



Technical Data Sheet

JC-PCE-WR

Water Reducing Admixture

DESCRIPTION

Jenga® JC-PCE-WR is a high-performance polycarboxylate-based water reducing agent (mother liquor). Adopting advanced polyether C6 technology, it provides high water reduction rates, outstanding dispersibility, superior concrete workability, and excellent slump-retention properties across various seasonal temperatures and high-flow concrete demands.

USES

Jenga® JC-PCE-WR is suitable for the production of high-performance, flowing, and high-strength concrete applications, including:

- Ready-mix concrete, pumping concrete, pipe pile, and long-distance transported concrete.
- Precast and cast-in-place concrete structures.
- Industrial and civil buildings, roads, bridges, ports, airports, and high-speed railway projects.
- Reinforced and prestressed concrete requiring high early and final strength development.

CHARACTERISTICS / ADVANTAGES

- High Water Reduction Rate: Achieves a water reduction rate of over 27% at a solid dosage of 0.2% of total cementitious materials.
- Enhanced Workability & Fluidity: Significantly improves concrete slump retention, fluidity, and ease of placement with minimal vibration.
- Low Alkali & Chlorine-Free: Contains extremely low alkali and no chloride ions, preventing steel reinforcement corrosion and ensuring long-term durability.
- Excellent Stability: Non-toxic, pollution-free, long-term storage stability without layering or winter crystallization.
- Standard Compliance: Meets relevant international standards and GB 8076 'Concrete Admixtures' specifications.

PRODUCT INFORMATION

Chemical Base	Modified Polycarboxylate Salt (Polyether C6 main chain)
Appearance / Colour	Colorless to light yellow liquid
Solid Content	50 ± 2%
Density	1.10 ± 0.02 g/cm ³
pH-Value	5.5 ± 1.5
Total Chloride Ion Content	Chloride-free (Low alkali content)
Packaging	IBC Tanks or Flexibags
Shelf Life	12 months minimum from date of production
Storage Conditions	Store in tightly sealed containers. Protect from direct sunlight, extreme heat, and freezing temperatures.

APPLICATION INSTRUCTIONS

Recommended Dosage & Mixing Methods:

- **Dosage Recommendation:** It is strongly recommended to conduct mix design trial mixes to establish the optimal dosage for specific site materials and performance requirements. (Base solid content ratio of ~0.2% of total binder yields >27% water reduction).
- **Dispensing Method:** Pre-mix thoroughly with mixing water prior to adding to aggregates, or introduce directly into the freshly mixed concrete batch.
- **Formulation Compatibility:** Can be blended with other polycarboxylate mother liquors, sodium gluconate, air-entraining agents, defoamers, and hydroxycarboxylic acid salts.
- **Incompatibility Warning:** Strictly DO NOT combine or mix with naphthalene-based, amino-based, or aliphatic water reducers.

IMPORTANT CONSIDERATIONS & PRECAUTIONS

- **Material & Temperature Variations:** Whenever concrete materials change, mix proportions are adjusted, or ambient temperatures fluctuate by more than 10°C, trial mix tests must be performed to confirm configuration.
- **Curing Requirements:** Concrete construction must undergo proper curing following standard concreting guidelines. During winter conditions, insulation measures (plastic film, straw mats) are recommended.
- **Health & Safety:** Product is weakly acidic. Direct contact with skin may cause mild irritation. In case of skin or eye contact, rinse immediately with abundant clean water and seek medical advice if needed.



LEGAL NOTES

The information, and, in particular, recommendations relating to application and end-use of Jenga products are given in good faith based on current knowledge and experience when properly stored, handled, and applied under normal conditions. In practice, differences in site materials, substrates, and actual field conditions are such that no warranty in respect of merchantability or fitness for a particular purpose can be inferred from this document. Users must test the product's suitability for the intended application.