

➤ Description

TamCem 53I is poly-carboxylic ether based high range water reducing admixture conforming ASTM C494 Type G and IS 9103 Retarding Type. It has developed for Self-Compacting Concrete, high workable concrete, Sprayed Concrete, Ready Mixed Concrete etc. Its compatible with all cements to meet desired performance.

TamCem 53I consist of selective polycarboxylate ether based long chain polymers branched with ethoxylates, selective neutralize hydroxycarboxylic acid to give high water reduction and longer open time to facilitate longer time for concrete placement without significant delayed setting of the concrete.

Traditional SNF based admixture adsorbed by cement (Moistened) granules. They wrap around the cement (Moisten) granules and developed negative charges. This electrostatic force causes the cement paste to disperse. Hence the cement particles de-flock and demand less water in compare to concrete without admixture.

TamCem 53I has different chemical structure, initially after mixing with cement (Moisten) it also develop negative charges around the cement paste, but the side chains linked to the backbone generates a steric hindrance provides a physical barrier, along with the electrostatic barrier, between the cement grains. Dual repulsive force gives more dispersibility to cement paste; hence **TamCem 53I** gives higher water reduction.

➤ Key Benefits

- Low water-cement ration enhance high early and ultimate strength of concrete.
- High flowability provides easy placement and compaction.
- Higher E modulus.
- Better resistance to carbonation and other atmospheric conditions.
- Dispersibility of cement partials reduces permeability of concrete also discontinued spore in concrete resulting low water penetration.
- Reduce Shrinkage and creep.

➤ Typical Applications

- High-Workable Concrete.
- High strength concrete.
- High performance concrete.
- Durable concrete.
- Ready mixed concrete.

➤ Technical Data

TamCem 53I

Test	Specified Limit
Color	Brown Liquid
Relative Density	1.07 ± 0.02
pH	Minimum 6
Chloride Content	Max. 0.2%
All above test completed at 25°C.	

All technical data stated here is based on tests carried out under laboratory conditions.

➤ Application Guidelines

Dosage can reach up to 1.6 % by weight of cementitious binder. Should application conditions require a higher dosage rate such as with self-compacting concrete (SCC) applications, consult your local Normet representative.

Trial concrete mixes must be carried out to determine the appropriate dosage.

An independent dispenser and feed line must be used during the application. **TamCem 53I** can be added to the mixed concrete or into the mixing water but addition to any dry concrete mix is not recommended.

➤ Packaging

TamCem 53I is available in 225 Kgs barrels. Packaging size may vary subject to local regulations and requirements, please contact your local Normet representative for more details.

➤ Storage

TamCem 53I should be stored at room temperature (min 10°C and max 40°C). Kept in dry and away from sunlight, in shaded area. If pack is remain unopened and stored as specified then shelf life of 1 year can be expected.

➤ Health & Safety

TamCem 53I should only be used as directed. We always recommend that the Safety Data Sheet (SDS) is carefully read prior to application of the material. Our recommendations for protective equipment should be strictly adhered to for your personal protection. The Health & Safety data sheet is available upon request from your local Normet representative.

Whilst any information and/or specification contained herein is to the best of our knowledge, true and accurate, we always recommend that a trial be carried out to confirm suitability of the product. Please note regional climatic conditions may cause a variation in the performance of the product. No warranty is given or implied in connection with any recommendations or suggestions made by us or our representatives, agents or distributors. The information in this data sheet is effective from the date shown and supersedes all previous data. Please check with your local Normet office to confirm that this is current issue TamCem 53I_ V11IN_APR-19