



### **BP Floorshield-NM** (Non-metallic, Dry Shake, Concrete Floor Surface Hardener)

**BP Floorshield-NM** is a ready to use, dry shake floor surface hardener. It is a blend of non-metallic synthetic mineral aggregate, cement, and plasticisers, and is applied as a dry shake to the surface of wet concrete or screed. It provides added protection against wear, impact, abrasion, & high resistance to various industrial chemicals, oils, grease, detergents, etc.

**Uses:** BP Floorshield-NM is designed to ensure improved durability in applications where the floor is subjected to medium traffic and where a non-dusting surface is required. It improves and enhances the in-use performance of all concrete floors; suitable for use in a wide range of industrial, commercial, and institutional flooring applications, such as Workshops, Power Stations, Garages Car Parks, Warehouses, Loading Bays, Factories, Power Stations, Traffic Decking, Car Washes, Workshops where tracked vehicles are serviced, Military installations where tracked vehicles are used.

**Advantages:** BP Floorshield-NM carries several advantages as follows:

1. Premixed – offering factory controlled quality assurance
2. Applied monolithically to fresh concrete with ease of application
3. Quick application and finishing results in considerable time savings
4. Joints can be afforded better protection by addition of extra material at edges of bays
5. Wear, abrasion, and impact resistance superior to concrete, maintenance free
6. Non-oxidising, Slip-resistant, Non-dusting, Easy to clean and maintain
7. High impermeability compared to concrete under the same conditions
8. Forms an integral part of the floor surface and will not delaminate, peel or wear away

#### **Directions for use:**

A well proportioned mix design of the concrete is essential. The concrete supplier should ensure that water cement ratios and slumps are generally in accordance with the following standard and norms:

- Cement (SRC or OPC) Min 350 Kg/m<sup>3</sup>
- Slump: Ideally 75mm
- Strength: Min 30 N/mm<sup>2</sup>
- Concrete should not segregate and bleed or contain more than 3% air

Concrete should be levelled off with a straightedge (wooden bull float) and then vibrated. Any bleed water should be removed (avoid sponge type absorbents). Thereafter sprinkle BP Floorshield-NM along edges of bays (approx. 8cm strips) where expansion and contraction joints will be located. Trowel into surface using a wooden float. BP Floorshield-NM is ideally applied to a surface which is neither too wet nor dry, but is ideally settled. Ambient temperatures will dictate when the material is to be applied. Generally in temperatures of 35-45<sup>o</sup>C a waiting period of 30-40 minutes is recommended. This may need to be extended in temperatures of less than 35<sup>o</sup>C. Using a raised trestle which spans the slab, the material is broadcast by hand onto the wet concrete surface. The application is carried out in two stages as follows:

- Apply 2/3 of the required material to the concrete ensuring uniform distribution

- Allow applied material to absorb moisture from the concrete surface (a uniform darker colour will be apparent)
- Apply the balance of material and wait until material has obtained a darker colour before floating with a wooden trowel
- When surface is firm enough to take the weight of foot traffic, BP Floorshield-NM should be finished off by means of a power float
- A good slip resistant finish can be obtained, but the surface should not be overworked
- If manual finishing with steel trowels is to be undertaken, then this should take place before concrete becomes firm enough to take foot traffic

#### **Typical Properties:**

Appearance	: Fine Grey Powder
Hardness	: 7 (MOHS)
Compressive Strength	: 70 N/mm <sup>2</sup>
Chemical Resistance	: Oils, acids, salt, etc
Coverage light-medium	: 2-3kg/m <sup>2</sup>
Coverage Heavy Duty	: 4-5kg/m <sup>2</sup>

#### **Specification Compliance:**

- BS 1881 (Compressive Strength)
- ASTM C944 (Abrasion Resistance)
- M.O.H.S. (Hardness)



# BUILD PLUS

## CONSTRUCTION CHEMICALS

**Pack Size:** 25 kg plastic sacks

### Precautions:

- Do not add any admixture or fluidifiers
- Proper curing is required
- Store materials in a dry place
- Do not allow to freeze until 4000 psi is attained
- Do not use as a topping
- Do not use material at freezing temperatures
- Rate of strength gain is significantly affected at temperature extremes.

### Shelf Life & Storage:

Nine months if stored properly in original unopened packing in dry, cool, dry, ventilated conditions away from direct sunlight. It should be stored as supplied, until ready for use. Pallets can be stacked two high provided care is taken. Opened Sacks should be used first. Unopened Sacks can be stored for 9 months. Use oldest material first.

### Technical support:

GMC offers comprehensive technical support service & specification assistance in locations to our channel partners, end users, and contractors.

### Quality & Care:

All the products manufactured and originated from Gulf Minerals and Chemicals, UAE facility are independently tested and certified under a Buildplus Management System to conform to the requirements of the quality, environmental, health & safety Standards.

### Health & Safety Precautions:

**BP Floorshield-NM** contains Portland cement which is slightly alkaline when wet. For people with sensitive skins may cause irritation. As a general Code of Safety Practice all chemical products should be treated with care, kept away from children and animals, especially protect eyes and skin. In an emergency seek medical advice.

----- BP Floorshield-NM -----

