

Product Overview

The HYB Hybrid series represents a premium class of high-performance Polycarboxylate Ether (PCE) liquid polymers engineered for advanced concrete technology. Developed using state-of-the-art molecular design, this series optimizes particle dispersion, reduces water demand and delivers superior consistency control across diverse structural applications.

Technical Specifications & Analytical Methods

The metrics below detail empirical parameters evaluated via standardized international testing protocols.

Specification Parameter	n-Ether HYB	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): Drastically lowers the water-to-cement (w/c) ratio to maximize structural density.

High-Flow / Self-Consolidating Concrete: Optimizes fluid consistency for effortless placement in congested reinforcement grids.

Precast Concrete: Accelerates hydration and early strength development for rapid mould turnaround times.

Ready-Mix Concrete (RMC): Enhances workability and maintains slump-retention capacity during extended transit.

Sustainable Eco-Green Concrete: Maximizes efficiency in formulations utilizing high volumes of supplementary cementitious materials (Fly Ash / Slag).

Application Protocols & Dosage Guidelines

Recommended Dosage Range

The generic dose configuration varies from 0.4% to 1.4% by weight of total cementitious materials (cement + SCMs).

Engineers must adjust precise configuration variables based on project aggregate properties, cement classes and ambient site conditions.

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 & Supply Logistics

Industrial Drums: 230 kg net capacity sealed polymers.

Bulk Deliveries: Full industrial road tanker shipments.

Alternative or custom high-capacity containers are supplied on demand.

Warehouse Storage & Shelf Life

Temperature Range: Safely maintain warehousing frameworks between 5°C and 40°C.

Environmental Exposure: 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: Liquid properties may naturally range from light yellow to localized dark brown shades over time. This reaction is cosmetic and exerts zero influence on technical performance.

Shelf Life Maturity: Valid for 12 months from the noted production timestamp when stored in uncompromised original containers.

Health, Safety & Environmental Profiles

Personal Protective Equipment (PPE)

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

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

First Aid & Hygiene

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

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

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.