

# BT-302 Polycarboxylate superplasticizer

## High Slump Retention Solid 50%

### Product introduction

BT-302 is a new generation of fast-releasing and slump retaining mother liquor made from TPEG by free radical polymerization, and a new sustained-release group is introduced into the synthesis. Under the alkaline condition of concrete, the slow-releasing group in the molecular structure of this product can slowly release the group with dispersive function, playing the role of continuing to disperse the cement, so as to achieve the role of inhibiting the concrete slump loss. It has a low water reduction rate, but it has very high slump protection performance. Generally used with water reducing mother liquor JS-101B and JS-101A, etc., It is mainly used in high-strength concrete with higher requirements for slump protection performance, and its products are widely used in pumping concrete, super-flow self-compacting and high-strength high-performance concrete and commercial concrete for high-speed railway, expressway, hydro-power and other large engineering projects.

### Main Feature

\*The slow-release mother liquor was faster release PCE mother liquor. The release time is generally after 30min (according to the material that the release time is difference)

\*With super high slump performance, can let the concrete slump 2h without loss

\*Low water reduction rate is generally not used alone, it needs to be combined with water reduction type mother liquor

\*With low viscosity and thixotropy, it is more suitable for concrete with low water cement ratio

### Typical Characteristics

Test Item	Specification
Appearance	Colorless or light yellow liquid
Density(g*cm <sup>3</sup> )	1.02-1.05
PH Value	6-8
Solid Contents	50%±1
Cement slurry fluidity MM	270mm per Hour

## Physical properties of concrete

Test item	Specification
Water reducing Rate	5%
bleeding rate ratio	0%
Pressure bleeding rate	30%
Air Content	3%
(30min)Slump retention mm	200mm
(60min)Slump retention	170mm
3D Compressive strength ratio	190MPa
7D Compressive strength ratio	170MPa
28D Compressive strength ratio	150Mpa

### Application

1. Applicable to the configuration of early strength concrete, retarded concrete, precast concrete, cast-in-place concrete, flow concrete, self-compacting concrete, mass concrete, high-performance concrete and clear concrete, all kinds of industrial and civil buildings in the premix cast-in-place concrete, especially for low-grade commercial concrete.

2. It can be widely used in high-speed railways, nuclear power, water conservancy and hydro-power projects, subways, large Bridges, expressways, harbors and wharves and other national large and key projects.

3. Applicable to all kinds of industrial and civil construction and commercial concrete mixing stations.

### How to use

1. This product is a colorless or light yellow liquid. Dosage: Usually, use 0-30% mother liquor with reducing water mother liquor, and mix other small materials to make water reducing agent. The dosage of water-reducing agent is generally 1% ~ 3% of the total weight of cementing materials.

2. Before use of this product or changing the type and batch of cement and gravel, it is necessary to carry out adaptability test with cement and gravel. According to the test, formulate the proportion of water reducing agent

3. This product can be single used (Usually it could not use in single) It can be combined with water-reducing mother liquor and set retarding mother liquor to reduce concrete slump loss. Or compound with functional aids to get admixtures with retarder/early strength/antifreeze/pumping functions. The application method and conditions should be determined by testing and

compounding technology.

4.This product can be used together with other kinds of admixtures such as early strength agent, air entrainment agent, retarder, etc., and should be tested before use. Do not mix with naphthalene series water reducer.

5.Concrete cement and mix ratio should be determined by test, When using, mixed and measured water should be added or added to the concrete mixer at the same time. Before using, the mixing test should be carried out to ensure the quality of the concrete

6.When there are active admixtures such as fly ash and slag in the ratio of concrete, the amount of water-reducing agent should be calculated as the total amount of cementing materials.

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