

TECHNICAL DATA SHEET FOR

## FLOOR-PRO 601 LIQUID FLOOR HARDENER

FLOOR-PRO 601 LIQUID FLOOR HARDENER is a one-component water-based, deep penetrating solution based on sodium silicate that reacts with free lime within concrete for sealing and dust-proofing friable concrete and masonry surfaces. It acts as a concrete treatment and not a surface coating, and thus will not change the natural colour of the concrete. It can be applied on old and green concrete, but not suitable for natural stone.

### FEATURES

- Non-toxic
- Easy to apply
- Improve compressive strength & surface hardness - eliminates dust formation from within the treated surfaces
- Improve abrasion and impact resistance
- Improve resistance to oil and grease penetration
- Can be applied to new and old concrete surfaces and damp surface

### APPLICATION AREAS

- Concrete floor, wall, slab, bridge and concrete road surface. Dust-proofing on old concrete floor.
- As a surface hardener to improve the abrasion resistance of treated concrete, masonry and granolithic floors. Improving the density of new concrete to reduce penetration of oil, grease and other chemical solutions.

### PHYSICAL PROPERTIES

Chemical Composition	Water-based sodium silicate liquid hardener
Density, mixed	1.4 g/cm <sup>3</sup>
pH	Approx. 11

### PERFORMANCE DATA

Compressive Strength (1:3 Mortar cube)	Curing , days	Without treatment with hardener, N/mm <sup>2</sup>	With treatment with hardener, N/mm <sup>2</sup>
		32	29.3
	64	34.5	39.1
	108	35.0	42.5
	225	43.0	54.5
Abrasion Resistance (1:3 Mortar cube)	No of cycles	Without treatment with hardener, weight loss, gm	With treatment with hardener, weight loss, gm
	500	3.89	1.46
	1000	8.35	2.82
	1500	13.43	3.90
	2000	17.47	5.16

\*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)	28Kg of FLOOR-PRO 601 Liquid Floor Hardener with 56kg of water
Number of coats	2 coats
Theoretical Coverage	840 m <sup>2</sup> /mixing of 28Kg bag
Recoating time	Within 2-4hrs
Curing time	24 hrs
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/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.

### APPLICATION METHOD

- Using a roller, spray or mop, apply 2 coats of FLOOR-PRO 601 LIQUID FLOOR HARDENER (shake well before use) on the clean, dry substrate, and allow 2-4 hours interval between coats

### PACKAGING

28 Kg Pail

### STORAGE AND SHELF LIFE

The products have a shelf life of 24 months and 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)

### 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.