TDS of Powdered Defoamer XP-12

Description

XP-12 is a modified polyether-based high-performance powdered defoamer designed for use in dry-mixed mortar and other construction material systems.

Technical Principle

Through a specialized process, the active polyether ingredients are combined with an inorganic carrier to provide both rapid defoaming and long-lasting foam suppression. This effectively addresses foam issues arising during mixing, pumping, and molding, thereby enhancing the density, strength, and surface quality of the final product.

Advantages/Characteristics

(1) The product is a white, free-flowing powder that is environmentally friendly and suitable for industrial production processes such as dry-mix mortar.

(2) It provides excellent defoaming performance, optimizes the size and distribution of air bubbles in mortar, reduces the viscosity of the mixture, and improves its flowability and workability. This facilitates pumping, self-leveling, and plastering applications while reducing the risk of delamination and cracking.

(3) It is highly compatible with cement, gypsum, and other cementitious materials, as well as admixtures such as water-reducing agents, retarding

agents, and water-retaining agents. It does not bleed oil or leach out, and does not affect the hydration process or setting time.

Quality Specification

Item	Unit	Standard
Appearance	/	Off-white or light yellowish powder
Density	kg/m³	500±50
pH (23℃)	/	7.0±1.0
Cl^-	%	≤0.02
Total Alkali Content	%	≤0.3

Application

(1) Cement-based materials: self-leveling mortar, grout, grouting mortar, bearing mortar, repair mortar, waterproof mortar, ready-mix concrete, precast components, etc.

(2) Gypsum-based materials: gypsum board, plaster, gypsum blocks, gypsum moldings, self-leveling gypsum flooring, etc.

(3) Other dry-mix building materials: dry-mix joint compound, cement-based joint filler, decorative mortar, etc.

Usage Instructions and Precautions

(1) It is recommended to add this product directly during the mixing stage of dry-mix mortar. Mix thoroughly with dry ingredients such as cement and sand for 3 to 5 minutes to ensure even distribution.

(2) Recommended dosage: 0.01% to 0.03% of the total mass of the cementitious materials. The specific dosage should be determined through small-scale testing, taking into account the material mix design, mixing process, and severity of foaming to identify the optimal value.

(3) Compatibility testing is required when used with other admixtures.

Packaging Specifications

Packaging Specifications: Packaged in 20kg plastic woven bags with PE inner liners.

For sea freight: 14 tons (including pallets) per 20 foots standard container; 28 tons (including pallets) per 40 foots high cube container.

For rail freight: 25.5 tons (including pallets) per 40 foots high cube container.

Storage & Transportation

This product is non-toxic and non-flammable and may be transported as a general chemical. Store in a dry, well-ventilated area, away from sunlight and rain. Store and transport at temperatures below 40℃.

Shelf Life

Shelf life of one year under specified storage and shipping conditions.