

VELOSIT® MS 9902

High Silica – Content Silica Fume for Concrete

VELOSIT – Your strong partner with innovative products!

Discover the Future of Concrete Innovation with Velosit's Micro Silica Range

Velosit Micro Silica: Elevate Your Concrete, Elevate Your World

At Velosit, we're dedicated to pushing the boundaries of construction innovation. Our Micro Silica range is here to transform your projects, delivering unrivaled strength, durability, and performance to your concrete structures. Whether you're an architect, builder, or engineer, Velosit's Micro Silica products are the secret ingredient for success in your construction endeavors.

Why Choose Velosit's Micro Silica Range?

- 1. Exceptional Strength: Elevate your concrete's compressive and flexural strength, ensuring it stands the test of time against heavy loads and structural demands.
- 2. Enhanced Durability: Protect your projects from the elements. Our Micro Silica products fortify your concrete, making it highly resistant to weather, abrasion, and chemical wear.
- 3. Effortless Workability: Achieve the perfect concrete consistency with ease. Our Micro Silica products improve workability, making pouring and molding a breeze.
- 4. Eco-Friendly Choice: We're committed to sustainability. By reducing the need for additional materials, our products contribute to a greener future.
- 5. Versatile Application: From towering skyscrapers to intricate architectural masterpieces, Velosit's Micro Silica range suits a wide array of projects, both big and small.

Micro Silica: The Magic Ingredient

Our Micro Silica is a finely engineered, highly reactive powder that, when added to your concrete mix, fills gaps between cement particles, creating a denser matrix. This results in increased strength, reduced permeability, and long-term chemical stability, thanks to its pozzolanic properties.

Explore the Velosit Micro Silica Range:

- Velosit Micro Silica Standard Grade: For everyday projects requiring superior concrete strength and durability.
- Velosit Micro Silica High-Performance Grade: Perfect for challenging construction environments where extreme strength and durability are paramount.
- Velosit Micro Silica Eco-Blend: An eco-conscious choice that combines Micro Silica's performance benefits with a reduced environmental footprint.

Contact Us for Product Information

Ready to revolutionize your construction projects with Velosit's Micro Silica range? Contact us today for detailed product information, availability, and expert guidance:

Phone: +91-86920 66664 Email: info@velositindia.com Website: www.velositindia.com

Our experienced team is here to help you unlock the full potential of Velosit's Micro Silica products. Join us in building a stronger, more sustainable future with concrete excellence.



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Velosit Micro Silica Where Innovation Meets Concrete.



Application Fields

VELOSIT MS 9902 is a super fine (mean size of 45μ), amorphous, high silica-content, non-crystalline, pozzolanic powder supplied in the densified form. VELOSIT MS 9902 is used in concrete mixes to replace part of the cement content and enhance the resultant concrete's water impermeability and/or increase compressive strength. Typical application fields besides others include:

- > Pre-cast & cast-in-situ concrete elements
- > High performance concretes
- > Marine structures such as bridges, causeways, piers, jetties, ship building yards, ports and quays
- > Oil, gas & petrochemical processing structures
- > Below grade structures exposed to aggressive ground waters such as foundations, rafts, basement walls & floors and underground tunnels
- > Structures exposed to high abrasion such as concrete roads, bridge decks & factory floors Improved durability and extended sustainability

Quality features

Form: Free	e flowing powder
Color: Dar	k grey
SiO ₂ content (*)	:90% ± 1
Dry bulk density	:620 kg/m³ ± 20
Specific gravity	$:2.3 \pm 0.1$
Specific surface area	$:22.5 \text{ m}^2/\text{g} \pm 7.5$
Moisture content	:< 0.35%
Loss on ignition:3.0% \pm 1.0 Maximum retention on $45\mu^{(**)}$ siev	e : 9.8% ± 2.0
Fire rating EN13501-1	:Class A1

Compatibility

VELOSIT MS 9902 is compatible with common water reducers, high-range super plasticisers (including PCE based admixtures), retarders, rheology modifiers, non-Chloride accelerators, air entrainers and slump-extending admixtures.

Estimating

VELOSIT MS 9902 densified powder is typically added at a dosage between 3% and 15%. Other dosage rates may be used for specific project requirements.

Packaging

VELOSIT MS 9902 is available in 25 kg (55.1 lb.) bags. Larger bulk packaging available on request.

Properties

VELOSIT MS 9902 is the result of careful processing and densification. Densification of the silica fume significantly reduces dusting, health hazards whilst minimizing storage space requirements.

VELOSIT MS 9902 is regularly tested to conform with ASTM C 1240 requirements & IS 1727-1967; RA 2013.

VELOSIT MS 9902 is added at the batch plant in the powder form to the dry constituents of the mix or as a liquid suspension after slurrying it. VELOSIT MS 9902 gives the following properties to the resultant concrete:

- > Enhanced rheology (significant reduction/ prevention of bleeding and segregation)
- > Minimized shrinkage; reduced micro-cracking
- > Enhanced cohesiveness and final surface finish
- > Increased early and final compressive strength
- > Increased density leads to improved water impermeability and significant reduction of chloride/sulphate ion penetration

Addition

1.) Powder

VELOSIT MS 9902 is added as a powder with the aggregates and sand and before the addition of the cement. Allow mixing for at least 30 seconds prior to addition of cement, mixing water and concrete admixtures.

2.) Slurry

VELOSIT MS 9902 may be made into slurry on site to facilitate dosing and improve dispersion in the concrete mix.

Use only quality slurrying equipment with adequate suspension additive. Storage tanks may require an integrated circulation system that prevents sedimentation.

The VELOSIT MS 9902 slurry is added with the final 25% of mixing water and allowed to mix in the batch plant mixer for at least 30 seconds.

Storage

VELOSIT MS 9902 can be stored in unopened original packs for 24 months at 5-35°C (40-95°F) in a dry storage place protected against sunlight and moisture.



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