
Technical Data Sheet

Reductor® GSPN, is a concrete additive, based on a compound of aromatic sulfonates and modified polycarboxylic acids that function as medium-range water reducers, with high setting delay power.



Reductor® GSPN

Reductor® GSPN - ASTM C-494 Type A & D

Reductor® WR200 - ASTM C-494 Type F

Reductor® SPC-1 - ASTM C-494 Type G

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Product Information

The **Reductor® GSPN** is a super-plasticizer water reducer and retardant depending on the dosage to be used. It provides initial viability especially with a low water / cement ratio. Improves the initial viability of concrete without increasing the demand for water. Improves durability by increasing endurance.

Compliance with Regulations

ASTM C494 - Type A

ASTM C494 - Type D

Materials and Design Properties	Control	4 oz/ cwt	9 oz/ cwt
Cement (kg/m ³)	306.70	306.70	306.70
Water (kg/m ³)	171.50	157.04	145.7
Coarse Aggregate (kg/m ³)	1097.5	1097.50	1097.5
Fine Aggregate (kg/m ³)	682.3	720.23	749.90
W/C Ratio (water/cement)	0.559	0.512	0.475
Plastic Properties and Setting Time	Control	4 oz/ cwt	9 oz/ cwt
Water Reduction	0	8%	15%
Slump (inches)	4.00	3.50	3.00
Initial Setting (minutes)	315	347	409
Final Setting (minutes)	416	460	494
Initial Setting Difference (minutes)	0	32	94
Final Setting Difference (minutes)	0	44	78
Compressive Strength	Control	4 oz/ cwt	9 oz/ cwt
3 Day Average (psi)	2150	2630	3250
3 Day % of Control	0	122	151
7 Day Average (psi)	3000	3580	3880
7 Day % of Control	0	119	129
Flexural Strength	Control	4 oz/ cwt	9 oz/ cwt
3 Day Average (psi)	450	465	470
3 Day % of Control	0	103	104
7 Day Average (psi)	500	575	570
7 Day % of Control	0	115	114

Benefits

- Powerful plasticizing action with improved initial viability.
- It offers a high resistance concrete production with a high saving of cement.
- It improves the cohesion and dispersion of particles, which minimizes the separation and bleeding for an excellent pumping, excellent for concrete injection.
- Ideal for transporting concrete over long distances and in warm climates.
- Increases early resistance with high settlement retention.

Physical and Chemical Characteristics

Technical Data	Specifications
Appearance	Viscous dark liquid
Chemical Character	Mixture of aromatic sulfonates, modified salts, free of alkyl phosphonates, and polycarboxylic acids, free of chloride
Concentration	~25% +/- 1.0
Ionic Characteristic	anionic
Application	4 oz - 12 oz / 100 lbs of cement

Use Recommendations

Function	Dose
Type A - Water Reducer	4 oz - 6 oz / 100 lbs of cement
Type D - Reducer and Retardant	6 oz - 9 oz / 100 lbs of cement

The dose should be regulated by the user depending on the delay time they occupy and the amount of water they wish to reduce.

We recommend not to exceed 12 oz / 100lbs of cement so as not to excessively extend the setting times.

Packaging

The Reductor® GSPN can be delivered in 200 kg drums, 1000 kg totes and 20,000 kg tanks.

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Zoli INHDELVA
Nave 4B, INHDELVA NORTE
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Honduras



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The above recommendations are based on extensive results done in the most professional manner. The user must try this product industrially first, to verify if the product is viable for further use. The technical information and application advice given in this **Novachem** publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. These results however verified and certified by a third party, do not hold us liable in terms of performance deviations. These tests have been conducted in controlled environments. The user is responsible for checking the suitability of products for their intended use.

For further information and to request samples, please visit **novachemgroup.com** where a qualified technician will assist you.