

PRODUCT DATA SHEET

ART-JR

Set Retarding Type High Performance Water Reducing Admixture

Description

ART-JR is a newly developed green and environmentally friendly polycarboxylate-based high performance water reducing agents, PCEs, which promotes the workability of concrete with high water reduction rate, low slump loss and good compatibility with cement. ART-JR helps to maintain good fluidity of concrete over a longer period and has the advantages of reducing the temperature rise in large-volume concrete, reducing shrinkage, and having no corrosion to steel reinforcement. It is particularly suitable for long-distance concrete transportation, construction of high-grade concrete, and concrete with retarding requirements in summer.

Main benefits/Characteristics

- Water reducing rate can reach more than 25%, which meets the construction requirements of high-grade concrete
- Retarding, the slump of concrete is virtually lossless within two hours, and the initial and final setting times of the concrete can be extended by 2-3 hours according to construction requirements.
- Low air entraining performance; air content of concrete is less than 2%, which improves workability of concrete
- No corrosive effect on steel and improves the durability of concrete

Applications

- Large-volume concrete and high-strength concrete construction under hot climate conditions
- Pumped, long-distance transportation, high-strength concrete and ultra-high-strength concrete
- Cast-in-place concrete, reinforced concrete, and prestressed concrete used in industrial and civil construction, roads, bridges, port terminals, airports, high-speed railways, and other engineering projects.

Physical and chemical indicators

Items	Performance
Appearance	Light yellow transparent liquid
Solid content/%	26.5 ± 1.35
pH	6.0 ± 1.0
Density/g/cm ³	1.07 ± 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.

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.