



Technical Data Sheet

JC-PCE-SR

Slump Retaining Admixture

DESCRIPTION

Jenga® JC-PCE-SR is a plasticity-retaining polycarboxylate superplasticizer characterized primarily by its medium to long-term release of slump retention with low initial water reduction. Designed to slowly release in the alkaline environment during cement hydration, it maintains medium- and long-term concrete fluidity over 0.5 to 3.0 hours. It can be compounded with other polycarboxylate water reducers, hydroxycarboxylic acids, and alkyl alcohol amines to produce standard, retarding, and plasticity-retaining concrete admixtures.

USES

Jenga® JC-PCE-SR is ideal for site-batched, ready-mix, and high-performance concrete requiring extended slump retention and long transportation, including:

- Pre-blended, pile, pumped, flowing concrete, and long-distance transport applications.
- Precast and cast-in-place concrete structures across industrial and civil engineering projects.
- Infrastructure works including roads, bridges, port terminals, airports, and high-speed railways.
- Hot weather concreting and applications utilizing reactive cements or blended cements with high fines (e.g., fly ash, slag).

CHARACTERISTICS / ADVANTAGES

- Excellent Mid-Term Release Effect: Rapid release of dispersion capability within 0.5–3.0 hours, effectively preventing slump loss after 2 hours.
- Extended Workability: Maintains long-term concrete fluidity, workability, and ease of placement under hot weather or extended transit times.
- High Material Compatibility: Excellent compatibility with various cement types and supplementary materials (fly ash, slag), mitigating the impact of clay/mud content on workability.
- Low Alkali & Chlorine-Free: Extremely low alkali content and free of chloride ions, preventing corrosion of steel reinforcement and ensuring high durability.
- Superior Stability: Non-toxic, pollution-free, resists phase separation during prolonged storage, and does not crystallize in cold winter weather.



- Standard Compliance: Conforms to specifications of JC/T 2481-2018 'Concrete Slump Retaining Agent' for Type II products and EN 934-2.

PRODUCT INFORMATION

Chemical Base	Aqueous solution of modified Polycarboxylate (Slump-retaining type)
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 (Very low alkali content)
Packaging	IBC Tanks or Flexibags
Shelf Life	12 months minimum from production date
Storage Conditions	Store in tightly sealed original packaging. Protect from direct sunlight and freezing temperatures.

APPLICATION INSTRUCTIONS

Recommended Dosage & Dispensing:

- Recommended Dosage: Trial mix designs are recommended prior to site application to determine the optimal ratio based on desired slump retention time and concrete raw materials.
- Dispensing: Mix uniformly with gauging water before introducing into the mixer or add directly into the concrete batching plant. Ensure adequate mixing time.
- Formulation Blending: Can be blended with other polycarboxylate mother liquors (e.g., high water-reducing types like JC-PCE-WR), sodium gluconate, air entrainers, and defoamers to achieve tailored performance.
- Incompatibility Warning: Do NOT combine or mix with naphthalene-based, amino-based, or aliphatic water reducers.

IMPORTANT CONSIDERATIONS & PRECAUTIONS

- Rapid Slump Loss Warning: For concrete formulations that rapidly lose slump within 0.5 hours, it is NOT recommended to use this product alone (blend with a water-reducing mother liquor).



- Trial Mixes: Perform concrete mix trials whenever raw materials change, mix ratios are adjusted, or ambient temperatures change by more than 10°C.
- Winter Concreting & Curing: Follow standard concreting practices and curing specifications. Cover with plastic film or straw mats in cold weather to provide insulation.
- Health & Safety: Skin contact should be rinsed off with clean water. Avoid eye contact; if splashed, rinse immediately with plenty of water and seek prompt medical attention.

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.