

# **NFS-2028 IMP**

Super Hydrophobic Silicone Impregnating Agent Water Repellent Treatment Strong Protection Against Moisture

When mineral building materials come into contact with water, they absorb an amount which depends on their porosity. The result is various forms of damage, including:

- Penetration of moisture through the wall
- Cracks caused by swelling and shrinkage
- Damage caused by frost and deicing salt
- Destruction of concrete caused by corrosion of the reinforcing steel
- Efflorescence and salt damage caused by hydration and crystallization
- Lime leaching
- Rust stains and curtaining
- Dirt pick up and curtaining Attack by fungi, moss, lichens and algae
- Chemical corrosion, e. g. binder transformation caused by acidic gases (SO<sub>2</sub>, NO<sub>2</sub>)
- Impaired thermal insulation

Many of these forms of damage can be prevented, or at least reduced or kept at bay for longer, by means of impregnation agents. Creation of a water repellent zone considerably reduces the uptake of water and aggressive substances; the masonry remains dryer, and is consequently less prone to the kinds of damage referred to above.

The purpose of water repellent treatment is to protect exposed facades from moisture and attendant damage by applying a colorless, non-film forming agent which prevents capillary uptake of water and the aggressive substances dissolved therein. Because the impregnating agent does not block the capillaries, the substrate retains its vapor permeability.

## **Product description**

**NFS-2028 IMP** is an aqueous, solventless based on modified organosilicon compounds used as a water repellent and priming coat as well as for impregnating mineral and alkaline constriction.

## **Features and Benefits**

- Strong reduction in water uptake
- Excellent water repellent and consequently: Salt barrier – chlorides dissolved in water are blocked (e.g. road salt and sea water) No corrosion – the reinforcing steel does not rust, as no moisture reaches it No frost damage – greater resistance to freeze/thaw cycles
- Prevention with NFS-2028 IMP saves costs, energy and resources: Cost- and resource-intensive renovation is avoided. Buildings that have been treated by hydrophobic impregnation have a significantly longer lifespan and thus a low environmental impact over the long term
- Does not influence water-vapor permeability



The physical properties of the construction material, especially its water vapour permeability are barely affected by **NFS-2028 IMP**.

- High early water resistance
- Creates a strong beading effect
- Solvent free
- Low soiling tendency
- Excellent depth of penetration

**NFS-2028 IMP** does not build up a film and shows a very good and deep penetration of the construction material (Due to its very fine particles, the product is able to penetrate the masonry materials deeply).

- Prevents salt blooming and efflorescence
- Excellent chemical resistance
- Resistance to UV light
- Surfaces not rendered shiny or tacky, or caused to yellow
- Environmental compatibility

**NFS-2028 IMP** provides a comprehensive and long-lasting protection of construction materials against water intrusion, efflorescence and destruction by water-soluble pollutants as well as against frost damage and the attack of micro-organism.

# Applications

**NFS-2028 IMP** is used for impregnation of building materials like normal and reinforced concrete, brick, natural stones, rooftiles, plaster and thatched surface and wood. Also, it can be used as primer with coating system.

## **Typical Product Data Property**

Active substance	Approx. 50 %
Appearance	Clear, liquid
pH-Value	13-14
Density, 25 °C	1.4g/cm <sup>3</sup>
Solvent	Water

## Processing

Deposition method of this coating on various surfaces is by using the spray or brushes. The coating method of this product is single-step, quite simple, easy, economical and practical.

Before coating, the surface must be cleaned from grease and dust.

Old and flaky paint (if there is) must be removed from the surface through sanding before coating the surface.

Mix or stir the bucket or drum before using. Dilute **NFS-2028 IMP** in a ratio of 1:30 to 1:65 with tap water. Apply several coats, wet on wet, until the substrate is saturated.

## Storage

One year shelf life when stored in cool and dry place in closed containers at a temperature of 5-35 °C.

Phone: 00989130844702,00983132686714 Fax : 00982142695425 Web: www.nanofaraz.ir, www. nanofaraz.com Email: info@nanofaraz.com