

# W-66

## HIGH RANGE SUPERPLASTICIZER

**PRODUCT DESCRIPTION:** W-66 is a multi-component superplasticizing admixture that will provide a high degree of water reduction to concrete. W-66 will allow easy flowability and pumping of high slump concrete with increased early and final strengths and improved workability. W-66 may be used in ready mix, mobile mix, block, precast, prestressed, concrete, mortars, and grouts.

**BENEFITS:** ALLOWS LOW WATER TO CEMENT RATIOS, IMPROVED COMPRESSIVE STRENGTHS AT ALL AGES, LESS BLEEDING AND EASIER WORKABILITY, PROVIDES DENSER CONCRETE WITH LESS PERMEABILITY

**COMPOSITION:** Low viscosity, A.E.A. modified naphthalene based plasticizer. W-66 does not contain any calcium chloride or intentionally added chlorides that would initiate or promote corrosion of reinforcement steel, or contribute to efflorescence.

PHYSICAL PROPERTIES at 70° F (21°C):	APPROXIMATE VALUES:
Weight per gallon:	9.75 +/- 0.20 lb./ gallon
pH:	9.0 +/- 0.5
Color:	Brown liquid
Viscosity –Brookfield:	20-30 cps

**TECHNICAL DATA:** W-66 is formulated to comply with ASTM C-494 Type A and F guidelines. W-66 is typically dosed at 16-24 oz. per 100 lbs. of cement (1040-1560 ml/100 kg) for most applications. The dosage can be increased as needed to allow more flowability along with corresponding higher percents of water reduction. It is recommended that field test or trial mix be run in order to determine the optimum dosage needed for the specified slump requirements.

PERFORMANCE CHARACTERISTICS - Run @ 70°F (21° C) AMBIENT TEMPERATURE	
MIX DATA:	W-66 SL DOSAGE:
Dosage, fl oz./cwt (ml/100 kg)	16 (1040)
Cement, Type I lb/yd <sup>3</sup> (kg/m <sup>3</sup> )	500 (296)
Air Content %	Non-Air Entrained

STRENGTH GAIN VERSUS CONTROL- @ 70° F (21° C)		
COMPRESSIVE STRENGTH psi (mPa)	PLAIN (CONTROL)	W-66 SL @ 16 oz/cwt (1040 ml /100kg)
1 day (average)	1350 ( 9.3)	2570 (17.6)
3 day (average)	2950 (20.3)	4550 (31.3)
7 day (average)	4600 (30.9)	5750 (39.5)
28 day (average)	5300 (38.0)	6850 (47.1)

\*This data is based on controlled laboratory tests. Slight variations from the results shown here may be experienced as a result of jobsite conditions, different mix design components, or other factors.

**DIRECTIONS FOR USE:** W-66 should be added to the batch water and aggregates, never directly to the dry cement. W-66 is compatible with concrete mixes containing a wide range of cements, slags, fly ash, silica fume, and aggregates. W-66 is also compatible with traditional air entraining agents or other admixtures; however, they should always be added separately into the mix. Add to concrete at the rate of 16 -24 oz. per 100 lbs. of cement (1040-1560ml / 100 kg.) depending on the amount of water reduction or flowability required.

**AIR ENTRAINMENT:** W-66 contains a synthetic air entraining agent that provides added air entrainment ranging between 3-5% when used at the dosage range listed above. Depending on final end product requirements, additional air entraining agent (A.E.A.) may have to be added to achieve required levels. Air entrainment naturally varies in concrete mixes depending on the type of A.E.A used, the cement, W/C (water to cement ratio), the temperature of the mix, and many other factors. For air entrainment options, use of AE-12 or AE-15 is recommended.

**CAUTIONS:** W-66 will freeze at approx. -15° F (-26° C), but may be completely restored by thawing above 32° F (0° C) and thoroughly mechanically agitating before use. Do not use pressurized air for mixing or agitation. Keep from freezing. If frozen loosen cap, lid or bung and allow solution to thaw and mechanically agitate before using. The solution will be restored and can then be used. W-66 should be stirred before using if the material has set for an extended period (3-6 months).

**WARNINGS:** Avoid contact with skin and eyes. Wear protective clothing and safety glasses during application. Keep away from food and drink. Do not take internally. Refer to product M.S.D.S. (Material Safety Data Sheet) for further health and safety information. **FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN.**

**H.M.I.S. CODES:** HEALTH = 1, FLAMMABILITY= 0, REACTIVITY = 0, PERSONAL PROTECTION = C (GLOVES, GOGGLES, APRON)

**SHIPPING NAME:** Concrete Admixture –Waterbased -Not regulated

**SHIPPING CLASS:** ITEM 33880, SUB 2, LTL 55

**STORAGE:** Ideal storage is between 60° to 80° F. Keep from freezing.

**PACKAGING:** 5 gallon (18.9 L) pails, 55 gallon (208 L) drums, 265 gallon (1000 L) containers.

**SHELF LIFE:** 1 year stored properly. Depending on storage conditions, the shelf life may be extended.