

TECHNICAL DATA SHEET FOR

FLOOR-PRO 407 SB PU FINISH

FLOOR-PRO 407 SB PU FINISH is two-component polyurethane coating based on high quality polyester branched polyurethane resin

FEATURES

- Seamless, monolithic application
- Easy to clean
- High chemical resistance to wide range of chemical
- Abrasion resistance against light or high traffic
- Hard wearing

APPLICATION AREAS

- Ideal to be used as a clear or coloured coating for areas with light, medium and high traffic industrial and commercial floor and wall
- Recommended for use in carpark, garages, warehouses, pedestrian areas, laboratories, electronic clean room, pharmaceutical, refineries, printing pulp paper, mills, bridge tunnel, roofing and other industrial plants sectors
- Areas used for GMP, hygienic industrial floors, for wet food processing, beverage, seafood, meat, kitchen, cold storage, freezer/cool room, palm oil processing and wet packaging plants

PHYSICAL PROPERTIES

Chemical Composition	Solvent-based polyurethane
Colour	As per standard colour and Clear
Finish	Gloss, Satin, Matt
Density, mixed	1.3 ± 0.05 g/cm ³ @ 28°C
Solid Content, mixed	70 ± 2% (by weight)

PERFORMANCE DATA

Adhesive strength	>1.5 N/mm ² (Concrete failure)
Water Permeability	Nil-Karten test (impermeable)
BS 476: Part 6: 1989+A1:2009	<2.0 (Fire Propagation Index (I))
Taber Abraser Wear Index	37 mg / 1000 revolutions / 1kg (ASTM D 4060-10)

*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)- Colour	<u>Coloured</u>	Part A	: Part B
	Gloss	4	: 1
	Satin	4	: 1
	Matt	4.5	: 1

	Clear	Part A	:	Part B
	Gloss	3	:	2
	Satin	4	:	1
	Matt	4.5	:	1
Number of coats	2 coats			
Recommended Thickness	80 µm DFT per coat			
Theoretical Coverage	0.13 Kg/m ² /coat			
Recoating time	Within 6-48hours @ 28°C			
Pot Life (Working time)	2 hour @ 28°C			
Curing time		20°C	25°C	32°C
	Foot traffic (hrs)	24	22	20
	Light traffic (hrs)	36	34	24
	Exposure to chemicals (days)	10	7	7
Substrate Temperature relative to dew point	≥ 3°C			
Recommended application temperature range	Minimum 5°C Maximum 40°C			
Relative Humidity	< 85%			

SUBSTRATE REQUIREMENTS

- Concrete or screed substrate should be a minimum of 25 N/mm² and adhesive pull off strength of 1.5 N/mm², free from laitance, dust and other contamination.
- The substrate should be dried up to 85% RH as per BS8204 and free from rising damp and ground water pressure.

SURFACE PREPARATION

- Concrete substrate must be clean, free of laitance and contaminants.
- The concrete substrate must be dry and waterproofed against negative ground water pressure.
- Appropriate moisture barrier at 2 mm thickness is recommended if the substrate moisture > 4%.
- In the event of high substrate moisture > 6%, it is recommended to apply a 5 mm thickness high compressive strength anti-osmosis epoxy mortar as moisture tolerance system.
- Allow to cure over-night before the application of subsequent painting 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 patching compound. Cut 5mmX5mm grooves around the perimeter of the floor and at end points (eg: plinth, column, drains etc.)

APPLICATION METHOD

Applying Primer

- FLOOR-PRO 106 SF EPOXY PRIMER or FLOOR-PRO 107 SF Damp-Proof Epoxy Primer is the recommended primer. Refer to the product TDS for details application method

Applying FLOOR-PRO 407 SB PU FINISH

- Mix Part A for 30 seconds using a suitable mechanical mixer (approx. 750 rpm).
- Add all the Part B (Hardener) into Part A and mix both liquid parts thoroughly for 1 minutes until homogenous.
- 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 wide short-pile mohair roller.

Overcoating of FLOOR-PRO 407 SB PU FINISH

- Overcoating the previous coat should be done within 1 day but preferably as soon as possible after it has been allowed for minimum of 5-6 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	Gloss Level	PART A (BASE)	PART B (HARDENER)
TOTAL 5 Kg	Coloured - Gloss	4	1
TOTAL 5 Kg	Coloured - Satin	4	1
TOTAL 5.5Kg	Coloured - Matt	4.5	1
TOTAL 5 Kg	Clear- Gloss	3	2
TOTAL 5 Kg	Clear- Satin	4	1
TOTAL 5.5 Kg	Clear-Matt	4.5	1

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. (Unopened and in good condition temperature 10°C to 30°C)

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.