

CARBON[®]

Water-Reducing Concrete Admixture



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CARBON[®] is a water-reducing concrete admixture used at the batching plant or job site to increase flowability and slump. Its hot-weather workability retention supports reduction of the water-to-cement ratio, concrete commonly up to 35 MPa and economical concrete mix designs.

Applications

- High-strength concrete during hot seasons
- Retention of flowability and workability during the first 120 minutes in hot weather
- Easier pumping through long pipelines
- Reducing cold-joint risk during prolonged placement
- Reduced permeability and improved durability
- Smooth, uniform architectural concrete surfaces
- Reduction of cement content by up to 10%

Approvals / Standards

- ASTM C1017 Type II
- ASTM C494 Type D
- ACI 212.3R-16
- INSO 2930

Advantages / Benefits

- Reduced concrete water at equal slump
- Strength increase of up to 40% compared with concrete without CARBON
- Improved plasticity in poorly graded concrete
- Reduced thermal cracking
- Reduced bleeding and segregation
- Compatibility with Portland cements

Guideline for Use

At the batching plant, add CARBON after the cement, preferably after dilution with water. For job-site addition, visually assess slump, bring concrete to the truck-mixer opening, add CARBON directly onto the concrete while avoiding the drum walls, return the load to the drum and mix at high speed for 5 minutes. Recheck slump and discharge when accepted; otherwise repeat the approved procedure.

Dosage

0.5 to 1% by weight of cement. The exact dosage is selected according to project conditions.

Storage

+10°C to +30°C, in dry conditions and away from direct sunlight

Packaging

20 kg can / 1,100 kg tank

Shelf Life

One year from production in the original packaging

Health and Safety

- Keep in closed containers away from direct sunlight.
- Do not swallow and avoid contact with the eyes.
- In case of accidental skin or eye contact, rinse immediately with plenty of fresh water.
- If swallowed, seek medical attention immediately.
- Refer to the Safety Data Sheet (MSDS).
- Non-flammable.

Basis Of Data

Product Information

Chemical base	Calcium lignosulfonate
Physical state / color	Liquid / brown
Density	$1.15 \pm 0.05 \text{ g/cm}^3$
pH	7 ± 2
Chloride ion content	None



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