Shandong Zhuoxing Chemical Co., Ltd.
Zibo Zhuoxing Enterprises Co., Ltd.

TDS of SPS-19 Early Strength Water-Reducing High-Performance PCE Powder

Description

SPS-19 is a new-generation, environmentally friendly, high-performance PCE powder characterized by early strength, high water-reducing and full water solubility.

Technical Principle

With EPEG-5500 as the main raw material, early strength functional monomers such as amino group and sulfonic acid group were introduced into the molecule to achieve high water-reducing, promote the early hydration reaction of cement, and significantly improve the early strength of concrete.

Advantages/Characteristics

(1) Solid content: 97% min.

(2) Rapidity and completely dissolved in water.

(3) The 1d compressive strength ratio can reach more than 180 %, and the 3d compressive strength ratio exceeds 160 %, which greatly improves the early strength and speeds up the construction progress.

(4) High water-reducing, synergistic effect of water reduction and early strength.

(5) Combined with organic amines (such as triethanolamine), inorganic salts (such as sodium nitrite, calcium formate, etc.) early strength agent, synergistic early strength, the effect is obvious.

Application

Applied to mortar, repair mortar, special mortar, self-leveling, grouting material, pressure slurry, prefabricated components, UHPC, etc.; also used for high strength, self-compacting, large volume and other concrete construction, which can significantly improve the early strength of concrete.

Quality Specification

Item	Unit	Standard
Appearance	/	Off-white or light yellowish powder
Density	kg/m^3	550±50
pH (23℃)	/	4.0±1.0
Solid Content	%	≥97.0
Moisture content	%	≤3.0
Water Reducing Ratio	%	≥25
Cl^-	%	≤0.02
Total Alkali content	%	≤0.3

Usage Instructions and Precautions

(1) Recommended dosage is 0.2%-0.5% by weight of binding materials. Specific dosage must be determined through mix design testing.

(2) Testing must be conducted prior to use.

(3) This product must not be mixed with naphthalene sulfonate admixtures.

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

Storage and Transportation Requirements

Packaging Specifications: Packaged in 25kg 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.

Transportation: Classified as non-hazardous chemicals; transport as general cargo. Protect from rain and moisture during transit.

Storage Conditions

Store in a cool, dry, well-ventilated area. Strictly avoid moisture exposure, as it may cause clumping and affect performance. Protect from direct sunlight and high temperatures (recommended ambient temperature ≤40℃).

Shelf Life

12 months. Use after testing if stored beyond this period.