



USF92

Undensified Silica Fume

CAS # 69012-64-2

USF92 is an undensified silica fume, a highly reactive pozzolanic material consisting primarily of amorphous silicon dioxide (SiO_2). It is a co-product of silicon and ferrosilicon alloy production and is designed for applications where high reactivity and dispersion are critical. USF92 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. USF92 is compatible with water reducers, superplasticizers, and other admixtures.

TYPICAL SPECIFICATIONS

Parameter	Specification	Test Method
SiO_2 Content	$\geq 92.0\%$	ASTM C1240
Moisture Content (H_2O)	$\leq 0.30\%$	ASTM C1240
Bulk Density (Undensified)	600–700 kg/m^3	ASTM C1240
Loss on Ignition (LOI)	$\leq 4.0\%$	ASTM C1240
Pozzolanic Activity Index @ 7 Days	$\geq 105\%$	ASTM C1240
Retained on 45 Micron Sieve	$\leq 10.0\%$	ASTM C1240

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:

- 20 kg paper or plastic-lined bags
- 600 kg bulk bags
- Other packaging available upon request

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.