

3 30 00 Cast-in-Place Concrete Precast Concrete Mass Concrete

## **Description**

PS 1466 ready-to-use high-range water-reducing admixture is a new generation, patent pending admixture based on polycarboxylate chemistry. PS 1466 admixture is very effective in producing concretes with different levels of workability including applications that require self-consolidating concrete (SCC). The use of PS 1466 admixture results in improved compressive strength providing mixture proportioning flexibility.

PS 1466 admixture is particularly effective in improving concrete mixtures with reduced portland cement contents without compromising 28-day strength requirements. PS 1466 admixture will meet ASTM C 494/C 494M requirements for Type A, water-reducing, and Type F, high-range water-reducing, admixtures.

### **Applications**

Recommended for use in:

- Concrete with varying water reduction requirements (5-40%)
- Concrete mixtures utilizing supplementary cementitious materials
- Concrete where high flowability, increased stability and durability are needed
- Production of selfconsolidating concrete (SCC) mixtures
- 4x4<sup>TM</sup> Concrete for fasttrack construction
- Pervious Concrete

# **PS 1466**

# **High-Range Water-Reducing Admixture**

#### **Features**

- Maximum dosage effectiveness for a given water reduction
- Controlled rheology
- Robust air-entraining admixture compatibility
- Improved strength development

#### **Benefits**

- Can be used in a wide variety of concrete mixtures as a Type A or Type F admixture
- Improved finishability and surface appearance
- Mixture development flexibility for cement reductions and/or increased use of supplementary cementitious materials

#### **Performance Characteristics**

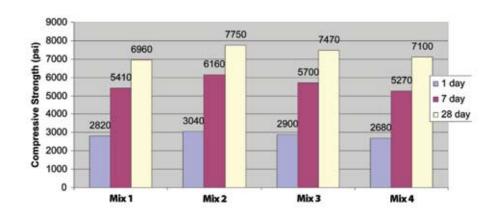
**Compressive Strength:** Concrete produced with PS 1466 admixture achieves significantly higher 28-day compressive strength compared to plain concrete and concrete mixtures containing naphthalene, melamine, and early generation polycarboxylate high-range water-reducing admixtures.

Mixture Data: Type I portland cement; Ambient Temperature, 70 °F (21 °C)

Mix 1: 620 lb/yd3 (367 kg/m3); w/c = 0.43; Conventional PC HRWR

Mix 2: 620 lb/yd³ (367 kg/m³); w/c = 0.43; PS 1466 Mix 3: 600 lb/yd³ (356 kg/m³); w/c = 0.44; PS 1466

Mix 4: 580 lb/yd $^3$  (344 kg/m $^3$ ); w/c = 0.46; PS 1466





**Product Data: PS 1466** 

#### **Guidelines for Use**

**Dosage:** PS 1466 admixture has a recommended dosage range of 2-10 fl oz/cwt (130-390 mL/100 kg) of cementitious materials. For most applications, dosages in the range of 2-6 fl oz/cwt (130-360 mL/100 kg) will provide excellent preformance. Because of variations in concrete materials, job site conditions and/or applications, dosages outside of the recommended range may be required. In such cases, contact your local BASF Construction Chemicals representative.

*Mixing:* PS 1466 admixture can be added with the initial batch water or as a delayed addition. However, optimum water reduction is generally obtained with a delayed addition.

#### **Product Notes**

Corrosivity – Non-Chloride, Non-Corrosive: PS 1466 admixture will neither initiate nor promote corrosion of reinforcing steel embedded in concrete, prestressing steel or of galvanized steel floor and roof systems. Neither calcium chloride nor other chloride-based ingredients are used in the manufacture of PS 1466 admixture.

**Compatibility:** PS 1466 admixture is compatible with most admixtures used in the production of quality concrete, including normal, mid-range and high-range water-reducing admixtures, air-entrainers, accelerators, retarders, extended set control admixtures, corrosion inhibitors, and shrinkage reducers.

Do not use PS 1466 admixture with admixtures containing naphthalene sulfonate. Erratic behaviors in slump, workability retention and pumpability may be experienced.

#### Storage and Handling

**Storage Temperature:** PS 1466 admixture must be stored at temperatures above 40 °F (5 °C). If PS 1466 admixture freezes, thaw and reconstitute by mechanical agitation. **Do not use pressurized air for agitation.** 

**Shelf Life:** PS 1466 admixture has a minimum shelf life of 6 months. Depending on storage conditions, shelf life may be greater than standard. Please contact your BASF Construction Chemicals representative regarding suitability for use and dosage recommendations if the shelf life of PS 1466 admixture has been exceeded.

# **Packaging**

PS 1466 admixture is supplied in 55 gal (208 L) drums, 275 gal (1040 L) totes and by bulk delivery.

#### **Related Documents**

Material Safety Data Sheets: PS 1466 admixture.

# **Additional Information**

For additional information on PS 1466 admixture or its use in developing concrete mixtures with special performance characteristics, contact your BASF Construction Chemicals representative.

The Admixture Systems business of BASF Construction Chemicals is a leading provider of innovative additives for specialty concrete used in the ready mix, precast, manufactured concrete products, underground construction and paving markets throughout the NAFTA region. The Company's respected Master Builders brand products are used to improve the placing, pumping, finishing, appearance and performance characteristics of concrete.

**BASF Construction Chemicals, LLC** Admixture Systems

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