

Technical Data Sheet

Novastar™ 580

Polycarboxylate Superplasticizer(PCE)

Novastar™ 580 Polycarboxylate Superplasticizer is a freely flowing, spray-dried modified polycarboxylate ether powder. It offers high water reduction and high plasticity properties, making it suitable for dry powder mortars and concrete systems. It has good adaptability and dispersibility in various cement-based material systems, providing the material system with excellent workability. Novastar™ 580 Polycarboxylate Superplasticizer can effectively improve the system's compactness and strength, enhance the compactness of the hardened paste, improve shrinkage and creep properties, and reduce cracking. Novastar™ 580 Polycarboxylate Superplasticizer is recommended for use in high-strength, high-durability concretes such as grouts and pressure/injection materials.

Specifications

Property	Condition	Value
Appearance	-	White powder
Matrix	-	Modified polycarboxylate ether
Solid Content	-	≥98
Bulk Density	-	600±100g/L
Active Ingredients	-	≥90%
Water Reduction Rate	-	≥35
Moisture Content	-	≤3%

These figures are only intended as a guide and should not be used in preparing specifications.

Applications&Feature

Novastar™ 580P is a modified polycarboxylate powder admixture that exhibits free-flowing and spray-drying characteristics. It has a high water-reducing rate and excellent flowability, making it suitable for cement-based material systems. It can enhance the mechanical properties of cement-based materials and increase their compactness to improve compressive and flexural strength.

- ★ Ultra high performance cement
- ★ Prefabricated Component
- ★ Grouting Mortar
- ★ Injection Mortar
- ★ Self-leveling
- ★ Waterproof Mortar
- ★ Repair Mortar

Processing

To prepare concrete such as grouts and pressure/injection materials, simply mix Novastar™ 580 PCE with other components in the appropriate equipment until it is well combined. To maximize water reduction performance and overall capabilities, we recommend mixing for at least 30 seconds after adding the appropriate water ratio. The added amount varies depending on the application process and changes in dry mix components. The general dosage range is between 0.1% and 0.3%. At high dosages, bleeding or segregation may occur, as well as an impact on the setting of the mortar. We recommend actual testing before using this product to determine the optimal dosage.

Packaging & Storage

1.Packaging Term:

25 kg per bag, 1000 kg per pallet

2.Storage Term:

The PCE product should be stored in a cool and dry place, protected from moisture and humidity. Prolonged storage at temperatures above 30°C, especially when subjected to pressure, moisture, or exposure to sunlight, the product may result in caking. After opening, the product should be properly sealed before storage. The recommended storage period should not exceed 12 months from the date of production. If the PCE has been stored for a longer period than the recommended time without caking, it can still be used. However, in such cases, we recommend customers to test the product's performance to ensure it meets the intended application requirements before use.

This information is based on our present state of knowledge and is intended to provide general notes on our products and their uses. It should not therefore be construed as guaranteeing specific properties of the products described or their suitability for a particular application. Any existing industrial property rights must be observed. The quality of products is guaranteed under our General Conditions of Sale. Neither Landu nor its agents nor its distributors accept liability for damages arising from the use of our product or our recommendation. The recommendations should be evaluated by the customers' different operating conditions and raw materials. It is our customers' responsibility to avoid infringement of the rights of third parties. We reserve the right to modify the document as the technical development.