



SP 7000 is a **High Range Water Reducing** aqueous dispersant designed for use in concrete applications. It provides fluidity to concrete slurries at substantially reduced water content. Benefits include increased productivity, lower costs and improved concrete properties.

• TYPICAL ANALYSIS

Nature: Aqueous solution of Polycarboxylate Ether

Appearance (70°F): Yellow to brownish liquid

Solids content (%): 40

pH (70°F): 7.2

Specific gravity (70°F): 1.09

Viscosity (centipoise):

Chloride content (%): < 0.01

Alkali content (Na₂O_{eq}): < 3.5

ADVANTAGES

SP 7000 features:

- New generation of polycarboxylate ether
- High water reduction ability
- Versatile dispersant
- Easy to formulate
- No anti foam addition needed
- Slurry stability at high dosage

SP 7000 benefits:

- Increase productivity
- Reduce costs
- Confer good pumpability to concrete

SP 7000 can be recovered from overdosing by adding our **VC 1000**. This water thickening agent will bring back your batch to workable conditions.

SP 7000 is fully compatible with the major chemicals and additives used in concrete admixtures.

• APPLICATIONS

SP 7000 uniqueness is its versatility.

SP 7000 is a **High water reducing agent**. In standard conditions, without addition of an antifoam agent, water reduction of 30% can be achieved. Excellent low air performance with stable air conditions.

SP 7000 is performing in Ready Mix applications as well as in admixtures for Self Compacting Concrete and in Precast applications.

Self Compacting Concrete

SP 7000 high efficiency at low dosage in SCC and Precast application enables you to combine performance and cost efficiency. The formulation in **Table 1** is the control mix .

Table 2 illustrates the performance of **SP 7000**. The tests conducted show that the SP 7000 enables you to reach slumps larger than 3.5 in. This high slump level is obtained for a dry/cement ratio of 0.51%.

One additional feature of **SP 7000** its ability to increase compressive and flexural strength. As illustrated in **Table 2**, **SP 7000** enables you to increase initial compressive strength by as much as 18% and flexural strength by 8% above this control design.

Table 1 – Control Mix

Component	Quantity (lbs.)
Cement CEM I/II	517
Fine Aggregate	1350
Coarse Aggregate	1750
Vinsol Resin fl. Oz.	4.95
Water	300

Water/Cement ratio	0.58
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Performances

Table 2

	Control	SP 7000
Dispersant (fl. Oz.)	0	25.85
Slump (in)	3.0	4.0
Water / cement ratio	.58	.51
Air content (%) (avg.)	5.5	5.5
Flexural Strength (psi) 28 Day (avg.)	969	1046
Compressive Strength (psi) 28 Day (avg.)	4835	5861

SP 7000 high efficiency at low dosage in SCC and Precast applications enable you to combine performance and cost efficiency.

Customers are faced with some limitations when using conventional PCE. Above a given dosage, the addition of PCE becomes detrimental to the slurry stability. The different components of the concrete may begin to segregate. **SP 7000** technology alleviates these limitations. High dosage rates can be used, allowing the product to reach unmatched performances.

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Recommendations:

SP 7000 does not need to be formulated with defoamers.

Anti-synergistic effects have been reported when mixing polycarboxylate ethers and polynaphthalene sulfonates.

STORAGE

SP 7000 can present colour variations from light yellow to slightly brown. These variations can occur in normal storage conditions. They have no influence on the product performances.

SP 7000 should be protected from the effects of weathering and stored between 32°F and 100°F.

In these conditions, products should be used within 12 months after delivery.

STANDARD PACKAGING

- 5 gallon pails
- 440 lb. drums
- 2200 lb. totes

HEALTH & ENVIRONMENTAL DATA

Please refer to the Material Safety Data Sheet.

The information contained in this technical documentation relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. The information provided herein is based on technical data that Riteks, Inc. believes to be reliable, provided that Riteks, Inc. makes no representation or warranty as to the completeness or accuracy thereof and Riteks, Inc. assumes no liability resulting from its use for any claims, losses, or damages of any third party. Recipients receiving this information must exercise their own judgement as to the appropriateness of its use and it is the user's responsibility to assess the material's suitability (including safety) for a particular purpose prior to such use. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used (2008/10/27).