Univer ST-3H is an ether type of retention polycarboxylate based high performance polymer, which is good for making concrete stickiness low.

The stickiness of high cement content concrete is too high to pump, so it may be a cause of critical pumping trouble. Univer ST-3H shows the way to obtain good slump retention as well as workability of low stickiness. It is designed for the need to extend retention for long period.

### **Physical Properties**

Physical Properties of UNIVER ST-3H	
Appearance	Colorless liquid
Total Solid Contents, %	55%
pH(undiluted)	2.2 – 4.2
Specific Gravity	1.08 – 1.12 (25℃)
Viscosity, Brookfield Viscometer, cps	Max. 700 (25℃)

## Application

UNIVER ST-3H should be applied along with other polycarboxylate polymers that have good water reduction performance.

UNIVER ST-3H prolongs slump retention time by application of mixture with other polycarboxylate polymers.

## Characteristics

· UNIVER ST-3H is well compatible with any polycarboxylate polymer.

 $\cdot$  UNIVER ST-3H is well compatible with chemical additives for admixtures such as defoamer, air entraining agent etc.

# Typical dosage

The recommended dosage range of UNIVER ST-3H is 0.2~1.0 liters/100 kg of binders. But the optimum dosage of UNIVER ST-3H may depend on specific requirements of concrete properties and materials. The optimum dosage of UNIVER ST-3H should be determined by trials using the materials and conditions.

## Storage and Handling

UNIVER ST-3H should be stored between  $0^{\circ}$ C to  $40^{\circ}$ C. If stored in original unopened containers it will have a shelf life of 12 months. If ST-3H become frozen, the properties of ST-3H can be homogenized by thorough agitation of the completely thawed product.

Packaging UNIVER ST-3H is available in bulk supply, 1100Kg/IBC or 230kg/drum