



高聚物抗裂膨胀剂 Polymer anti-crack expander

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Provider of comprehensive solutionsfor concrete disease control



T60 polymer anti-cracking expansion agent is a new type of concrete expansion agent successfully developed by Zhongde Xinya on the basis of the fourth generation of concrete expansion agent production technology of China Academy of Building Materials Science, with the remarkable features of low dosage, low alkali content and high performance. It can effectively prevent the cracking of concrete, so that the overall structure and waterproofing quality of reinforced concrete can be fundamentally improved, thus realizing the structural self-waterproofing of concrete and the seamless construction of ultra-long structures.

Performance metrics

Test item	Type I	Type II
Magnesium oxide content(%)		≤5.0
Alkali content(%)		≤0.75
Fineness	80 μm square hole sieve 1.18 mm square hole sieve	≥200 ≤0.5
Setting time	Initial coagulation Final coagulation	≥45 ≤600
Restriction of expansion(%)	水中 (7d) 空气中 (21d)	≥0.035 ≥0.050 ≥-0.015 ≥-0.010
Compressive strength(MPa)	7d 28d	≥22.5 ≥42.5

Precautions

- 1. The recommended dosage is $6 \sim 8\%$ for internal mixing (replacing cement in equal amount), and the recommended dosage for expansion concrete in backing belt or reinforcing belt is $8 \sim 10\%$ for internal mixing, and the final dosage of T60 high polymer anti-cracking and expansion agent needs to be determined by test for different cement varieties and different chemical additives.
- 2.T60 high polymer anti-cracking expansion agent to compensate for shrinkage concrete ratio design and ordinary concrete is basically the same, but for waterproofing projects, its cement dosage design than the same grade of ordinary concrete increased by about 10%, based on the mixing of T60 high polymer anti-cracking expansion agent, the sand rate of 36-40%, the water-cement ratio according to the requirements of the concrete slump adjusted, generally less than 0.5.
- 3.T60 concrete expansion agent weighing error shall not be greater than 0.5%, and other materials together into the mixer.
- 4. The mixing time of ready-mixed concrete mixed with T60 polymer anti-cracking expansion agent is 30-60 seconds longer than that of ordinary concrete, but it can not be extended for commercial concrete.
- 5. Due to the long distance of concrete transportation, traffic congestion and hot temperatures and other reasons, when the slump of T60 polymer anti-cracking expansion agent commercial concrete out of the pump is less than 12cm, a small amount of non-air-entraining type water reducing agent can be mixed at the scene, and the concrete is delivered to the place after rapid mixing, and it is strictly prohibited to add water at will;
- 6. T60 polymer anti-cracking expansion agent is mainly used in structural waterproofing projects. Therefore, special attention should be paid to the vibration and pounding of dense, do not miss the vibration, and do not over need. Before the concrete is finally set, it should be repeatedly smeared and pressed three times to prevent settlement cracks from appearing;
- 7. After the concrete is hardened for 12-24h, it should be watered and conserved for not less than 14d. For the winter casting of concrete or large-volume concrete, it is necessary to carry out thermal insulation and moisturizing conservation;
- 8. Due to the thinness of the side wall and the difficulty of conservation, early demolding makes the rate of concrete temperature drop increase, and it is easy to appear shrinkage cracks. At room temperature, the requirements of concrete pouring 1 day after loosening the template screws, away from the seam 2-3mm, and then from the top of the watering no less than 14 days. Demolding time, for C30 concrete for 3 days, for C40 concrete for 7 days, for C50 above concrete for 10 days.

Packaging and storage

Packed in composite bag, net weight 25kg/bag, shelf life 3 months; need to be stored in a dry and ventilated room, the bag is sealed, pay attention to moisture-proof, anti-freezing.