

TECHNICAL DATA SHEET FOR

**FLOOR-PRO 409 SF FLEXIBLE PU FINISH**

FLOOR-PRO 409 SF FLEXIBLE PU FINISH is a two-component, 100% solid, solvent-free pigmented polyurethane formulated with special binder with excellent flexibility and toughness. It provides superior adhesion on mineral and organic substrates

**FEATURES**

- Solvent-free
- Seamless
- Good adhesion on various organic and mineral substrates
- Excellent flexibility and toughness
- Fast installation

**APPLICATION AREAS**

- Ideal for use a tough and durable water-tight coloured self-priming coating for the multi-storey car parking decks, ship decks, warehouses and production floors, walkways and many other rigid & flexible substrates

**PHYSICAL PROPERTIES**

Chemical Composition	Solvent-free polyurethane
Colour	As per standard colour
Finish	Gloss
Density, mixed	1.1 g/cm <sup>3</sup> @ 30°C
Viscosity, mixed	1000 - 2000 cps @ 30°C
Solid Content, mixed	100 % (By weight)

**PERFORMANCE DATA**

Adhesive strength	>1.5 N/mm <sup>2</sup> (Concrete failure)
Elongation	70 - 80% (ASTM D638)

\*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 3.41 : 1.59
Number of coats	1 -2 coats
Recommended thickness	200 µm DFT per coat
Theoretical Coverage	0.10 – 0.25 Kg/m <sup>2</sup> /coat (Consumption will vary dependant on undulation and absorption of the substrate)
Recoating time	Within 24 - 72 hrs @ 28°C
Pot Life (Working time)	30 mins @ 28°C

Curing time		30°C
	Foot traffic (hrs)	18-24
	Light traffic (days)	3
	Exposure to chemicals (days)	7
Substrate Temperature relative to dew point	≥ 3°C	
Recommended application temperature range	Minimum 15°C Maximum 35°C	
Relative Humidity	< 85%	

### SUBSTRATE REQUIREMENTS

- Concrete or screed substrate should be a minimum of 25 N/mm<sup>2</sup> and adhesive pull off strength of 1.5 N/mm<sup>2</sup>, 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 (e.g.: plinth, column, drains etc.)

### APPLICATION METHOD

- The products in the system are multi-components and pre-packed in sets. Each set requires effective and homogenous mixing using drill and helical spinner with the least inclusion of air in a clean mixing barrel prior to applying.
- FLOOR-PRO 409 SF FLEXIBLE PU FINISH is proportioned 2-component products which are spread on the floor by squeegee and finished with roller
- If reworking within 24 hours after application the coating need not be sanded. Reworking later than that is only possible after sanding it carefully.

### PACKAGING

Components	PART A (BASE)	PART B (HARDENER)
TOTAL 5 Kg	3.41	1.59

**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.