

**TECHNICAL DATA SHEET FOR** 

# FLOOR-PRO 307 SF EPOXY FINISH

**FLOOR-PRO 307 SF EPOXY FINISH** is a two-component solvent-free high grade epoxy coating. It is to be used on primed floor as a chemical, oil and abrasion resistance finishing coat.

### **FEATURES**

- Solvent free, low odour
- High compressive strength
- High wear, abrasion and impact resistance
- High acid and alkaline resistance
- Excellent water resistance
- Dust free, easy to clean and maintenance
- Can be designed as an anti-slip system

## **APPLICATION AREAS**

- It is used as coloured coatings for surfaces with light mechanical stress and traffic or heavy duty with epoxy mortar combinations
- Areas which require high oil and abrasive resistance against high vehicular traffic and load such as industrial surfaces, storage rooms, garage floors, pedestrian areas, technical centres and others

PHYSICAL PROPERTIES		
Chemical Composition	osition Solvent-free amine cured epoxy	
Colour	As per standard colours	
Density, mixed	1.40 ± 0.05 g/cm <sup>3</sup> @28°C	
Viscosity, mixed	Approx. 2000 – 3000 mPa.s @28°C	
Solid Content, mixed	100%	

PERFORMANCE DATA		
Adhesive strength	> 1.5 N/mm² (Concrete failure) (ASTM D4541)	
Compressive Strength	> 120 N/mm <sup>2</sup> (ASTM D695)	
Flexural Strength	> 39 N/mm <sup>2</sup> (ASTM D790)	
Tensile Strength	> 19 N/mm <sup>2</sup> (ASTM D638)	
Taber Abraser Wear Index	< 100mg / 1000 revolutions / 1 Kg (ASTM D4060, CS-17)	
Shore D Hardness	> 80 (ASTM D2240)	
Service temperature	Dry, Atmospheric	
	Max 50 °C: Continuous	
	Max 80 °C: Short term (Max 7 days)	
	Max 100 °C: Short term (Max 12 hours)	
	The temperatures listed relate to retention of protective properties.  Aesthetic properties may suffer at these temperatures.	

<sup>\*</sup>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.

<sup>\*\*</sup>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	
	16.75	: 3.25	
Number of coats	2 – 3 coats		
Recommended Thickness	200 - 300 µm DFT per coat		
Theoretical Coverage	0.3 - 0.5 kg/m²/coat		
Recoating time	Within 12 – 24 hrs @ 28°C		
Pot Life (Working time)	20 mins @ 28°C		
Curing time		30°C	
	Foot traffic (hrs)	12	
	Light Traffic (days)	3	
	Exposure to chemical	als (days) 7	
Substrate Temperature relative to dew point	≥ 3°C		
Recommended application	Minimum 15°C		
temperature range	Maximum 35°C		
Relative Humidity	< 85%		

## SUBSTRATE REQUIREMENT

- Concrete or screed substrate compressive strength should be of minimum 25 N/mm<sup>2</sup> and adhesive pull off strength of 1.5 N/mm<sup>2</sup>.
- 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.

### **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 307 SF 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 the Part A (Base) thoroughly for 1 minute. 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.

### Over-coating of FLOOR-PRO 307 SF EPOXY FINISH

 Over-coating the previous coat should be done within 1 day but preferably as soon as possible after it has been allowed for minimum of 12 hours drying.



 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 20 Kg	16.75	3.25

### 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	6	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.