ARIT奥莱特

PRODUCT DATA SHEET

ART-JR2

Set Retarding Type High Range Water Reducing Admixture

Description

ART-JR2 is a retarding high-efficiency polycarboxylate superplasticizer independently developed by ARIT. It is characterized by an extended setting time of over 2 hours, high water reduction rate, low slump loss, excellent workability of concrete, and no strength regression in the later stages.

Main benefits/Characteristics

- **Good Retarding Effect:** Extends the setting time of concrete by over 2 hours.
- **Good Slump Retention:** Excellent 2-hour slump retention performance.
- **Reduced Heat of Hydration:** Lowers the temperature rise in mass concrete, delays the exothermic peak, and reduces shrinkage.
- **Low Air Content:** The air content in concrete is less than 2%, which enhances density and durability.
- **Excellent adaptability:** Compatible with most cements, mineral admixtures, and various aggregate types available on the market.
- **Environmental Friendliness:** Non-corrosive to steel, non-toxic, non-flammable, non-explosive, and pollution-free.

Applications

- Large Volume Concrete
- Concrete for Long-Distance Transport

- Concrete for Summer Construction

Physical and chemical indicators

Items	Performance
Appearance	Light yellow liquid
Solid Content /%	Adjusted for on-site materials
pH	6.0±1
Alkali content (as Na_2O)	≤10%
Density/g/cm^3	1.04 ± 0.02
Chloride content	⩽ 0.1%

Application Case

- Hot-Weather Concreting

A large commercial concrete mixing station group, with a daily average output of 30,000 cubic meters, uses ARIT's set retarding type high-efficiency polycarboxylate superplasticizer in summer. This meets the construction requirements for concrete grades ranging from C15 to C40.

Usage Instructions

- The recommended effective solids content is 1.00 % – 3.00 % of the total cementitious materials; the exact dosage must be predetermined through trial tests according to the raw materials, job-site conditions, construction codes, and technical requirements.
- Any change in materials or environmental conditions may also cause the dosage to vary within a certain range, so new tests are required to re-establish the optimum dosage.

Complies with the Following Standards

GB/T 8076-2008

ASTM C494 TYPE D

EN934-2

Packaging

IBC Tank or Flexitank for customer demand

Storage

- It should be stored in a cool and dry place, avoiding direct sunlight, and kept in a dedicated warehouse or a fixed location.
- The effective storage period is 1year. It can still be used after being tested and verified to be qualified if it exceeds the time limit.

Precautions

- When changing the type of cement or using newly delivered cement, a compatibility test should be conducted.
- Do not use in combination with naphthalene-based admixtures. When using in combination with other admixtures, compatibility tests should be performed.
- Strictly follow the construction specifications during application.
- The product information is only used to describe the product's characteristics and functions, and it is not a guarantee. Users are also required to carefully test the product's functions and its suitability. The functions and suitability of the product must be verified through testing conducted by qualified professionals.

Legal Notes

- Retaining or disclosing product samples without the company's explicit permission is strictly prohibited.
- In addition to the product quality itself, the actual performance also depends on other uncontrollable factors. If there are uncontrollable factors, company cannot guarantee the performance of the product.
- Users are requested to strictly follow the technical guidance and product instructions for use. The company shall not be liable for any consequences resulting from unauthorized changes to the product usage method without the company's authorization.