



DSF-92

Densified Silica Fume

CAS # 69012-64-2

DSF-92 is a densified silica fume, a highly reactive pozzolanic material composed of amorphous silicon dioxide (SiO₂). It is a co-product of silicon and ferrosilicon alloy production and densified for improved handling and dispersion. DSF-92 enhances strength, durability, and resistance to chemical attack in a wide range of cementitious systems.

KEY FEATURES

- Improves compressive and flexural strength
- Reduces permeability and chloride penetration
- Enhances durability in marine and sulfate-exposed environments
- Increases cohesion and reduces rebound in shotcrete
- Compatible with a wide range of admixtures and cement blends

USAGE GUIDELINES

Typical dosage ranges from 5% to 15% by weight of cementitious materials, depending on the performance requirements of the application. Ensure thorough mixing to achieve even dispersion. DSF-92 is compatible with water reducers, superplasticizers, and other admixtures.

TYPICAL SPECIFICATIONS

Parameter	Specification	Typical	Test Method
SiO ₂ Content	≥ 92.0%	93.5%	ASTM C1240
Moisture Content (H ₂ O)	≤ 0.30%	0.15%	ASTM C1240
Bulk Density (Densified)	500–700 kg/m ³	600 kg/m ³	ASTM C1240
Loss on Ignition (LOI)	≤ 4.0%	2.5%	ASTM C1240
Pozzolanic Activity Index @ 7 Days	≥ 105%	118%	ASTM C1240
Retained on 45 Micron Sieve	≤ 10.0%	2.0%	ASTM C1240
BET Surface Area	15–35 m ² /g	20 m ² /g	ASTM C1240 / ISO 9277

All testing conducted in accordance with ASTM C1240.



**LIMITED WARRANTY INFORMATION.
PLEASE READ CAREFULLY.**

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This document is subject to revision without notice as new data becomes available.

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PACKAGING

Available in:

10 kg degradable paper bags
25 kg woven poly bags
1200 kg bulk bags

STORAGE & SHELF LIFE

Store in a dry, well-ventilated area, out of direct sunlight and moisture. Product should remain sealed in original packaging.

Shelf life: 12 months under recommended storage conditions.

SAFETY & REGULATORY INFORMATION

Refer to the Safety Data Sheet (SDS) for full instructions on handling, PPE requirements, and first aid. Avoid inhalation of fine dust. Use dust extraction and respiratory protection where required.