FLOOR HARDENER Non Metallic

June, 2019 Page 1 of 3

PRODUCT

TARGET® Non-Metallic Floor Hardener is a specially formulated product containing accurately weighed cementitious materials and a high quality natural aggregate which has been graded to particle sizes suitable for flooring work. It is free of organic impurities and provides improved impact and abrasion resistance. TARGET Non-Metallic Floor Hardener is plasticized to provide greater ease of placing and finishing.

USES

TARGET Non-Metallic Floor Hardener is designed for use as a surface hardener for concrete floors, which are subject to wear due to abrasion or impact from light to medium traffic. Using proper application procedures it is possible to obtain an easily cleaned surface with good slip resistance. Since the natural aggregates used in TARGET Non-Metallic Floor Hardener are non-metallic, it is non-rusting and suitable for both interior and exterior use.

COLOR

TARGET Non-Metallic Floor Hardener is similar in color to conventional Portland cement concrete. The precise color will, however, depend on the particular concrete used and curing procedures adopted.

PROCEDURES

- 1. Apply TARGET Non-Metallic Floor Hardener in two dry shake applications of equal weight.
- 2. Apply the first shake after sufficient floating has been carried out to bring enough moisture to the surface for combining with the dry material.
- 3. When the first application of dry shake becomes dampened by the moisture from the concrete, refloat the floor surface to obtain thorough mixing of the shake with mortar from the concrete.
- 4. Immediately following this floating, evenly distribute the remainder of the dry shake over the concrete surface.
- 5. Carry out a final floating to obtain thorough mixing with the previously applied surface treatment. Avoid excessive floating.
- 6. Where color uniformity is of importance use only stainless steel trowels for hard trowelling.

TEMPERATURE

Concrete and air temperatures should be above 10 °C (50 °F) during the application of TARGET Non-Metallic Floor Hardener. If space heaters are used to increase air temperatures, care must be taken to avoid damage to the concrete surface due to carbonation.

CURING

 Adequate curing is extremely important. Curing should commence as soon as final set has occurred and before the surface starts to dry. Conventional moist curing



FLOOR HARDENER - Non Metallic

June, 2019 Page 2 of 3

procedures such as water spray, ponding, wet burlap or plastic covers may be used with TARGET Non-Metallic Floor Hardener if precise color uniformity is not required. Moist curing should be continued for at least 48 hours.

 If moist curing is not practicable or if color uniformity is of importance, a membrane curing compound such as TARGET Cure & Seal should be applied to the concrete immediately after disappearance of bleed water after final finishing and before any surface drying occurs.

COVERAGE

Rates of application vary with the hardness required to suit the planned traffic conditions. Suitable application rates are:

	COVERAGE	
TRAFFIC CONDITION	lb/100 ft ²	kg/10 m ²
Light Medium	60-80 80-100	30-40 40-50

CAUTION

- In cases of severe impact and abrasion the use of TARGET Synthetic Floor Hardener may be preferable. Consult Target Products Ltd for advice.
- For best results the air content of the concrete to which the floor hardener is applied should not exceed 3% for concrete that will not be exposed to freezing and thawing. If TARGET Non-Metallic Floor Hardener is to be applied to concrete which will be exposed to freezing and thawing, contact Target Products Ltd for advice on the air content and procedures required.
- While TARGET Non-Metallic Floor Hardener will provide improved resistance to many chemical substances, it is not recommended for use on floors exposed to acids and their salts.

TYPICAL PROPERTIES OF NON-METALLIC FLOOR HARDENER

COMPRESSIVE STRENGTH, at 28 days, 50.8 mm (2 inch) cube samples 0.45 water/cement ratio	55 MPa (8000 lb/in²)	
AGGREGATE HARDNESS	6.5, Mohs scale	
ABRASION RESISTANCE, wt loss Taber Abrader, H22 Calibrade Wheels, 1000 g load, 1000 cycles	3.6 g (6.0 g for untreated concrete)	

SPECIFICATION GUIDE

The floor hardener shall be TARGET Non-Metallic Floor Hardener or approved equivalent applied as two dry shakes to give a total hardener application rate of (insert required rate for service conditions) kg/10 m² (lb/100 ft²). The floor hardener shall be a premixed blend of Portland cement and a natural aggregate with a Moh's Hardness of

TARGET

FLOOR HARDENER - Non Metallic

June, 2019 Page 3 of 3

not less than 6, and produce a minimum compressive strength of 55 MPa (8,000 lb/in²) at 28 days.

PACKAGING

TARGET Non Metallic Floor Hardener is available in 25 kg (55 lb) bag 56 bags per pallet.

