

**DESCRIPTION**

C-Floor PU320 HB is an aliphatic polyurethane coating with the following main properties:

- High solids content.
- High gloss finish.
- Enables high dry film thickness coats to be applied.
- Excellent weather resistance, good colour and gloss retention.
- Good resistance in maritime and chemically aggressive industrial environments.
- Good mechanical characteristics (flexibility, hardness, resistance to shock and abrasion).
- Fireproof.
- CE Marking product.

**MAIN APPLICATIONS**

Recommended for application to interior and exterior steel and concrete floors, in maritime and chemically aggressive industrial environments. It can be applied to industrial flooring, off-shore platforms, foot bridges and on areas of moderate traffic of cars, trucks and forklifts in warehouses, car parks, swimming pools, etc.

**PROPERTIES**

<b>Finish</b>	Gloss
<b>Components</b>	2
<b>Colour</b>	White 0501, grey 7042, blue 5344. Other colours: to order
<b>Proportions (by weight)</b>	Resin 7F-321 5 parts Cure 7F-322 1 part
<b>Pot life of the mixture</b>	4 hours at 23 °C The pot-life depends on the temperature and the quantity mixed.
<b>Volume solids</b>	71 % (in accordance with ISO 3233) Small variations ( $\pm 3$ %) are acceptable due to the imprecision of the method.
<b>Specific gravity</b>	1,349 g/mL For white colour
<b>Recommended dry film thickness</b>	75 - 125 $\mu$ m per coat
<b>Nº of coats</b>	2 – 3 depending on the method of application
<b>Application method</b>	Airless spray, brush and roller
<b>Approximate spread rate</b>	0,20 kg/m <sup>2</sup> per coat Consider losses caused by application, surface irregularities, etc.

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**Drying time**

At 23 °C, 50 % RH and 125 µm:	
Light traffic:	24 hours
Light load movement:	48 hours
Through hard:	7 days
Overcoating:	Min: 16 hours
	Max: 48 hours

**SURFACE PREPARATION****Floors**

**Steel** – The surface must be free from any contaminants. When the product is applied directly to the surface, it should be grit-blasted to Sa 2½. (ISO 8501-1).

**Concrete** – The concrete must be left for at least 28 days to harden. The surface must be clean, dry and of sufficient roughness. We recommend mechanical preparation using multi-purpose diamond discs (or other abrasive discs) or by shot blasting. If a concrete hardener has been used, this must be completely removed by mechanical means or with an acid solution to obtain adequate adhesion. The concrete must have minimum traction resistance of 1 N/mm<sup>2</sup> (10 kg/cm<sup>2</sup>). The surface must be dry when the paint is applied. It must not be applied to concrete substrates subject to hydrostatic counter-pressure.

**Swimming pools**

Good end results in painting swimming pools depend largely on surface preparation as well as construction and location. The pool should be waterproofed in the exterior, so we recommend the application of a waterproof coating or membrane between the walls and the surrounding land otherwise the water from the rain or irrigation water that penetrates through the concrete can cause blistering. This might only be visible when the pool is emptied once when full the pressure of the water maintains the system balanced and can prevent the appearance of the defect. In this case we recommend the use of mortars that could resist to hydrostatic counter-pressure.

**New swimming pools:**

If the pool has been recently built it is best to wash it thoroughly with water, rubbing the surface well to ensure the complete dissolution and removal of alkaline salts. In the case of a very smooth surface, it can be blasted to rough the surface. Otherwise, it should be cleaned with a 10% solution of hydrochloric acid. The acid reacts superficially with the cement thereby roughening it and facilitating adhesion. If the first application does not produce the desired effect repeat once or twice. Then wash immediately with fresh water, scrubbing the surface to ensure complete removal of all traces of acid. Allow to dry thoroughly before painting.

**Repairing damaged surfaces:**

If cracking exists we recommend the use of Fast Tela F167 between mortar coats over the cracks (allow 0,5m on each side of the crack)

**Repainting swimming pools:****Swimming pools previously painted with thermoplastic paints**

Remove all traces of old paint by sandblasting

**Swimming pools previously painted with two components coatings**

Sweep blast all the surface by sandblasting

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**PAINT SYSTEM**
**Floors**
**Steel:**

In the case of steel surfaces C-Floor PU320 HB is usually applied over epoxy primers such as C-Pox Primer ZP150 or C-Pox Primer ZP200 HB or over epoxy intermediates such as C-Pox S135 FD. We recommend applying 2-3 coats of C-Floor PU320 HB.

**Concrete:**

In the case of new concrete surfaces, C-Floor PU320 HB can be applied directly to the concrete provided the surface is cohesive. In these cases, the first coat should be thinned 10-15%. If the surface needs to be bonded, one coat of the sealing primer C-Floor Sealer E120 should be applied.

**Swimming pools**

Apply C-Floor Sealer E120, Cromodrol Sealer or Waterproof Mortar (waterproof mortar). For more information see the Technical Data Sheet of these products.

When will be necessary to provide some resistance to osmotic pressure, should be applied the Cromodrol Sealer or the Waterproof Mortar. The Cromodrol Sealer could be used up to 0,2 MPa of osmotic pressure (minimum consumption of 400 g/m<sup>2</sup>). Depending on surface regularity may be necessary to apply two layers of sealer. The Waterproof Mortar could be used up to 0,5 MPa of osmotic pressure (minimum consumption of 4 kg/m<sup>2</sup> in two layers).

**Finish type**
**Smooth finish:**

Apply 2-3 coats of C-Floor PU320 HB.

**Non-slip finish:**

Apply 1 coat of C-Floor PU320 HB

Apply 1 coat of C-Floor PU320 HB, sprinkled until saturated with silica Quartz G300 or Quartz G450.

After 24 hours, remove the non-adhered silica and apply 1 coat of C-Floor PU320 HB.

**APPLICATION**

Add the *cure* to the *resin* and stir mechanically for 5 minutes. Closed areas must be well ventilated during application and drying to ensure that all solvents have evaporated.

**Ambient application conditions:**

Temperature	5 e 40 °C
Relative humidity	less than 80 %
Minimum temperature of the substrate	3 °C above dew point
Substrate humidity	less than 4 % according ASTM F2659 and measured with "Tramex" equipment type

**Application equipment:**

<b>Airless spray</b>	Recommended
Orifice	0,015 – 0,021 inches
Working pressure	150 - 170 kg/cm <sup>2</sup>
Thinning	5 - 10 %
<b>Brush/roller</b>	Recommended
Thinning	5 - 10%
<b>Thinner:</b>	25-242 (Dil. C-Thane R/T)
<b>Cleaning thinner:</b>	52-510 (Dil. Industrial)

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**ADDITIONAL INFORMATION**
**Drying mechanism** – By solvent evaporation and chemical reaction between components

**Volatile Organic Compounds (VOC)**

EU limit for this product (cat. A/j): 500 g/l

This product contains max VOC::

Resin: less than 346 g/L ; Cure: less than 113 g/L ; Thinner: less than 814 g/L ; Cleaning Thinner: less than 864 g/L ; Supply form: less than 300 g/L ; Mix: less than 351 g/L \*

\* The VOC value shown above refers to a ready for use product, as tinted, thinned, etc in accordance with our recommendations. We are not responsible for products obtained by mixing products with are different from those we have recommended and we must draw attention to the responsibility of anyone involved within the supply chain not to infringe Directive 2004/42/CE.

**Flashpoint (EN 426)**

Resin	28°C
Hardener	50°C
Thinner	24°C
Cleaning thinner	less than 0°C

**Supply form**

Resin	20 kg and 5 kg
Hardener	4 kg and 1 kg

**Shelf life**

2 years, when stored inside in original containers between 5 and 40°C.

**PROPERTIES**

 Fire Reaction Classification in accordance with European Standard 13501-1: B<sub>fl</sub> s1 (fire resistant with low smoke emissions).

Persoz Hardness according standard EN ISO 1522 measured at 23 °C, 50 % of relative humidity and 75 µm of dry film thickness: 1 day - 78 seconds; 7 days - 175 seconds.

**CHEMICAL RESISTANCE**

Test performed according to standard ASTM D1308, method 3.1.2.  
 Drying and cured conditions: 1 week, 23 °C and 50 % of relative humidity.  
 For other condition, the chemical resistance may differ.

	2 hours	1 day	1 week
Water	+	+	+
Sulphuric acid (10%)	+	+	+
Sodium hydroxide (10%)	+	+	+
Sodium hypochlorite (2,5%)	+	+	+
Motor oil	+	+	+
Diesel	+	+	+
Leadfree petrol 95 octane	+	+	+
Xylene	+	+	+

+ Resistant; ± Light superficial attack (hardness, colour and gloss); - Not resistant

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**REMARKS**

The concentration of chloride in the water should not exceed 3 mg/L otherwise discoloration of the film is probable to occur. Full details of the legal maximum allowable concentrations of free residual chlorine and total residual chlorine, refer to local legislation.

**CE MARKING**

CE Marking of this product is the evidence given by CIN that this product is subject to the provisions of Community Directives of the Construction Products that are applicable with European Regulation nº 305/2011 on March, 9 of 2011 and the European Standard EN 13813. "Screed material and floor sounds – Sound material - Properties and requirements". This product conforms to the requirements of Annex ZA of that that standard.

	
CIN – Corporação Industrial do Norte, S.A. Avenida de Dom Mendo 831 – Apartado 1008 4471 – 909 Maia – Portugal	
14 EN 13813	
Continuous floor coating Declaration of performance: CE-7F420	
Classification Adhesion strength Fire reaction	SR – B <sub>fl</sub> -s1 – B1,5 > 1,5 N/mm <sup>2</sup> B <sub>fl</sub> -s1

**HEALTH, SAFETY AND ENVIRONMENT**

In general, avoid contact with the eyes and skin; gloves, goggles and appropriate clothing should be worn. Keep out of the reach of children. Use only in well ventilated areas. Do not empty into drains. Keep the container properly sealed and stored in the correct place. Take correct measures when transporting the product so as to avoid any accidents that could rupture the can or cause damage to the packaging. Ensure that the container is correctly stacked in a safe area. Do not store or use the product in extreme temperature conditions. Always take account of the appropriate legislation relating to the environment and Health and Safety at Work. For more information it is essential to read the label on the container and the MATERIAL SAFETY DATA SHEET of this product, its components and all complementary products referred on this Technical Data Sheet.

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