



SUPER 1S

Concrete Water Reducing Superplasticizer

DESCRIPTION

SUPER 1S is a high-range water-reducing concrete admixture that is far more powerful than ordinary reducing aids. This super-plasticizer greatly reduces the amount of water normally required to impart workability to a concrete mix. **SUPER 1S** does not contain any chloride.

SUPER 1S meets the following specifications:

- **ASTM C494 Type F**
- **BS 5075 Part 3 – 1985**

USES

PRECAST / PRESTRESSED

- Through proper mix design, precast producers cut cement consumption while simultaneously increasing high early strength to cut mold cycle time thus reducing fuel consumption.
- Prestressed concrete producers using **SUPER 1S** formulate very high early and ultimate strength mix designs for earlier distressing of prestressed members and rapid mold stripping. Both precast and prestressed producers use **SUPER 1S** to formulate water-reduced concrete with 25% less water producing no loss in slump and up to 40% increase in compressive strength in 24 hours.
- The plasticity **SUPER 1S** imparts to a concrete mix produces a very even flow during form filling. When the forms are stripped away, the concrete appears smoother than a standard mix with fewer cavities that create a honeycombed finish.

READY MIX

- In ready mix applications, **SUPER 1S** improves flow while the concrete remains cohesive and retains its water-cement ratio without bleeding, segregation, or strength reduction.
- **SUPER 1S** can convert 3 inch slump concrete into 8 inch slump high-flow concrete with no loss of strength. Concrete with **SUPER 1S** minimizes the work required for placement in closely spaced areas, large bay areas, floor slabs, roof decks, and similar structures.

FEATURES AND BENEFITS

SUPER 1S imparts the following benefits to concrete producers:

- **Permits lowering of water-cement ratio**
- **Quicker and easier mix placement**
- **Increased early and ultimate compressive strength from water reduction**
- **Enables lowering of cement content while maintaining strength**
- **Allows quicker mold turnover time for precasters**
- **Minimizes energy required for curing**
- **Improves finish of cast concrete by minimizing honeycombed surface**

DIRECTIONS FOR USE

The dosage of **SUPER 1S** is based on the cement content of the concrete mix. In most cases a 25% water reduction can be obtained with 1.80% of **SUPER 1S**.

- To obtain maximum advantages of **SUPER 1S**, the concrete mix should be redesigned and tested by normal trial batch procedures. A low slump can be corrected by increasing

the level of **SUPER 1S** content rather than by adding more water. This will establish the most effective level of **SUPER 1S** for the highest possible strength.

- For best results, **SUPER 1S** should be added to the concrete mix two minutes prior to pouring. Mixing periods of 1 to 2 minutes will be sufficient for efficient mixers, 5 to 7 minutes for the average truck mixing.

DOSAGE

- **SUPER 1S** ranges of super-plasticizers are used at the dosage of 800 ml to 2000 ml per 100 kg of cement. It is recommended that initial trials be carried out to determine the optimum dosage required.



TECHNICAL DATA

Material Based:	Naphthalene formaldehyde sulphonate
Appearance	Dark, amber liquid
Solid Content	38% ± 1
PH Value	7 - 8
Specific Gravity	1.15 – 1.2
Flammability	Non-flammable product
Packaging	5 and 25 liter plastic pail and 200 liter steel drum
Storage Conditions	Free from frost
Shelf Life	Minimum 24 months when unopened

SAFETY PRECAUTIONS

- Rubber gloves should be worn when handling **SUPER 1S**. Avoid contact with eyes and prolonged contact with skin. In case of contact, flush eyes with plenty of clean water for at least 10 minutes and get prompt medical attention; wash skin thoroughly with soap and water.
- Keep out of reach of children.
- **FOR INQUIRIES PLEASE DO NOT HESITATE TO CONTACT OUR SALE REPRESENTATIVES OR TECHNICIANS.**

