

Product Overview

The n-Ether Super Slump Retainer (SSR) series represents an advanced, next-generation grade of high-performance Polycarboxylate Ether (PCE) liquid polymers. It is specifically engineered for ultra-extended workability retention in critical concrete applications. This specialized formulation sustains maximum fluid consistency and placement rheology over prolonged intervals under extreme environmental conditions, completely eliminating the risk of premature structural retardation or loss of early strength.

Technical Specifications & Analytical Methods

The laboratory parameters below are evaluated using standardized international testing methodologies.

Specification Parameter	n-Ether SSR	Testing Methodology
Physical Appearance	Colorless to Pale Yellow Liquid	Visual Assessment
Solid Content (%)	50.0 ± 1.0%	Moisture Analyzer
pH Value (@ 25°C)	3.0 – 6.0	Digital pH Potentiometer
Viscosity (cps) (@ 25°C)	Max 1100 cps	Brookfield Viscometer
Specific Gravity (@ 25°C)	1.00 ± 0.2 gm/cc	Hydrometer

Strategic & Salient Applications

High-Performance Concrete (HPC): Maintains low-viscosity flow profiles in low water-to-cement (w/c) ratio designs.

Self-Consolidating / High-Flow Concrete: Prevents slump loss across congested reinforcing steel frameworks.

Precast Concrete: Optimizes the open handling window for intricate or large-volume monolithic casts.

Ready-Mix Concrete (RMC): Engineered for ultra-long haul transit and concrete placement in hot-weather zones.

Sustainable Eco-Green Concrete: Maximizes hydration efficiency in mixes with high volumes of Fly Ash or Slag.

Application Protocols & Dosage Guidelines

Recommended Dosage Range

The standard dosage profile ranges from 0.4% to 1.4% by weight of total cementitious materials (cement + SCMs).

Engineers must adjust the final configuration variables based on target retention times, cement chemistry and local ambient site temperatures.

Mandatory Rule: Project-specific laboratory trial mixes must be executed with local materials to verify performance targets prior to full-scale batching.

Admixture Compatibility

Approved Matrix: Fully compatible with all alternative Polycarboxylate Ether (PCE) variants and Lignosulfonate-based plasticizers.

Strict Restrictions: Do not blend with Sulfonated Melamine Formaldehyde (SMF) or Sulfonated Naphthalene Formaldehyde (SNF) plasticizers. Cross-contamination permanently impairs plasticization mechanisms.

Logistics, Packaging & Supply

Industrial Drums: 230 kg net capacity sealed heavy-duty containers.

Bulk Delivery: Full industrial road tanker shipments.

Alternative or custom high-capacity containers are engineered and supplied upon request.

Warehouse Storage & Shelf Life

Temperature Range: Maintain warehouse storage frameworks between 5°C and 40°C.

Environmental Protection: Securely guard product units against direct sunlight, freezing temperatures, or localized weather elements.

Handling Note: Direct sunlight or temperatures above 35°C may cause the HDPE drums to bulge slightly.

This is a normal physical reaction caused by water evaporation and does not affect product quality. To resolve this, gently loosen the cap to release the pressure, then tighten it again. Move the HDPE drums to a cool, shaded area.

Aesthetic Variations: The liquid may naturally exhibit variations from light yellow to deeper brownish shades under normal storage conditions. This colour shift is purely cosmetic and exerts zero influence on product performance.

Shelf Life Maturity: Valid for 12 months from the original production date when stored in uncompromised, unopened containers.

Health, Safety & Environmental (HSE) Profiles

Personal Protective Equipment (PPE)

Industrial Skin Guarding: Wear chemical-impervious safety gloves at all times during handling and application.

Ocular Protection: Deploy clear safety goggles or face protective shields while dispensing.

First Aid & Hygiene

Decontamination: Thoroughly wash face, skin and hands using soap and clean water at the end of working shifts or following incidental exposures.

Hazardous Rating: Formulated with non-hazardous base materials. Exercise standard industrial hygiene procedures during all operational phases.

LEGAL NOTICE & DISCLAIMER:

The technical data and application guidelines herein are based on laboratory testing and current expertise. They reflect typical product properties and serve as a general guide only. Since site-specific environmental conditions, substrate preparation, material compounding and application methods are beyond our direct control, this information does not constitute a legal warranty or guarantee of performance, express or implied. Users must conduct independent, project-specific trial mixes to verify product suitability for their unique operational requirements prior to commercial use. The manufacturer assumes no liability for site-specific performance failures.