

PRODUCT DATA SHEET

ART-DF

Defoamer

Description

ART-DF is an advanced concrete defoamer independently developed by ARIT and protected by intellectual property rights. This product employs specialized defoaming technology to effectively reduce bubble formation in concrete, enhancing its compactness and structural integrity. ART-DF is specifically designed to minimize bubbles during the mixing and pouring processes of concrete, without impacting the workability and final curing quality of the concrete. It is particularly suited for construction scenarios requiring high compactness and a smooth surface texture, such as industrial floors, precast components, and decorative concrete. Additionally, ART-DF is also highly appropriate for large-scale infrastructure projects and high-performance engineering, providing exceptional construction effects and long-term durability. In high temperature and humidity environments, this product also demonstrates excellent defoaming performance, ensuring efficient and quality-assured concrete construction.

Main benefits/Characteristics

- Significant defoaming effect: This defoamer can rapidly eliminate bubbles produced during the concrete mixing process, effectively preventing the formation of voids and honeycombs, and enhancing the compactness and uniformity of the concrete structure.
- Improved concrete fluidity: ART-DF significantly enhances the fluidity and workability of concrete, making it easier to handle and pour, while also reducing segregation and bleeding.

- **Broad material adaptability:** This defoamer is suitable for various types of concrete mixes, including high-performance and highly flowable concrete, capable of meeting diverse construction and engineering needs.
- **No impact on concrete strength:** Within a reasonable dosage range, it does not affect the initial and ultimate strength of the concrete, ensuring structural safety and durability.
- **Efficient compatibility:** When used in combination with other concrete additives, such as polycarboxylate superplasticizers, it dissolves quickly.

Applications

- Precast components
- Ultra-high performance concrete
- Self-compacting concrete
- Pumped concrete
- Fair-faced concrete

Physical and chemical indicators

| Items | Performance |
|---------------------------|-------------------------|
| Appearance | Semi-transparent liquid |
| Solid content/% | 97±2 |
| pH (1% aqueous solution) | 6±1.5 |
| Density/g/cm ³ | 1.06±0.02 |
| Viscosity (25°C, mPa.s) | 260±30 |

Instructions for Use

1. Ensure that the defoamer is stored in a dry, cool environment, avoiding direct sunlight and rain.
2. Check the expiration date and packaging integrity of the defoamer before use to ensure there are no clumps or layering.
3. Adjust the dosage of the defoamer according to the designed strength of the concrete, construction conditions, and environmental requirements. Typically, the dosage of the

defoamer is between 0.01% to 0.5% of the weight of the additives.

4. Conduct trial mixes to determine the optimal dosage of the defoamer, ensuring that the performance of the concrete meets the design requirements.

5. Ensure that the defoamer is evenly distributed in the concrete, and usually, the mixing time needs to be extended to fully activate the effect of the defoamer.

Packaging

Drums or flowbins for customer demand

Storage

Store in undamaged, original sealed packaging in dry conditions.

Protect product from direct sunlight

A minimum shelf life of 12 months under normal storage conditions. Shelf life may be greater than stated depends 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.