

## ANTI-WASHOUT ADMIXTURE

### ADVANTAGES

- Concrete can be exposed to water without excessive washout.
- Eliminates time and expense of dewatering hydraulic structures prior to placement.
- Eliminates the need for pumps or tremmies when direct placement is possible.
- Self-leveling and self-consolidating.
- Allows direct underwater concrete placement in repair locations.
- Effective in fresh and salt water environments.
- Improves concrete workability with no loss in strength.
- Higher strengths may be achieved more economically using standard mix designs.
- Improves cohesiveness and reduces concrete segregation and water dilution.
- Lower permeability.
- Higher durability.
- Addition of high-range water reducer is not required.
- Improved bond strength to steel and existing concrete.
- No need for admixture dispensers because Hydrocizer is packaged in patented water soluble Fritz-Pak inner bags for convenient use at the plant or job site.

### DESCRIPTION

Fritz-Pak Hydrocizer is a dry powdered admixture, packaged in a ready-to-use water soluble bag. Hydrocizer is a polymeric fluid loss additive combined with a premium superplasticizer formulated to physically bind with the water in the concrete and provide maximum water reduction for controlled slump while producing stronger more durable concrete. The special combination yields an admixture suitable for concrete placement in fresh water as well as marine environments. When used as an anti-washout admixture, Hydrocizer allows placement of concrete in underwater applications without segregation, reduces water requirements, increases concrete compressive strength, reduces permeability and increases durability. Hydrocizer is recommended for all types of underwater concreting where performance with decreased segregation, lower water-cement ratio, and improved slump characteristics are desired. Hydrocizer does not contain calcium chloride or other potentially corrosive materials and is compatible with all standard concrete admixtures.

### DIRECTIONS

1. Determine the amount of Hydrocizer needed. See Recommended Dosage Rate.
2. Remove the protective outer bag.
3. Place the entire water-soluble inner bag into the concrete mix in the drum, where it will easily dissolve. Hydrocizer can be added at the plant or job site.
4. Mix at high speed for 5-7 minutes. Mixing time is very important to allow anti-washout materials to dissolve and become active.
5. Discharge material from the truck within 30 minutes after adding Hydrocizer.

Best results are achieved with concrete mixes that have a low water:cement ratio or a low slump of 2-3" (5-8 cm). Rounded coarse and fine aggregates are preferred to ensure better flowability and self-consolidation. The addition of Fritz-Pak Silica Fume is also useful to further increase compressive strength, bond strength and abrasion and washout resistance.

### RECOMMENDED DOSAGE RATE

One 1.75-lb (1.1-kg) bag of Hydrocizer is recommended for each cubic yard (meter) of 4000 psi (275 kg/cm<sup>2</sup>) concrete to achieve anti-washout stability and yield a slight increase in slump. Concrete temperature, ambient temperature or concrete mixes containing 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 and applications for this product. We recommend that testing be done to determine the suitability of Hydrocizer to your mix designs.

### COMPATIBILITY

Hydrocizer is compatible with most air-entraining admixtures as well as other conventional admixtures. When used with other admixtures, each one must be dispensed separately into the mix.

### PACKAGING

- 1.75-lb water soluble bag, 24 bags per case, 25 cases per pallet (item #97090)
- 1.1-kg water soluble bags, 20 per case, 25 cases per pallet (item #97093)
- 50-lb (22.7 kg) paper bag, 40 bags per pallet (item #97091) *continued...*

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### **FAQs**

- Q. What is Hydrocizer?
- A. It is a blend of water retention agents and superplasticizers. The water retention agents hold the concrete together and the superplasticizer reduces the amount of water in the mix.
- Q. Does the superplasticizer in Hydrocizer change the set time?
- A. No. It is a non-retarding superplasticizer.
- Q. What standards does Hydrocizer meet?
- A. There are no ASTM standards for additives for underwater concreting, rather there are standards for the concrete used in underwater concreting. Hydrocizer can be used to develop mixes that meet standards and requirements for underwater concreting.
- Q. Can Hydrocizer be used in saltwater?
- A. Yes. The superplasticizer in Hydrocizer is tolerant of high salt concentrations.

### **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.

### **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.

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