

Chryso® Force 10,000 D

High Performance Concrete Admixture Dry
Densified Powder

DESCRIPTION

Chryso® Force 10,000 D is a dry densified microsilica (silica fume) admixture designed to increase concrete compressive and flexural strengths, improving durability, permeability reduction, and hydraulic abrasion-erosion resistance. It is ideal for flatwork and other structural concrete applications requiring enhanced mechanical

performance and long-term durability. This product features a densified powder form, making it well-suited for high-performance concrete requiring improved strength and resistance to harsh service conditions.

ADVANTAGES

- Refines concrete microstructure for improved performance
- Promotes a stronger bond between paste and aggregate
- Enhances mechanical properties without altering set time
- Minimizes surface bleed water in large placements
- Supports durable, long-lasting concrete in demanding conditions

FIELDS OF APPLICATION

- Ready-Mix Concrete
- High-Performance Concrete
- Mass Concrete
- Post-Tensioned Concrete
- Prestressed Concrete

Method of Use

Dosage

- Application rates vary based on cement type, mix design, aggregate properties, environmental conditions, and project requirements.
- Dosage rates should be calculated on percent microsilica by weight of cement, or on lb/yd³ (kg/m³) of concrete.
- Please consult your Chryso® representative to determine optimal dosage rates.

Implementation

- It is strongly recommended that trial mixes be made several weeks before construction start-up. This allows the concrete producer to determine the proper batching sequence and admixture amounts needed to deliver the required mix. Trial mixes also help verify that the combination of materials and construction practices will meet specified performance requirements.
- Please see [Recommended Procedures for Batching & Mixing Chryso® Force 10,000 D Concrete](#) for more information on product implementation.

Equipment

- This product is ready to use and does not require specialized equipment for proper application when added manually to concrete mixes.
- For bulk handling, this product requires the use of clean, cement-compatible silos and appropriate unloading systems to ensure proper storage and flow. Large-diameter (6 in. / 150 mm), flat-lined, flexible rubber pipes are recommended to minimize unloading time. Standard cement handling equipment, such as augers or gravity-fed systems from silo to weigh hopper, is suitable for dispensing.
- Consult your Chryso® representative for recommendations on appropriate equipment.

Complimentary Products

- Chryso® Force 10,000 D is compatible with most Chryso® admixtures, including conventional water reducers, superplasticizers, set retarders, and corrosion inhibitors.

The information contained in this technical data sheet is given to the best of our knowledge and the result from extensive testing - which were conducted in order to remain as objective as possible. However, it cannot, in any case, be considered as a warranty involving our liability in case of misuse or any different use of our products, other than those from the "Application" paragraph of this technical data sheet. Some application tests should be carried out before using the product to ensure that the methods of use and conditions of application of the product are satisfactory. Our technical assistance is at the disposal of the users.

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- This product is not compatible with admixtures containing calcium chloride, as these may negatively impact concrete durability and strength development. Only non-chloride set accelerators are recommended for use with this product.
- For concrete that requires air entrainment, the use of an ASTM C260-compliant air-entraining agent, particularly vinsol resin-based formulations, is recommended to provide suitable air void parameters for freeze-thaw resistance.
- Pretesting is recommended to verify compatibility with all mix components and ensure desired performance outcomes.
- Consult your Chryso® representative for guidance on product combinations and compatibility.

Performances

- Achieves compressive strengths of 6,000 psi (42 MPa) and above using standard materials and methods.
- Delivers high early strength, making it well-suited for precast and prestress applications.
- Enhances watertightness and significantly lowers permeability, improving resistance to chloride intrusion.
- Improves durability in aggressive chemical environments, extending service life in harsh conditions.
- Increases resistance to hydraulic abrasion-erosion, supporting performance in high-flow or marine exposure applications.

CHARACTERISTICS

Product Nature	Powder
Color	Grey

PACKAGING

- Bulk
- Super Sacks
- 11,3kg Bag (25 lb)

PRECAUTIONS

- Protect from direct sunlight and moisture to maintain product integrity.
- Store in a dry, sheltered area to prevent clumping and contamination.
- Use a dust mask when manually dispensing the bagged product to avoid inhalation of fine particles.

SAFETY

Prior to any use, please read carefully the Safety data Sheet.