

# MasterPolyheed® 8320

Formerly Known as Rheoplus 71 (UL)

Retarding Superplasticiser based on PCE for Ready-Mix Concrete

## DESCRIPTION

**MasterPolyheed 8320** is an economical admixture based on modified polycarboxylic ether. The product has been primarily developed for applications in ready mix and site-batched concrete. **MasterPolyheed 8320** is specially designed to allow considerable reduction of mixing water while maintaining control on extend of set retardation.

**MasterPolyheed 8320** is free of chloride & low alkali. It is compatible with all types of cements.

## RECOMMENDED USES

- Ready mixed concrete
- Long-distance transporting
- Pumped concrete
- High workability without segregation or bleeding
- High performance concrete for durability
- Congested/complex reinforced sections
- Mixes requiring >20% water reductions

## FEATURES AND BENEFITS

- Good dispersion even in mixes with high fines
- High workability for longer periods
- Lower pumping pressure
- Resistance to segregation even at high workability
- Longer workability with extended setting
- Reduced water content for a given workability
- Higher ultimate strengths
- Increased ease in finishing concrete

## PERFORMANCE TEST DATA

Aspect	: Light Brown liquid
Relative Density	: 1.08±0.01 at 25° C
pH	: ≥6
Chloride ion content	: <0.2%

## TEST CERTIFICATION/APPROVALS

- ASTM C-494 Type B, D & G
- EN 934-2: T3.1/3.2
- IS 9103

## DOSAGE

Optimum dosage of **MasterPolyheed 8320** should be determined with trial mixes. As a guide, a dosage range of 400 ml to 1200ml per 100kg of cementitious material is normally recommended. Because of variations in concrete materials, job site conditions, and/or applications, dosages outside of the recommended range may be required. In such cases, contact your local BASF representative.

### Effects of over dosage

A severe over-dosage of **MasterPolyheed 8320** can result in the following:

- Reduced permeability
- Long extension of initial and final set
- Increase in air entrainment
- Bleed/segregation of mix, quick loss of workability
- Increased plastic shrinkage

A slight overdosing may not adversely affect the ultimate strength of the concrete and can achieve higher strengths than normal concrete, provided it is properly compacted and cured. Due allowance should be made for the effect of fluid concrete pressure on form work, and stripping times should be monitored.

In the event of over dosage, consult your local BASF representative immediately.

## APPLICATION

**MasterPolyheed 8320** is a ready-to-use liquid which is dispensed in to the concrete together with the mixing water. The plasticizing effect and water reduction are higher if the admixture is added to the damp concrete after 50 to 70% of the mixing water has been added. The addition of **MasterPolyheed 8320** to dry aggregate or cement is not recommended.

Thorough mixing is essential and a minimum mixing cycle, after the addition of the **MasterPolyheed 8320**, of 60 seconds for forced action mixers is recommended.



The Chemical Company

# MasterPolyheed® 8320

Formerly Known as Rheoplus 71 (UL)

## COMPATIBILITY

**MasterPolyheed 8320** is compatible with most of the products under the MasterSet (formerly known as POZZOLITH) including MasterSet RT 55. **MasterPolyheed 8320** is not compatible with Melamine or Naphthalene based admixtures and should not be used in conjunction in the same mix. **MasterPolyheed 8320** is compatible with lingo-sulphonates and carboxylic acid based plasticiser and retarders and also with most type of air-entrainers, accelerators, retarders, extended set-control admixtures, corrosion inhibitors, and shrinkage reducers. **MasterPolyheed 8320** is also compatible with slag and pozzolans such as fly ash, metakaolin and silica fume.

## WORKABILITY

**MasterPolyheed 8320** ensures that rheoplastic concrete remains workable in excess of 3 hours at +25°C. Workability loss is dependent on temperature, and on the type of cement, the nature of aggregates, the method of transport and initial workability. It is strongly recommended that concrete should be properly cured particularly in hot, windy and dry climates.

## PACKAGING

**MasterPolyheed 8320** is supplied in 225 kg drums or in bulk on request.

## STORAGE /SHELF LIFE

**MasterPolyheed 8320** must be stored where temperatures do not drop below +5°C. If product has frozen, thaw at +5°C or above and completely reconstitute using mild mechanical agitation. Do not use pressurized air for agitation. Store under cover, out of direct sunlight and protect from extremes of temperature.

## PRECAUTIONS

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs (which can also be tainted with vapor until product fully cured or dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention. Keep away from children and animals. Reseal containers after use. Do not reuse containers for storage of consumable item. For further information refer to the material safety data sheet. MSDS available on demand or on BASF construction chemicals website

TDS Ref no.: MasterPolyheed 8320 1014 v1

## STATEMENT OF

## RESPONSIBILITY (Disclaimer)

The technical information and application advice given in this BASF Construction Chemicals publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.