

# **SUPERCIZER 5**

# HIGH PERFORMANCE SUPERPLASTICIZER

### **ADVANTAGES**

- Slump control at the job site without additional water.
- Higher early and ultimate strengths.
- Improves concrete workability with no loss in strength.
- Addition of Supercizer 5 will not affect the water-cement ratio.
- Higher strengths may be achieved more economically.
- Improves cohesiveness and reduces concrete segregation.
- Produces concrete with lower permeability.
- Concrete achieves higher durability.
- Allows concrete placement in difficult access or heavily reinforced areas.
- Concrete produced with Supercizer 5 can be used in the ready mix or prestressed/precast concrete industry.
- Reduced shrinkage cracks and creep.
- Higher modulus of elasticity.
- Supercizer 5 is packaged in a water-soluble Fritz-Pak inner bag for convenient use at plant or job site, eliminating the need for admixture dispensers.



## **DESCRIPTION**

Fritz-Pak Supercizer 5 is a dry powdered admixture, packaged in a ready-to-use water-soluble bag. Supercizer 5 is formulated to produce stronger more durable concrete. As a superplasticizer, Supercizer 5 may be added with the normal amount of mix water to produce more flowable concrete with up to a 6-inch (15 centimeter) slump increase. When used as a high-range water reducer, Supercizer 5 will reduce water requirements up to 25%, increase concrete compressive strength at all ages, reduce permeability and increase durability. Supercizer 5 does not contain calcium chloride, nitrates, nitrites or other potentially corrosive materials and is compatible with all standard concrete admixtures.

### DIRECTIONS

- 1. Determine the amount of Supercizer 5 required. See Recommended Dosage Rate.
- 2. Each Supercizer 5 package is double bagged. Remove the protective outer bag and add the water-soluble. Fritz-Pak inner bag to the concrete mix. The entire inner bag will easily dissolve.
- 3. Mix at high speed for 5 to 7 minutes to insure that the Supercizer 5 is uniformly dispersed throughout the mix.
- 4. Concrete containing Supercizer 5 may be redosed if necessary.

## RECOMMENDED DOSAGE RATE

Use a dosage rate equal to 5 to 7 ounces per 100 pounds (3 to 4.5 grams per kilogram) of total cementitious materials (0.30 to 0.45%). One 1.75-pound (1.1-kilogram) bag of Supercizer 5 is recommended for each cubic yard (cubic meter) of concrete to increase the slump up to 6 inches (15 centimeters) or to achieve up to 25% water reduction. The slump gain will remain in effect for 30 to 45 minutes. The concrete will then gradually return to the original slump. Concrete temperature, ambient temperature or concrete mixes containing accelerators, retarders, or special admixtures such as silica fume may require dosage rates outside the recommended range. Contact your Fritz-Pak distributor with any questions concerning the dosage rates for this product. It is recommended that testing be done to determine the suitability of Supercizer 5 to your mix designs.

## <u>COMPATIBILITY</u>

Supercizer 5 is compatible with all air-entraining admixtures, calcium chloride and other admixtures. When used with other admixtures, each admixture must be dispensed separately into the mix.

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### PACKAGING

- 1.75-lb water soluble bag, 24 bags per case, 25 cases per pallet (item #95600)
- 1.1-kg water soluble bag, 20 bags per case, 25 cases per pallet (item #95650)
- 50-lb paper bag, 40 bags per pallet (item #95652)

### **APPLICABLE STANDARDS**

ASTM C-494 Type F, AASHTO M-194 & CRD C-87

## **PRECAUTIONS**

All Fritz-Pak Concrete Admixtures should be stored in a dry location protected from breakage, deterioration, and contamination. Fritz-Pak Concrete Admixtures are not subject to damage from freezing temperatures.

### **FAQs**

- Q. Will it discolor the concrete?
- A. No. In fact, adding Supercizer 5 before adding color will improve the mixing of color into the concrete.
- Q. Will it change the set time?
- A. No, it will not speed or slow the set.
- Q. Will Supercizer 5 change the air content of my concrete?
- A. No, at the recommended dosage rate, no change in entrained air content should occur.
- Q. Will it change my concrete strength?
- A. If you use less water when adding Supercizer 5, your concrete will be stronger. If your water content is not changed, strength is not changed.
- Q. What standards does it meet?
- A. It meets ASTM C-494 type F, AASHTO M-194 and CRD C-87 standards.
- Q. Do you recommend Supercizer 5 for shotcrete?
- A. Yes. Supercizer 5 is the most indicated product for shotcrete applications.

#### **WARRANTY**

The information and recommendations in this publication are, to the best of our knowledge, reliable. Suggestions made concerning uses or applications are only the opinion of Fritz-Pak Corporation and users should make their own tests to determine the suitability of these products for their own particular purposes. However, because of numerous factors affecting results, Fritz-Pak Corporation makes no warranty of any kind, express or implied, including those of merchantability and fitness for purpose. Statements herein, therefore, should not be construed as representations or warranties. The responsibility of Fritz-Pak Corporation for claims arising out of breach of warranty, negligence, strict liability, or otherwise are limited to the purchase price of the materials.

U.S. Patents No. 4,961,790 No. 5,120,367 Other Patents pending in U.S. and selected foreign countries.

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