SUPERCIZER 1

MID RANGE SUPERPLASTICIZER

SUPER-PLASTICIZERS

ADVANTAGES

- Up to 20% water reduction or 6" slump increase.
- Slump control at the job site without adding water.
- Higher early and ultimate strengths.
- Improves workability with no loss in strength.
- Addition of Supercizer 1 will not affect the water-cement ratio.
- Higher strengths may be achieved more economically.
- Improves cohesiveness and reduces segregation.
- Produces concrete with lower permeability.
- Concrete achieves higher durability.
- Allows concrete placement in difficult access or heavily reinforced areas.
- No need for admixture dispensers because Supercizer 1 is packaged in a patented water soluble Fritz-Pak inner bag for convenient use at the plant or job site.

DESCRIPTION

Fritz-Pak Supercizer 1 is a dry powdered admixture, packaged in a patented ready-to-use, water soluble bag. Supercizer 1 is formulated to produce stronger, more durable concrete. As a slump enhancer, Supercizer 1 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 mid range water reducer, Supercizer 1 will increase concrete compressive strength at all ages, reduce permeability and increase durability. Supercizer 1 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 1 required. See Recommended Dosage Rate.
2. Each 1.75-lb or 1.1-kg Supercizer 1 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 1 is uniformly dispersed throughout the mix. **Improper mixing can lead to poor performance.**
4. Concrete containing Supercizer 1 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 bag (1.1 kilogram) of Supercizer 1 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 20% 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. We recommend that testing be done to determine the suitability of Supercizer 1 to your mix designs.

COMPATIBILITY

Supercizer 1 is compatible with all air-entraining admixtures, calcium chloride and other admixtures. When used with other admixtures, each one must be dispensed separately into the mix.

continued...

SUPERCIZER 1

MID RANGE SUPERPLASTICIZER

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

PACKAGING
- 1.75-lb water soluble bag, 24 bags per case, 24 cases per pallet (item #95575)
- 1.1-kg water soluble bag, 20 bags per case, 24 cases per pallet (item #95577)
- 50-lb paper bag, 40 bags per pallet (item #95576)

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

FAQs
Q. What is the shelf life of Supercizer 1?
A. If stored properly, about 1-3 years. **If the material ever seems hard or caked, do not use it. It will not break up in the mix.**

Q. How long will the slump change last?
A. 30-45 minutes. The concrete will gradually return to the original slump. Time will be shorter in warm weather.

Q. What standards does it meet?
A. It meets ASTM C-494, type F, AASHTO M-194 and CRD C-87 standards.

Q. Will it change the set time?
A. Supercizer 1 is a slight retarder. In temperatures between 50° and 70°F you may see up to an hour of set retardation.

Q. Will it affect the air content?
A. In most mixes it will not, but in some cases, it may increase air content 1-2%. If air content is critical in your application eliminate the addition of air entrainment admixture at the plant and correct the air content at the jobsite using Super Air Plus if needed.

Q. Will it change my concrete strength?
A. If water is reduced during the batching, you should expect an increase in strength. If water content is not changed, you will not see any changes in concrete strength.

Q. Do you recommend Supercizer 1 for use in the winter?
A. No. Supercizer 3 or Supercizer 5 should be used in the winter.

Q. Can the concrete be redosed if slump starts to change?
A. Yes. You may redose to maintain your slump.

Q. Is Supercizer 1 compatible with other superplasticizers?
A. Supercizer 1 is compatible with most other superplasticizers. However, due to the constant change in formulations by other manufacturers, we strongly recommend testing for compatibility with other superplasticizers. For specific applications, contact Fritz-Pak Corporation.

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. Because of numerous factors affecting results, Fritz-Pak Corporation makes no warranty of any kind, expressed 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 and No. 5,120,367.