

TECHNOHYPER N

High performance hyper plasticizer for self compacting concrete

DESCRIPTION

TECHNOHYPER N is a polycarboxylate based, new generation superplasticizing concrete admixture that is developed for the ready-mix concrete and prefabricated concrete sectors to produce concretes that require high early strength, significant reduction in the amount of water and excellent workability.

STANDARTS

ASTM C-494 type F
EN 934-2, type 3.1- 3.2

USES

- In precast and prefabricated concrete production,
- In higher quality and stronger concretes.
- In production of concrete with thin and compact reinforcements for difficult compacting,
- In concretes to ensure high water reduction and long workability,
- Where it is necessary to mold early or load the molds quickly,
- In production of pre-stressed concrete,
- In architectural concrete, engineering and artistic structures.
- In production of self-compacting concrete (SCC).

ADVANTAGES

- Significantly reduces the mixing water of concrete.
- Significantly improves the early high strength.
- Prevent concrete from losing viscosity fast.
- Ensures self-compacting of concrete.
- Allows for achieving high unit weight and strength.
- Ensures achieving less porous and less pervious concretes with a good surface appearance.
- Saves on energy by reducing the curing time and temperature in production of pre-cast members.
- Eliminates the risk of segregation.
- Reduces carbonation rate of concrete, improves its mechanical properties such as shrinkage and creep.
- Increases resistance of concrete to freezing.
- Ensures pumping of the concrete to long distances.
- Does not cause noise pollution since it does not require vibration

DOSAGE

- 0.6 – 2.0 % of cement
- Use of mineral additives like fly ash, micro silica and the amount and granulometry of mineral aggregates used in concrete may affect the dosage of the admixture.
- The final and correct dosage rate must be finalized after trials.

METHOD OF USE

TechnoHyper N is supplied ready to use. Add the admixtures to the concrete separately do not premix together prior to addition. If other admixtures are present in the concrete trial mixes should be undertaken to assess suitability. Add both admixtures with part of the mix water after the addition of the cementitious component. For maximum performance approximately 70% of plasticiser maybe added first and then all the TechnoHyper N. The remainder of plasticiser is then added & the concrete mixed for at least another 5 minutes to ensure good dispersion.

COMPATIBILITY

TechnoHyper N is compatible with the following;

- All Portland and other types of cement in accordance with ASTM standards.
- Air entraining admixtures.
- Silica fume.
- Fly ash.
- Polymeric and steel fibers.
- Do not use with other types of concrete admixtures.

MECHANICAL STRENGTHS

- Compared to a concrete without the admixture, the use of TechnoHyper N in concrete will result in an increase in the initial and final mechanical strengths.

PACKING AND STORAGE

- TechnoHyper N is available in bulk, 20 kg and 220 kg drums, 1100 kg IBC.
- If stored in between +5 °C / +25 °C in it's original packaging, protected from frost and direct sunlight, shelf life is more than 18 months from the date of production.

PRECAUTIONS

Use protective gloves and eye glasses during use.
Avoid contact with eyes and skin.