

Table 1 Uniformity indices of water-reducing admixture

Test Items		Quality Index	Test Result
Appearance		/	Transparent or light yellow liquid
Density		g/cm <sup>3</sup>	1.050-1.070
pH		/	6-8
Solid content		/	40 ± 1
Total alkali content (Na <sub>2</sub> O+0.658K <sub>2</sub> O%)		10.0	1.5
Chloride ion content (%)		0.200	0.012
Sodium sulfate content (%)		10.00	1
1 h Fluidity of cement paste (mm)		220	240
Water reducing rate (%)		25	28
Atmospheric bleeding ratio (%)		20	0
Pressure bleeding ratio (%)		90	36
Air content (%)		5.0	4.5
Slump retain value (mm)	30min	180	240
	60min	150	238
Ratio of compressive strength	3d	170	185
	7d	150	160
	28d	135	140
Corrosion to steel structure		No rust	No rust
Ratio of shrinkage (%)		135	110
Related indices based on GB8076-2008			

Note: The test used Yinshantai P.O42.5 ordinary portland cement, ZM-PCE-B dosage was 0.5% cementitious material.