ARIT奥莱特

PRODUCT DATA SHEET

ART-FHJ

Multifunctional Concrete Surface Protector

Description

ART-FHJ is a colorless and transparent liquid multifunctional concrete surface protector. It can effectively penetrate into concrete and chemically react with the active components within the concrete. This process consolidates the concrete into a solid mass and simultaneously forms a permanent seal on the concrete surface. As a result, the hardness, wear resistance, permeability resistance, and corrosion resistance of the concrete surface are significantly enhanced. The product has strong penetration ability, is easy to apply, and contains no VOCs (volatile organic compounds), thus providing an effective guarantee for extending the service life and improving the performance of concrete.

Main benefits/Characteristics

- Hardness Enhancement: The multifunctional concrete surface protector (ART-FHJ) utilizes advanced reaction and crystallization technologies. It reacts with the active chemical substances in concrete to form high-strength gels and crystalline structures, significantly increasing the hardness and wear resistance of the concrete surface layer.
- Water and Corrosion Resistance:The multifunctional concrete surface protector (ART-FHJ) reduces surface tension and employs strong penetration technology to block capillaries and micro-cracks in concrete. This completes the modification and optimization of the microstructure of the concrete surface layer, enhances its density, inhibits the erosion and transmission of media, and slows down or prevents the occurrence of permeation and corrosion reactions.

- Efficient Penetration: The multifunctional concrete surface protector (ART-FHJ) primarily enters the concrete through capillary action and further diffuses internally using the liquid phase as a carrier. It can penetrate up to more than 1 cm into the concrete.
- Rapid Reaction:The multifunctional concrete surface protector (ART-FHJ) significantly improves the strength of the concrete surface layer within 5 to 7 days.

Applications

Suitable for locations where enhanced surface strength and wear resistance are required, such as industrial floors, parking lots, warehouses, and highway bridge decks.

Suitable for environments where protection against erosion from water, chemicals, and salts is needed, providing water-resistant and anti-corrosion protection, such as coastal and port engineering projects, basements, tunnels, and water tanks.

Suitable for concrete structures with fine cracks or high surface porosity, capable of penetrating deeply and sealing micro-cracks, such as the restoration of old buildings, bridge maintenance, airport runways, and urban roads.

Other concrete building surfaces with insufficient strength after casting and forming.

Physical and chemical indicators

Items	Performance
Appearance	Colorless,transparent
Solid Content(%)	20.0±2
PH	≧11
VOC(g/L)	≦20
Density(g/cm^3)	≧1.07

Recommended Dosage

The normal dosage is 2 to 4 m^2 /kg. The specific amount depends on the permeability and porosity of the concrete. The optimal usage should be determined through on-site testing, taking into account factors such as the type of raw materials, ambient temperature, and construction requirements.

Use Method

Preparation:First, prepare a spray bottle, brush, mask, gloves, work clothes, etc. Before application, the concrete substrate surface can be sanded with sandpaper or a steel brush to ensure that the concrete surface is clean and dry. The construction temperature should be between 5–50°C, and the relative humidity should ideally be between 40–75%. When cleaning the floor, use neutral or weakly alkaline cleaners; do not use acidic cleaners for cleaning or maintenance of the floor.

Operating Steps:

- Shake the concrete surface hardener thoroughly before use, then pour it into a sprayer or container. Do not mix it with other liquids.
- Use a low-pressure sprayer or brush to apply the first coat evenly, until the surface reaches a saturated state. If any part dries too quickly during the process, it can be immediately resprayed.
- When the concrete surface is semi-dry, the second coat can be sprayed. Similarly, when the surface is semi-dry again, apply the third coat. Try to complete the spraying within one day.
- The appearance of white crystalline residues is a normal phenomenon. After curing for 5–7 days, they can be wiped off with clean water.

Curing: The treated concrete surface should be kept free from water exposure or freezing for 24 hours. After normal curing for 5–7 days, backfilling or covering with other materials can be done.

Precautions: Do not apply on the surface of aluminum products, glazed surfaces, or glass, as corrosion may occur. If contact happens accidentally, rinse with clean water immediately.

Packaging

It is available in 10kg, 50kg, or 200kg drums, and other packaging specifications can be provided according to customer requirements.

Storage

It should be stored in a sealed container in a dry and cool place. The shelf life is 6 months when sealed.

LEGAL NOTES

It is prohibited to retain or disclose samples of the product without the company's permission.

In addition to the product quality itself, the actual performance also depends on other factors. If there are factors beyond our control, we cannot guarantee the performance of the product.

Users are requested to strictly follow the technical guidelines and product instructions for use. The company shall not be held liable for any consequences resulting from unauthorized changes to the product's usage without the company's authorization.