m ²	DIN EN ISO 105-B06	After approx. 70 hours: ΔE* = 2,44 No chalking, no discolouration, no cracking and no blistering.
Colour fastness T= 100°C 60 W/m ² 15000 kJ/m ²	DIN EN ISO 105-B06	After approx. 70 hours: ΔE* = 2,44 No chalking, no discolouration, no cracking and no blistering.
Colour fastness 8h QUV/60°C + 4h condensation/50°C UV-lamp: type A (340nm)	ASTM G154a / ISO 4892	After approx. 500 hours: No chalking, no discolouration, no cracking and no blistering.
Pull off strength [N/mm ²]	DIN EN ISO 4624 / ASTM D-4541	Concrete: ≥ 1,5
Liquid Impingement Erosion Test conditions: Water jet 135m/s	ASTM G-73-10	Wear resistant up to 240 min. against liquid impingement erosion
Max. Process temp. [°C]	ISO 11346 / ASTM D-2485	Wet: 60 Dry: -20 to +120 Peak temperature dry: 140
Storage conditions [°C]	DIN EN 12701 / ASTM	10 – 30 (in closed original drums, stored at dry and well ventilated place; beware of freezing)
Shelf life	-	Approximately 12 months

*) All measurements at 23°C @ 50%rF. Deviations at different ambient conditions have to be taken into account.

CONCRETE SURFACE PREPARATION

Before coating is applied the concrete must be:

- Concrete should be dry
- All contaminants must be removed
- All cracks and spall areas must be repaired
- Mechanical preparation is the prepared method of preparing concrete for coating application. The following are all acceptable shot blasting, diamond grinding, scarifying and scabbling.

APPLICATION ADVICE PART 1

Thoroughly power stir the B - side component. If the application requires the **ELASTOFLOOR SL** to be pigmented add 10% by volume of the required pigment into the B-side component and power stir thoroughly before combining the A and B components.

Combine the A side and B-side components and power stir again before applying to substrate.

The mixing ratio of comp A to comp B is 1:1 by volume. To ensure full physical characteristics are achieved within the finished coating use graduated beakers / containers to ensure accurate 1:1 by volume mixing of component A and component B.

ELASTOFLOOR SL can be applied by roller, squeegee or notched trowel / rake.

APPLICATION ADVICE PART 2

When applying two or more coats allow each coat to dry completely before applying subsequent coats. If recoat window is exceeded, sand slightly to produce a profile, wipe with acetone and then apply the next coat.

Use a 8 - 13 mm Nap Mohair roller when rolling **ELASTOFLOOR SL**

When applying **ELASTOFLOOR SL** with a squeegee or notched trowel the floor should be back rolled using a spiked roller to assist in de-airing the coating.

ADDITIONAL NOTES:

In the event **ELASTOFLOOR SL** is to be pigmented in a very light colour be aware that additional coats may be necessary to achieve the required hiding power. When using very light colours like white the pigment loading can be increased from 10% by volume of the B-side to 15% by volume of the B-side component.

Take note that the tack free and curing times of **ELASTOFLOOR SL** are influenced by the environmental conditions at the time of application. Heat and humidity will accelerate the reactivity and curing of the **ELASTOFLOOR SL**. In hot and humid environments only mix small amounts of product at a time to enable full application of mixed product.

In cold environments the tack free and cure times can be extended considerably especially in environments less than 10C.

Quality Statement

CMCI manufactures its products at their manufacturing facility in Saudi Arabia as per the Quality Procedures certified to conform with quality Management System described in ISO 9000 series

CMCI provides a comprehensive technical support system for its full range of high Performance construction products CMCI also offers full technical field support to consultants, Architects, contractors, applicators and End Users.

"High Quality Construction Chemicals"

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The Technical Specification information and recommendations given are based on the current technical knowledge and the user or his representative is recommended to check the suitability of the product CMCI reserves the right to amend the technical characteristic of the product as part of ongoing research and development. As the work execution is beyond the direct and continuous control of CMCI no guaranty and or responsibility is assumed on the performance of work completion executed with use of our products.