ARIT奥莱特

PRODUCT DATA SHEET

ART-M640

Slump Retention Admixture

Description

ART-M640 is a cyclohexane polycarboxylate-based slump retention admixture independently developed by ARIT. It is characterized by its controlled release, smooth release profile, and excellent compatibility with cement. This product meets the needs of various project-oriented and civil construction engineering applications, improving various performance indicators of concrete and significantly extending its workability. To a certain extent, this product is suitable for extreme high-temperature conditions, with a release time exceeding 5 hours. It has low sensitivity to dosage selection, making it easy to control. The product also has excellent air-entrainment regulation capabilities, which greatly enhance the mechanical properties and durability of concrete. Compared with similar products, it offers significant cost-performance and performance metrics.

Main benefits/Characteristics

- Low Dosage: The recommended dosage is 0.05%-0.1% (by weight of cement).
- Long Slump Retention: At higher dosages, the slump loss is negligible even after 4 hours. This ensures the workability of the concrete during long-distance transportation and pumping, without affecting the normal setting of the concrete.
- Good Workability: Under high slump conditions, there is no noticeable segregation or bleeding, and the concrete maintains a uniform appearance. When used in the formulation of high-strength concrete, it provides excellent

workability and cohesiveness, facilitating easy mixing and pouring.

- Low Air Content: The concrete has an air content of less than 3%, which, while maintaining good durability, enhances the concrete's density and improves its strength and resistance to corrosion.
- Wide Compatibility: It can be effectively combined with a variety of other admixtures, enhancing its performance, and shows excellent compatibility with different types of cement and supplementary materials.
- High Strength Gain Rate: It promotes a higher strength gain rate, improves shrinkage performance, and reduces the carbonation rate of the concrete.
- Low Concrete Shrinkage: It significantly reduces concrete shrinkage, greatly improving the stability and durability of the concrete.
- Excellent Product Stability: The product retains uniform color during low-temperature storage, with no signs of separation, flocculation, or sedimentation.
- Environmentally Friendly: The product is non-toxic and harmless, making it an eco-friendly solution that supports sustainable development.

Applications

- Ordinary commercial concrete and pumped concrete in high-temperature environments
- Concrete with ultra-long construction time requirements
- Concrete with long transportation requirements
- Self-compacting concrete and large-volume concrete
- Concrete for bridges, highways, and railways.

Physical and chemical indicators

Item	Performance
Appearance	Colorless and transparent liquid
Solid Content/%	45±1
pH	6±1
Density/g/cm^3	1.08±0.02
Alkali Content（as Na_2O）	≤1.0%
Chloride Ion Content	≤0.01%

Recommended Dosage

1.0% to 5.0% weight of binder

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

Packaging

Plastic drums or transported in bulk by tankers.

Storage

Stored in a cool, dry place, away from direct sunlight, in a dedicated warehouse or a designated storage area.

The shelf life is 1 year. After this period, the product can still be used if it passes testing and is verified to meet the required standards.

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.