



W-42 SL SUPERPLASTICIZER

HIGH RANGE S.C.C. BASED CONCRETE ADMIXTURE

Specco W-42 SL Superplasticizer is a modified polycarboxylated high range water reducing admixtures formulated to produce self-compacting type (S.C.C.) concrete. **W-42 SL Superplasticizer** is specifically intended for use in precast and ready mix concrete providing high workability, slightly extended slump life, and improved fluidity with reduced or minimal vibration. The improved dispersing action of **W-42 SL Superplasticizer** results in concrete with “self-placing” properties that surpass conventional superplasticizer benefits. Very low water to cement ratios can be obtained with as much as 25-30% total water reduction.

BENEFITS:

- Greater water reduction and lower dosage rates than traditional melamine or naphthalene-based superplasticizers
- Improved flow (self-leveling) with self-healing rheology
- High early strengths
- Improved densification of surfaces
- Reductions in vibration and manufacturing noise levels

COMPOSITION: Modified polycarboxylate polyester solution. **W-42 SL Superplasticizer** does not contain any calcium chloride or intentionally added chlorides that would initiate or promote corrosion of reinforcement steel or contribute to efflorescence.

LEED CREDIT CONSIDERATIONS: EQ Credits 4.2: Low emitting materials (VOC < 25 g/L). **MR Credits 5.2:** Regional materials- Greater than 20% extracted, processed, and manufactured regionally at production location: Kankakee, IL. 60901. 90% Content-Harvested within 500 miles.

PHYSICAL PROPERTIES at 70° F (21°C):	APPROXIMATE VALUES:
Weight per gallon:	8.90 +/- 0.20 lb./ gallon
pH:	8.00 +/- 0.50
Color:	Clear light purple solution
Viscosity –Brookfield:	250 +/- 50 cps
Ionic nature:	Anionic

TECHNICAL DATA: W-42 SL Superplasticizer is formulated to comply with ASTM C-494 requirements for Type F high range water reduction. By adding fluidity to the mix, **W-42 SL Superplasticizer** liquid allows extended workability. The duration of workability depends on temperature, brand and type of cement, aggregate type and gradation, method of mixing, and method of transport. Concrete mixes containing higher overall cement “sulfate” content give easier fluidification of the mix than low sulfate cements. When added at normal dosages, **W-42 SL Superplasticizer** will not significantly affect the concrete’s heat of hydration. **W-42 SL Superplasticizer** is compatible with most mineral and chemical components common to Portland cement, calcium alumina cement, and calcium sulfate (gypsum)

PERFORMANCE CHARACTERISTICS - Run @ 70°F (21° C) ambient temperature.

MIX DATA:	W-42 SL SUPERPLASTICIZER DOSAGE:
Dosage, fl oz./cwt (ml/100 kg)	6 (520)
Cement, Type I lb/yd3 (kg/m3)	500 (296)
Air Content %	Non-Air Entrained

STRENGTH GAIN VERSUS CONTROL- @ 70° F (21° C)

Compressive Strength psi (mPa)	Plain (Control)	W-42 SL @ 6oz/cwt (405 ml /100kg)
1 day	1650 (11.7)	1850 (13.2)
3 day	3100 (22.0)	3575 (25.4)
7 day	3850 (27.4)	4500 (31.3)
28 days	5200 (37.0)	6050 (43.0)

* 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-42 SL Superplasticizer** is normally dosed as supplied at a rate of 6-8 ounces per 100 lbs. of cement (390–520ml/100 kg). Other dosages may be required depending on specific conditions.



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DIRECTIONS FOR USE (Continued): *W-42 SL Superplasticizer*'s flow properties allow typical dosage rates approximately 40% less than of standard melamine and naphthalene-based superplasticizers, while maintaining the same percent water reduction. *W-42SL Superplasticizer* should be added to the batch water and aggregates, never directly to the dry cement. *W-42SL Superplasticizer* is compatible with concrete mixes containing a wide range of cements, slags, fly ash, silica fume, and aggregates. *W-42SL Superplasticizer* is also compatible with traditional air entraining agents or other admixtures; however, they should always be added separately into the mix.

AIR ENTRAINMENT: Independent lab tests have shown no increased air entrainment effects when using *W-42 SL Superplasticizer* at 6 oz./ cwt of cement in the ASTM C-494 non-air entrained series. However, in the air entrained series, higher levels of air entrainment (9-10%) were obtained versus the control when dosed at the same 6 ounce level. Therefore, Specco recommends a minimum 50% reduction of any externally added air entraining agents when using in combination with *W-42 SL Superplasticizer* to keep the final air entrainment within the 6-8% specification range.

CAUTIONS: *W-42 SL Superplasticizer* is fully effective and compatible with most concrete admixtures however each admixture should be added separately to the concrete mix. *W-42 SL Superplasticizer* should be tested and evaluated with actual materials and blending processes to gauge overall performance and compatibility with mix components. *W-42 SL Superplasticizer* is water based and will freeze at 32° F but may be completely restored by thawing at room temperature and mechanically agitating thoroughly. *W-42 SL Superplasticizer* should be stirred before using if the material has set for an extended period (3-6 months).

GHS HAZARD RATINGS: NONE

FIRST AID: REFER TO PRODUCT S.D.S. (SAFETY DATA SHEET) FOR COMPLETE HEALTH AND SAFETY INFORMATION BEFORE USING THIS PRODUCT. FOR MEDICAL EMERGENCIES ONLY – CALL INFOTRAC AT 800-535-5053.

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 S.D.S. (SAFETY DATA SHEET) FOR FURTHER HEALTH AND SAFETY INFORMATION. FOR INDUSTRIAL USE ONLY, KEEP OUT OF REACH OF CHILDREN. FOR MEDICAL EMERGENCIES ONLY, CALL INFOTRAC 800-535-5053.

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

SHIPPING NAME: Concrete Admixture – Water base - Not regulated – CAS#-Mixture

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.

WARRANTY: Specco Industries Inc (Specco) solely and expressly warrants that its products shall be free from defects in materials and workmanship for one (1) year from the date of purchase. Unless authorized in writing by an officer of Specco, no other representations or statements made by Specco or its representatives, in writing or orally, shall alter this warranty. **SPECCO MAKES NO WARRANTIES, IMPLIED OR OTHERWISE, AS TO THE MERCHANTABILITY OR FITNESS FOR ORDINARY OR PARTICULAR PURPOSES OF ITS PRODUCTS AND EXCLUDES THE SAME.** If any Specco product fails to conform with this warranty, Specco will replace the product at no cost to Buyer. **Replacement of any product shall be the sole and exclusive remedy available and buyer shall have no claim for incidental or consequential damages.** Specco does not authorize anyone on its behalf to make any written or oral statements which in any way alter Specco's installation information or instructions in its product literature or on its packaging labels. **Specco explicitly excludes any written or oral statements or implied warranty on the performance of an applied/installed product manufactured or sold by or through Specco. Specco has no control over Specco application standards adherence, site conditions, atmospheric variations, installer/applicator skill level or the determination of the suitability of any Specco products for a specific intended purpose. Buyer shall be solely responsible for determining the suitability of Specco's products for the Buyer's intended purposes.** Product demonstrations, if any, are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind.

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