

PRODUCT DATA SHEET

ART-JA

Hardening Accelerating Type High Performance Water Reducing Admixture

Description

ART-JA is ARIT latest independently developed high-performance polycarboxylate water reducer. It features high water reduction rates, exceptional early strength, good fluidity, and high compactness. This product enhances the comprehensive performance of both precast and cast-in-place concrete, improving the concrete's frost resistance. Simultaneously significantly enhances construction efficiency. ART-JA is widely applicable to prestressed concrete, steam-cured concrete, shotcrete, and winter construction concrete.

Main benefits/Characteristics

- Water reduction rate exceeds 25%, granting the concrete mix excellent fluidity.
- Prominent hydration acceleration effect, capable of reducing the setting time of the concrete mix by 2 to 8 hours.
- Intelligent viscosity adjustment function, ensuring good flowability of the concrete between the gaps of steel reinforcements and complex formwork structures, guaranteeing the uniformity and integrity of the concrete.
- Low air-entraining, with air content in the concrete less than 2%, enhancing the compactness and durability of the concrete.

Applications

- Concrete for prefabricated buildings
- Concrete for cold regions and winter construction
- Concrete for precast piles, subway segments, and utility poles
- 3D printing concrete
- Concrete with rapid mold turnover requirements
- Concrete for rapid repairs of roads and infrastructure
- Steam-Curing-Free Concrete

Physical and chemical indicators

Items	Performance
Appearance	Light yellow transparent liquid
Solid content/%	25.5 ± 1.28
pH	6.0 ± 1.0
Density/g/cm ³	1.06 ± 0.02
Alkali content (as Na ₂ O)	$\leq 5.0\%$
Chloride content	$\leq 0.1\%$

Recommended Dosage

0.5% to 2.0% of the amount of cementitious materials

Pre-testing must be performed to determine the exact dosage rate

Packaging

IBC Tank or Flexitank for customer demand

Notes of attention

Cement compatibility test should be conducted when cement types change.

Pre-testing must be performed before mixing with other admixtures.

Do not compound with naphthalene-based admixtures.

Operate strictly in accordance with construction specifications when placing concrete

For concrete that requires an exceptionally long setting time, the setting time should be tested in advance according to the concrete trial mix.

Storage

Store in undamaged, original sealed packaging in dry conditions.

Protect product from direct sunlight.

Stir well before use and effectiveness will not be affected if any sedimentation occurs within the warranty period.

A minimum shelf life of 6 months under normal storage conditions. Shelf life may be greater than stated depending on storage conditions.

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.