# 1.08 **XPERT AC 900**

Normal and High Range Water Reducer (Type A & F)



## PRODUCT DESCRIPTION

XPERT AC 900 is a new generation super plasticizer based on naphthalene sulphonate technology. This product is designed to provide normal to high water reduction, while providing excellent flow ability during placement, and excellent slump retention without affecting initial setting time. This product incorporates the latest state of the art technology in high performance concrete. XPERT AC 900 was designed to provide extended slump retention for super high-strength concrete, flow able and self consolidating concrete in a variety of applications.

### **BENEFITS**

- Provides a linear dose response to provide desired water reductions. It is recommended for ready-mix for both structural and architectural applications.
- Provides a linear response to allow high levels of water reduction as well as maintaining the level of workability for longer periods of time versus conventional super plasticizers.
- Concrete mixes produced can exhibit a cohesive and non-segregating concrete.
- Can reduce the overall production cost, especially when used with XPERT's self-consolidating concrete technology.
- More efficient pumping of concrete with pump pres sures reduced as much as 50%.
- Reduced discharge and turn-around time for trucks.
- · Improves impermeability to reduce sulfate attack.
- Increased productivity, resulting in reduced labor costs.
- · Faster reuse of forms.
- · Increased strengths at all ages.

#### DIRECTIONS FOR USE

For optimum results, introduce XPERT AC 900 towards the end of the mixing process. XPERT AC 900 maintains its super plasticized consistency for up to 120 minutes depending on the dosage and environmental conditions. XPERT AC 900 Factors to consider are ambient temperature, transport distance, and jobsite delays. XPERT AC 900 can be used in conjunction with and is compatible with all XPERT's non-chloride accelerators.

## APPLICABLE STANDARDS

XPERT AC 900 meets or exceeds ASTM C-494; Types A & F. XPERT AC 900 does not contain calcium chloride. Complies with AASHTO M-194.

## **DOSAGE**

Dosage rates vary depending upon the amount of plasticity and/or water reduction desired.

Recommended dosage range for XPERT AC 900 is 33.8 to 52.8 ounces per 220.5 pounds (1000 mls to 1500 mls per 100 Kg) of cementitious material to meet ASTM Type A & F. XPERT AC 900 has a linear-dosage response so the dosage amount can precisely tailored to the degree of waterreduction or slump characteristics required for the application. For very high strength applications, the dosage can be increased up to 67 ounces per 220.5 pounds (2000 mls per 100 Kg) of cementitious material. Because of the variability increments, field conditions, and other ingredients in the mix, it is highly recommended that trial mixes be prepared to determine the optimum dosage for your specific performance requirements.

### **CHARACTERISTICS**

CATEGORY	PARAMETERS
Specific Gravity	1.160 @ 20°C
Appearance	Brown Liquid
Chlorides	Nil
Freeze point	-4°F (-20°C)
Shelf Life	1 year in original, unopened package

#### RECOMMENDATIONS

XPERT AC 900 is recommended for use in all types of concrete including plain, reinforced, flow able and self-consolidating concrete. XPERT AC 900 is very effective in concrete containing pozzolanic materials such as fly ash, silica fume and slag.

#### **PACKAGING**

XPERT AC 900 is supplied in either 55-gallon drums (210 liter) or delivered in bulk. XPERT AC 900 should be kept from freezing. If accidentally frozen, its properties can be restored by thawing and thoroughly re-mixing by mild mechanical agitation.