



Concrete Admixtures and Fiber

## IMISILICA

Microsilica Admixture for Concrete

### DESCRIPTION

**IMISILICA** is a dry powder microsilica admixture for concrete and mortar. It is used in structures requiring high strength and where there is exposure to brine or agents corrosive to reinforcing steel. It also imparts resistance to corrosion and abrasion. Examples include prestressed, precast concrete and ready mixed concrete in bridge decks, parking garages and shotcrete.

### ADVANTAGES

- Ultra-high strength for columns in tall buildings
- Increased resistance to abrasion and damage caused by vehicular traffic
- Increased durability and impact resistance in industrial concrete floors
- Produces industrial floors with high resistance to chemical attack
- Increased resistance to sulfate attack
- Produces water-tight concrete tanks
- Reduced corrosion of reinforcing steel in prestressed and post-tensioned construction
- Decreased permeability and increased abrasion resistance in tunnel construction
- Lower rebound and thicker mixes for shotcreting
- Protection against deterioration in concrete exposed to salt air
- Dramatic increase in high-early strength
- Dramatic increase in flexural strength for airport projects
- Reduced erosion due to wave action or running water

### DISPENSING & MIXING

**IMISILICA** is dispensed by weight at a rate of 5% to 22% of the total cementitious materials. It should be used in conjunction with a superplasticizer such as **MEGAFLOW** in order to disperse the powder. For best results, **IMISILICA** should be introduced to the empty mixer before any other materials. *WITHIN ONE MINUTE*, add 50% of the superplasticizer, then the mixing water and last, other materials. The remaining superplasticizer is reserved to fine-tune the slump. Concrete using **IMISILICA** should be mixed no less than 5 minutes.

## INTERNATIONAL MATERIALS INDUSTRIES, L.L.C.

2800 N. Johnson St.\* New Orleans, Louisiana 70117 \* PHONE: (504) 267-3344 \* Fax: (504) 267-3345

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## APPLICATION

**IMISILICA** should be used in conjunction with a superplasticizer (such as **MEGAFLOW**) to ease dispersion and mixing of the microsilica powder in the following circumstances:

1. When the concrete is placed within one hour of being mixed, the use of **MEGAFLOW** is suggested to obtain high early strength.
2. When the concrete is placed after more than one hour of mixing, use **FLOWMIX** where high slump maintenance is required or in conjunction with **MEGAFLOW** (dispensed at the jobsite) for high strengths.

## PACKAGING

**IMISILICA** is packaged in powder form in 50 lb. bags.

## TECHNICAL INFORMATION

- *Density*: 32 lbs. per cubic foot (approx.)
- *Specific Gravity*: 2.2
- *Color*: Gray
- *Shelf Life*: Unlimited if protected from humidity
- **IMISILICA** complies with ASTM (C-1240)

## LIMITATIONS

- Store in a dry area above 35°F
- Protect from freezing
- Not to be mixed with air-entraining agents
- Use with a superplasticizer in order to completely disperse powder