

PRODUCT DESCRIPTION

DSP™ is a high performance, densified silica fume powder mineral admixture used to produce high performance concretes with special performance properties including; increased strength, reduced permeability, improved abrasion resistance and increased corrosion resistance DSP™ is an extremely fine, highly reactive pozzolan which improves concrete performance by two mechanisms. First, the ultra-fine silica fume particles fill voids between the cement particles, physically reducing the concrete's permeability.

Secondly, as a highly reactive pozzolan, DSP™ chemically reacts with the calcium hydroxide present in the cement paste, forming the stronger calcium silica hydrate "glue". This results in improved paste to aggregate bond and higher concrete strengths.

PRODUCT FEATURES

- Dramatically reduces permeability
- Increases resistance to chemical attack
- Increases abrasion/erosion resistance
- Improves durability
- Increases compressive strength
- Increases flexural strength
- Increases bond strength

APPLICATION

DSP™ can be used to produce concretes with very low permeability and high abrasion and chemical resistance. Applications include parking garages, bridge decks, marine structures and any application where improved water tightness and reduced permeability are desired. Due to its chemical and physical properties DSP™ can greatly enhance the strength performance as well as the bonding properties of concrete to which it is added. Higher strengths translate to greater design flexibility and more efficient use of space in completed structures.

HOW TO USE

DOSAGE

DSP™ is recommended for use at a rate of 5 to 15% by weight of the cement. Dosage rates may vary depending on the application and desired concrete properties.

MIXING

DSP™ must be added with the cement at the batch plant. Because of the extreme fineness of the product (20 times finer than cement) it is recommended that a superplasticizer be added with the mixing water or at the end of the batching process to minimize the "balling" effect in the mixer. Because local job conditions vary, please contact AFZIR for further assistance if using outside recommended dosage ranges.

PACKAGING

22.7 kg bags

SAFETY

DSP™ is a very fine powder and it is recommended that a particle respirator be used to avoid inhalation of this product.

Please refer to the material safety data sheet for additional information.



Densified Silica Fume Powder - DSP™

DISCLAIMER OF LIABILITY

AFZIR, LLC warrants its products to be free from manufacturing defects. Buyer determines suitability of product for use and assumes all risks. Buyer's sole remedy shall be limited to replacement of product. Any claim for breach of this warranty must be brought within six months of the date of purchase.

AFZIR shall not be liable for any consequential or special damages of any kind, resulting from any claim or breach of warranty, breach of contract, negligence or any legal theory.

The Buyer, by accepting the products described herein, agrees to be responsible for thoroughly testing any application to determine its suitability before committing to production.