

TECHNICAL DATA SHEET FOR

FLOOR-PRO 605 METALLIC BASED FLOOR HARDENER

FLOOR-PRO 605 METALLIC BASED FLOOR HARDENER is a one-component ready-to-use dry shake floor hardener. It is formulated with cement and metallic aggregates of mineral origin which has good abrasion resistance, physical and mechanical properties.

FEATURES

- High wearing resistance in areas subject to constant or frequently wet conditions without oxidizing
- Slip resistance finish
- Excellent impact resistance
- Good stain resistance and non-corrosive
- Good resistance to penetration of oil, grease and other contaminants
- Easy to maintain and clean

APPLICATION AREAS

- Use for army camps, warehouses, ports, garages, engineering workshops, parking lots, service stations and factories.

PHYSICAL PROPERTIES

Chemical Composition	Industrial source of crushed and graded metallic aggregates mixed with cement, pigments and additives
Appearance	Natural cement colour powder

PERFORMANCE DATA

Compressive strength	90 N/mm ² @ 28 days (ASTM C109)
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*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

Theoretical Coverage	<table style="display: inline-table; border: none;"> <tr> <td>Light duty</td> <td>Medium duty</td> <td>Heavy duty</td> <td>Very Heavy duty</td> </tr> <tr> <td>3 Kg/m²</td> <td>4 Kg/m²</td> <td>6 Kg/m²</td> <td>9 Kg/m²</td> </tr> </table> <p>The consumption rate will depend on application method and the concrete mix ratio. This figure does not allow for surface profile and wastage</p>	Light duty	Medium duty	Heavy duty	Very Heavy duty	3 Kg/m ²	4 Kg/m ²	6 Kg/m ²	9 Kg/m ²
Light duty	Medium duty	Heavy duty	Very Heavy duty						
3 Kg/m ²	4 Kg/m ²	6 Kg/m ²	9 Kg/m ²						
Curing time	<p>24 hours @ 28°C (Foot traffic)</p> <p>The above value depends on the concrete and ambient condition of the area applied.</p>								
Substrate Temperature relative to dew point	≥ 3°C								
Relative Humidity	<85%								

SUBSTRATE REQUIREMENT

- 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.

APPLICATION METHOD

Mechanical Application – Automatic spreader

- Spread FLOOR-PRO 605 METALLIC BASED FLOOR HARDENER evenly onto the concrete immediately after screeding
- The spreading can start almost immediately after the concrete has been levelled to allow for the hydration of FLOOR-PRO 605 METALLIC BASED FLOOR HARDENER.
- Compaction with the trowel can start as soon as the weight of the power trowels can be supported by the concrete.

Manual Application

- Depending on the condition, remove the surface “bleed water” or allow it to evaporate.
- FLOOR-PRO 605 METALLIC BASED FLOOR HARDENER must be spread once the concrete can be stepped on, without leaving a print deeper than 3 -5mm.
- Periodical checking on the condition and development of the concrete time frame for each stage and sequence application.
- Sprinkle FLOOR-PRO 605 METALLIC BASED FLOOR HARDENER onto the screed concrete evenly in 2 stages First stage: 3 Kg/m², Second stage: 3 Kg/m²)
- Care must be taken to apply the product without ripples on the concrete surface.
- Casting FLOOR-PRO 605 METALLIC BASED FLOOR HARDENER carelessly or further 2 metre from point of casting will reduce the consistency of finish.
- The first application must be worked into the slab followed immediately by the application of the second stage of FLOOR-PRO 605 METALLIC BASED FLOOR HARDENER in one application.
- Never add water to the surface when the product has been applied.
- FLOOR-PRO 605 METALLIC BASED FLOOR HARDENER results in the slab surface becoming “stiff” more quickly than usual.
- Careful trimming must take place along the edges where joining slabs are poured.
- Final finishing for closing pores and removing undulations can be achieved either by hand or trowel.

LIMITATION

- Application of FLOOR-PRO 605 METALLIC BASED FLOOR HARDENER must not be carried in windy area or dry conditions.
- Do not use concrete where some cement has been replaced by fly ash, as this makes the mix sticky and less workable.
- Variations in concrete characteristics such water content and cement quality may lead to slight colour variation.
- To ensure optimum colour consistency, it is essential that the floor laying operation is clean and protected from dust and rain.
- Colour variation during the drying period is normal for this system.

PACKAGING

25 Kg paper bag

STORAGE AND SHELF LIFE

FLOOR-PRO 605 METALLIC BASED FLOOR HARDENER has a shelf life of 6 months from manufacturing date. 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.

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.