

PRODUCT DATA SHEET

ART-S33

Water Retaining Agent

Description

ART-S33 is a water retention agent for mortar or concrete independently developed by Jiangsu ARIT with independent intellectual property rights, which can significantly improve the segregation and water secretion state of mortar or concrete when mixed into mortar or concrete, and has an obvious gain effect on the maintenance of the fluidity (expansion) of mortar or concrete.

Main benefits/Characteristics

- **Good Cohesion:** Improves the cohesion and water retention of mortar and concrete mixtures.
- **Reduces Brittleness of Mortar and Concrete:** Increases the flexural and bending strength of mortar and concrete.
- **Good Water Resistance:** Enhances the water resistance of mortar and concrete.

Applications

- Concrete prone to segregation and bleeding
- Pumped concrete
- Precast concrete
- Ordinary Portland cement and sulfoaluminate cement systems
- Self-leveling mortar

Physical and chemical indicators

Items	Performance
Appearance	Colorless transparent liquid
Solid Content /%	10±0.5
pH	2.5±1
Alkali content (as Na ₂ O)	≤5.0%
Density/g/cm ³	1.02±0.02
Chloride content	≤0.1%

Application Case

- Pumped concrete

A ready-mix supplier's C30 pump-mix suffered from bleeding and segregation before placing. After adding our ART-S33 water-retaining agent, the performance improved instantly: water retention and cohesion rose markedly, bleeding and segregation were brought under control, and pumping proceeded without a hitch.

Usage Instructions

- The recommended effective solids content is 0.01 % - 0.10 % 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

T/CBMF 165-2022

ASTM C494 TYPE S

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 1 year. 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.