

PRODUCT DATA SHEET

READYMAXX - PP1

PRODUCT DESCRIPTION

ReadyMaxx-PP1 is a high-range water-reducing admixture powered by CR Nano's Pristine Graphene Nanoplatelet technology. Utilizing our patented Pristine Graphene—an ultra-high purity carbon material arranged in a hexagonal lattice—**ReadyMaxx-PP1** enhances concrete performance by delivering unparalleled strength, durability, and workability. Graphene is renowned for its space-age properties, being 100 times stronger than steel, 10 times more conductive than silver, and super-hydrophobic. These unique characteristics reinforce concrete at the molecular level, significantly improving compressive and flexural strength, reducing permeability for superior water and chemical resistance. **ReadyMaxx-PP1** optimizes water reduction, improves crack resistance, and increases structural integrity while promoting sustainability and cost efficiency by reducing material waste and extending infrastructure lifespan.

Complying with ASTM C494/AASHTO M 194, Type A & F, **ReadyMaxx-PP1** is engineered for proven performance and reliability in modern construction applications. Elevate your projects with **ReadyMaxx-PP1**—where nanotechnology meets next-generation concrete performance.

USES

ReadyMaxx-PP1 is designed for use in both ready mix and precast applications whenever high plasticity and increased strengths are required. Compatible with concrete designs containing Portland Limestone Cement (e.g. Type 1-2L) and supplementary cementitious materials. Please consult directly for recommended procedure with mixes that contain pozzolans such as Fly Ash and Ground Granulated Blast-Furnace Slag (GGBS). **ReadyMaxx-PP1** is suitable for the production of SCC (Self-Consolidating Concrete) and UHPC (Ultra High-Performance Concrete) as well as conventional slump concrete.



APPLICATIONS

- Industrial flooring and slabs
- Driveways and roadways
- Load bearing footers and foundations
- Radiant heated flooring and slabs
- High moisture areas (e.g. pools, freezers, sea walls)
- Pre-Cast components
- Bridges, dams, and highway infrastructure

KEY BENEFITS

- Increased compressive, flexural, and tensile strength
- Higher strength supports reduced carbon footprint achieved by minimizing cementitious materials, along with lower water consumption per volume of concrete
- Reach specified strength 75% earlier
- Increased toughness / durability
- Increased chemical / corrosion resistance
- Reduce permeability up to 85%
- Reduced micro-cracking
- Improved freeze-thaw resistance
- Lower water cement ratio (w/c)
- Improved workability (slump and flow)
- Increased abrasion resistance up to 20%
- Improves thermal dissipation during the cure through the full depth of the pour (i.e. uniform cure)
- Reduction in shrinkage
- Improve the temperature tolerance of the mix design reducing reliance on retardants and accelerant

PRODUCT PERFORMANCE

Water Permeability	DIN 1048	Passes DIN 1048: up to 75% reduction in permeability
Decreased Water / Slump	ASTM C143	Up to a 20% reduction : Neutral
Compression Strength	ASTM C39 ASTM C109	Up to 30% increase
Flexural Strength	ASTM C78	Up to a 10% increase
Workability / Finishability	Field Trials	Excellent
Type S Admixture	ASTM C494	Meets

PRODUCT / APPLICATION INFORMATION

Packaging	Available in 55-gallon drums and 275-gallon totes
Shelf Life	1 year when stored in original packaging with constant agitation (mixing) in dry warehouse conditions with temperatures between 40°F and 80°F
Storage Conditions	Stored above 40°F and should not be allowed to freeze
Appearance / Color	Dark Grey to Black Liquid
Density	Approx. 1.08 g/cm ³ (at 73°F)
Recommended Dosage	<p>The typical dosage rate of ReadyMaxx-PP1 will vary between 6-10fl oz / 100 lb. of cement or cementitious materials. Various factors will affect the dosage rates.</p> <p>Trial mixes with the actual materials should be conducted to determine the required dosage for optimum performance.</p> <p>To the extent specialized materials are used, extreme ambient temperatures are encountered, or for other unusual project conditions, dosage rates outside the typical range may be required. Please contact our technical team for assistance.</p>
Mixing	<p>Measure the required quantity manually or with an automated dispenser. Add ReadyMaxx-PP1 to freshly mixed concrete or during batching—do NOT mix with dry cement. PP1 can be dispensed on-site just before placement, ensuring thorough mixing. thoroughly. When used in combination with other admixtures dispense each admixture separately into the mix.</p> <p>NOT recommended for W/C (water/cement) ratios higher than 0.45 due to the hydrophobic nature of the Pristine Graphene.</p>

LEGAL DISCLAIMER

- **KEEP CONTAINER TIGHTLY SEALED**
- **KEEP OUT OF REACH OF CHILDREN**
- **NOT FOR INTERNAL CONSUMPTION**
- **FOR INDUSTRIAL AND PROFESSIONAL USE ONLY**

Before using any CR Nano product, users must read and follow all warnings and instructions provided on the most current product label, Product Data Sheet, and Safety Data Sheet, which are available at www.CarbonRivers.com or by contacting CR Nano's Technical Service Department. No information provided in CR Nano literature or materials relieves the user of their responsibility to review and adhere to all safety and usage guidelines outlined in the current documentation.

CR Nano warrants this product to be free from manufacturing defects and to meet the stated technical properties on the current Product Data Sheet when used as directed within its shelf life. The user is responsible for determining the product's suitability for the intended application and assumes all associated risks. The sole remedy for any claims shall be limited to a refund of the purchase price or replacement of the product, excluding any labor or additional costs. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, APPLY. CR NANO SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES UNDER ANY LEGAL THEORY. CR Nano is not responsible for any use of this product that may infringe upon existing patents or intellectual property rights.