

TECHNICAL DATA SHEET FOR

FLOOR-PRO 301 XHB GF EPOXY FINISH

FLOOR-PRO 301 XHB GF EPOXY FINISH is a two-component high solid modified cycloaliphatic amine cured glass flake epoxy finish. It can be used on primed floor as a chemical, oil and abrasion resistant finishing coating

FEATURES

- High compressive strength
- High wear, abrasion and impact resistance
- High acid and alkaline resistance
- Excellent water resistance
- Easy to clean and maintenance
- Easy to apply

APPLICATION AREAS

- Ideal for areas which require good chemical, abrasion and impact resistance such as industrial floor coatings for electronic communications, factories, laboratories, healthcare, petrochemicals, etc
- Ideal for areas which are subjected to high vehicular traffic and load such as carparks and transport hubs

PHYSICAL PROPERTIES	
Chemical Composition	Solvent-based cycloaliphatic amine cured epoxy
Colour	As per standard colours
Density, mixed	$1.37 \pm 0.05 \text{ g/cm}^3$
Viscosity, mixed	125 ± 5 KU @ 25°C
Solid Content, mixed	$90\% \pm 2$ by volume

Adhesive strength>1.5 N/mm² (Concrete failure)Compressive strength>37 N/mm² (ASTM D695)Flexural strength>11 N/mm² (ASTM D790)Tensile Strength>5 N/mm² (ASTM D638)Shore D Hardness>70 (ASTM D2240)	PERFORMANCE DATA	
Flexural strength>11 N/mm² (ASTM D790)Tensile Strength>5 N/mm² (ASTM D638)	Adhesive strength	>1.5 N/mm ² (Concrete failure)
Tensile Strength >5 N/mm ² (ASTM D638)	Compressive strength	>37 N/mm ² (ASTM D695)
	Flexural strength	>11 N/mm ² (ASTM D790)
Shore D Hardness >70 (ASTM D2240)	Tensile Strength	>5 N/mm ² (ASTM D638)
	Shore D Hardness	>70 (ASTM D2240)
Taber Abraser Wear Index<90 mg / 1000 revolutions / 1 Kg (ASTM D4060, CS-17)	Taber Abraser Wear Index	<90 mg / 1000 revolutions / 1 Kg (ASTM D4060, CS-17)

*Conditions such as installation process, inappropriate maintenance, short and long-term wear and use as well as surface contaminants (wet or dry) affects the slipperiness of flooring materials. To meet slip resistance requirement for wet conditions and/or surface contaminants (wet or dry), appropriate textured or anti-slip floor systems are recommended. Please contact Nippon Paint for further details and specifications.

**The final floor finish shall follow the profile of the concrete, therefore appropriate levelling compound is recommended to treat the undulating surface.

APPLICATION GUIDE	
Mixing Ratio (by weight)	Part A : Part B 3.5 : 1.5
Number of coats	2 – 3 coats
Recommended Thickness	130 - 170 μm DFT per coat
Theoretical Coverage	0.19 - 0.26 Kg/m²/coat
Recoating time	Min 8 hours @ 28°C
Pot Life (Working time)	1 hour @ 28°C



Curing time		30°C
	Foot traffic (hrs)	16
	Light Traffic (hrs)	24
	Exposure to chemicals (days)	7
Substrate Temperature relative to dew point	≥ 3°C	
Recommended application temperature	Minimum 15°C	
range	Maximum 35°C	
Relative Humidity	< 85%	

SUBSTRATE REQUIREMENT

- Concrete or screed substrate compressive strength should be of minimum 25 N/mm² and adhesive pull off strength of 1.5 N/mm².
- The moisture content of concrete shall be < 4% or dried up to 85% RH as per BS8204. It shall be free from rising damp and must be waterproofed against negative ground water pressure.</p>

SURFACE PREPARATION

- Concrete substrate must be clean, free of laitance and contaminants.
- In the event the moisture content is > 4%, FLOOR-PRO 203 SL EPOXY MOISTURE BARRIER may be applied as temporary moisture barrier system.
- Allow to cure over-night before the application of subsequent coating system. Prepare the concrete substrate surface by captive shot blasting, scarifying or mechanical grinding. Repair damaged area and patch up cracks and holes using a suitable repair material compatible with the coating system.

APPLICATION METHOD

Applying Primer

 FLOOR-PRO 106 SF EPOXY PRIMER is the recommended primer. Refer to the product TDS for details application method.

Applying FLOOR-PRO 301 XHB GF EPOXY FINISH

- Mix Part A and Part B separately for 30 seconds using a suitable mechanical mixer at low speed (approx. 300 - 500 rpm). Add all the Part B (Hardener) into Part A and mix both liquid parts thoroughly for 2 minutes until homogeneous. Transfer the mixed material to a clean container and mix for another minute. Avoid inclusion of air during the mixing process.
- Pour the mixed material onto the primed substrate in portion, and spread with a squeegee and back roll with a roller.

Overcoating of FLOOR-PRO 301 XHB GF EPOXY FINISH

- Overcoating the previous coat should be done within 3 days but preferably as soon as possible after it has been allowed for minimum of 16 hours drying.
- It is desirable to roughen the surface before overcoating to ensure proper adhesion.
- Exposure of the paint film to water, chemical and abrasion should be avoided as far as possible before full cure of the coating.



PACKAGING		
Components	PART A (BASE)	PART B (HARDENER)
TOTAL 5 Kg	3.5	1.5

STORAGE AND SHELF LIFE

The product must be stored in accordance with national regulations. Keep the containers in a dry, cool, well ventilated space and away from sources of heat and ignition. Containers must be kept tightly closed. Handle with care.

Components	PART A (BASE)	PART B (HARDENER)
Months	12	12

SAFETY PRECAUTION

- This product is intended for use by professional applicators. Refer to the safety information display on the container and in the safety data sheet (SDS) before using the product.
- Use this product in well-ventilated area, avoid skin contact, spillage on the skin should immediately be removed with suitable cleanser, soap and water.
- Eye should be well flushed with water and seek for medical attention immediately upon contact with this
 product.
- During the application, naked flame, welding operation and smoking is not allowed. Adequate ventilation should be provided.
- If you have any doubt regarding the suitability of use, refer to Nippon Paint for further advice.

DISCLAIMER

The information in this data sheet is given to the best of Nippon Paint's knowledge and practical experience. Users may consult with Nippon Paint on the general suitability of the product for their needs and specific application practices though it remains each user's responsibility to determine the suitability of the product for the user's particular use. The condition of the substrate and application are not within Nippon Paint's control. Therefore, no implied conditions, warranties or other terms will apply to the Product. Nippon Paint does not and cannot warrant the results which the user may obtain by using the product. In no event will Nippon Paint be liable to the user for any kind of loss (whether direct or indirect) even if Nippon Paint was previously advised of it. In line with Nippon Paint's policy for continuous development, Nippon Paint reserves the right to modify the product and the information in this data sheet without prior notice. It is the user's responsibility to check with Nippon Paint for the latest version of this data sheet. This data sheet has been translated into various languages. In the event of any inconsistency, the English version shall prevail.