



Microsilica | Rice Husk Ash | BioMass Pellets

# ABOUT GLOBAL MICRONS

## Brand, Vision, Mission, Core Values

---



Global Microns are manufacturer, supplier & exporter of Micro Silica Fume, Rice Husk Ash and Biomass Pellets for High Performance Concrete mix production, Metallurgical additives used in steel plants and foundries and Refractory admixtures. We establish long- term partnerships with several large-scale Construction, Foundries, Steel Production, Ferrosilicon and Silicon Metal factories, to control the raw materials supply and ensure the annual output of 80,000MT microsilica.

Backed by its highly professionally skilled & experienced men power is dominating the European market for last two decades catering its steel and Cement producing reputed clients apart from middle east, Asian, Australian and European customers including domestic clientele with its manufacturing unit at lothda industrial area, P.O Rajkot, Gujarat -BHARAT (India).

### Our Vision

Our vision is to take an organization of most modern. Technology based statutory-complaint global standard free from customer complaints of any nature supported by well-equipped infrastructural facilities and trained, skilled competent manpower. Also Contributing to world's green revolution by turning agriculture & industrial waste into value added green additives for infrastructure industry.

### Our Mission

We would strive to put in to practice our vision with all our efforts though an integrated management approaches systems, technology, best-quality resources and facilities and supported by demonstrated leadership and employee commitment at all levels as the prime drivers for ensuring a continuously progressive, stringently quality conscious safe, productive and healthy work environment.

### Core Values

Sincerest dedicated commitment towards execution of all timely actions with tech-savvy skill, professional urge and management expertise to the best satisfaction and in quest of excellence for our most valuable customer's requisite fulfillment of services.

- Customers First
- Sustainability & Integrity
- Empowerment & Respect
- Courage for Innovation







**For Steel Production & Foundry**  
**RICE HUSK ASH**  
**Ladle & Tundish Covering Compound**



# RICE HUSK ASH

## In Flake Form and In Powder Form



RICE HUSK ASH is a carbon neutral green product. RICE HUSK ASH is a low carbon product widely used in steel production as heat insulator. It is a free flowing, nonhazardous powder made from Rice Husk Ash as main source of silica. It is also known as a **Ladle /Tundish covering compounds**.

RHA is also used in ferrous industries for the casting of steel and for molten metal insulation in ladles and tundishes. This insulation of molten metal prevents cracks in the structure of refractories that can occur due to temperature drops of 200°C when molten metal is transferred from a ladle to a tundish. The low thermal conductivity of RHA also leads to a gradual decrease in the temperature of steel, and moreover to its uniform solidification. RHA containing silica is amorphous, however, which causes it to act as a non-heat conducting ingredient in refractories too.

- Prevent Heat Loss
- Absorbs nonmetal Impurities
- Better Metal Quality
- Prevents Re Oxidation of Metal

## Specifications

SiO <sub>2</sub>	85-94%
CaO	2% max
Moisture	1% max
Al <sub>2</sub> O <sub>3</sub>	1% Max
MgO	2% max
Fe <sub>2</sub> O <sub>3</sub>	2% max
Ph Value	7-9
Bulk Density	0.350-0.450 gm/cc
Carbon	2% max
LOI	2% max
Colour	Grey
Non-Hazardous	



### Container Capacity

#### 20' FCL

5 KGS Bags 9.250\* MT  
10 KGS Bags 9.600\* MT

#### 40' FCL

5 KGS Bags 18.500\* MT  
10 KGS Bags 21.600\* MT

For all export consignments, bags will be placed on pallets ( 1200mm x 1000mm or 1100mm x 1000mm ) and will be wrapped with shrink films.

**Sub Packing:** 5 Kg, 25 Kg, 500 Kg and 1MT Bags.

Each company is unique in its own. And we respect their preferences.

\*We are offering various packing sizes looking at the demand from our world wide buyers.

**Storage:** When stored correctly has an indefinite shelf life like cement, it must be protected from contamination and moisture. The product can be stored in bulk in a clean, dry storage silo.

# RICE HUSK ASH

## Technical Data Sheet for Steel plants



<b>Product Name</b>	Rice Husk Ash (which is also known as Refractory Cements, Refractory castables, Glutin, Insulex, Low smoke, Heat Insulated, Ladle Covering Compound and Tundish Covering Compound)
<b>Types of Carbons</b>	High And Low Carbon
<b>Feature</b>	Available in Flake and Powder form

### How it works ?

Rice husk ash powder, being spread over molten metal which is usually at temperature of 16500 C while in Ladle/Tundish. It will create a thick layer of about 1" - 2" over molten metal and helps maintaining temperature of molten metal in process.

- Prevents Heat Loss
- Absorbs nonmetal Impurities
- Better Metal Quality
- Prevents Re Oxidation of Metal

### Specifications

Chemical Propertise		Physical Propertise	
<b>SiO<sub>2</sub></b>	Min 85 - Max 96%	<b>Bulk Density</b>	Min 350 - Max 450
<b>CaO</b>	Min 0.0% - Max 0.58%	<b>Moisture / H<sub>2</sub>O</b>	Min 0.00% - Max 1% max
<b>Na<sub>2</sub>O</b>	Min 0.0% - Max 2.5% max	<b>Sieve Analysis Size</b>	
<b>Al<sub>2</sub>O<sub>3</sub></b>	Min 0.20% - Max 1%	(a) 0 mm - 1 mm	(a) 98.9%
<b>MgO</b>	Min 0.01% - Max 1%	(b) 1 mm - 2 mm	(b) 1.1%
<b>Fe<sub>2</sub>O<sub>3</sub></b>	Min 0.25% - Max 1%	<b>Colour</b>	Grey White
<b>Ph Value</b>	Min 7 - Max 9		Dark Grey
<b>Carbon</b>	Min 1% - Max 12%		Black
<b>LOI</b>	2% max	<b>% of material below 2 mm</b>	100%
<b>K<sub>2</sub>O</b>	Min 0.0% - Max 2.5% max	<b>Loss of Ignition</b>	Min 0.0% - Max <5% max
<b>Non-Hazardous</b>		<b>Melting point</b>	> 1550 Degree Celsius

#### Please Note

- 1: The above numbers are approximately.
- 2: Low Carbon ratio will be between 1% - 3% and High Carbon ratio will be between 5% - 12%.
- 3: As per client requirement, we export the material and provide the Test certificate (If any).





**Pozzolanic MicroSilica**  
**MICRO SILICA FUME®**

**Densified Dry Silicon Dioxide Compound**



# MICRO SILICA FUME

## MicroSilica Increase Strength of Concrete



MICRO SILICA FUME is composed of silicon dioxide ( $\text{SiO}_2$ ), Its with total  $\text{SiO}_2$  content 85% - 95%. It will react with the Calcium Hydroxide from the cement, which will form more of the Calcium Silicate hydrate,igreatly improves compressive strength, bond strength and abrasion resistance , permeability and helps in protecting reinforcing steel from corrosion. Using it will also increase the durability of the concrete.

### Area of Application:

- High Performance Concrete
- Precast Concrete
- Oil & Gas Drilling Industry
- Marine / Ocean concrete
- Ready Mix Concrete for High Strength Concrete
- Wear Resistant Flooring, Grouting Material
- Agriculture and Fertilizer Industry
- Nuclear Power Project

MICRO SILICA FUME 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 MICRO SILICA FUME 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.

### Specifications

<b>SiO<sub>2</sub></b>	85-96%
<b>CaO</b>	2% max
<b>Moisture</b>	0.1 - 0.35%
<b>Al<sub>2</sub>O<sub>3</sub></b>	1% Max
<b>Particle Size</b>	0.03 - 0.1microns
<b>Available Alkalis</b>	0.5 - 1.5%
<b>Ph Value</b>	7-9
<b>Dry Bulk Density</b>	500 - 700 kg/m <sup>3</sup>
<b>Carbon</b>	2% max
<b>Loss Of Ignition</b>	2.0 - 4.0%
<b>Colour</b>	Grey
<b>Surface area (BET method)</b>	15 - 28 m <sup>2</sup> /g



### Standard Specifications

Conforms to ASTM C -1240-03, AASHTO M-307, EN 13263:2005 and IS 9103 (1999)

# MICRO SILICA FUME

## MicroSilica Increase Strength of Concrete



### Directions for use:

MICRO SILICA FUME 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.

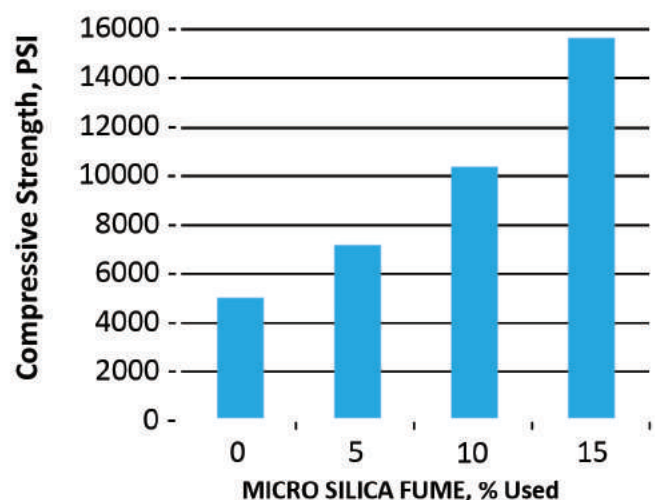
### Associated Advantages:

**Enhanced durability:** Micro Silica Fume ( $\text{SiO}_2$ ) increases the strength of concrete and increases the resistance to weathering and enhances the durability.

**Compatibility:** Micro Silica Fume ( $\text{SiO}_2$ ) is compatible with other admixtures in the same concrete mix. When used in conjunction with other admixtures, each admixture must be dispensed separately.

- Dramatically reduces permeability
- Increases resistance to chemical attack
- Increases abrasion/erosion resistance
- Improves durability
- Produces ultimate compressive strength
- Increases flexural strength
- Increases bond strength
- Less material wastage
- Reduces the rate of carbonation
- Decreases permeability to chloride
- High Pozzolanic Activity Index
- Allows greater design flexibility and structural design economies

### Compressive Strength Performance



#### Container Capacity

##### 20' FCL

5 KGS Bags 9.250\* MT

10 KGS Bags 9.600\* MT

##### 40' FCL

5 KGS Bags 18.500\* MT

10 KGS Bags 21.600\* MT

For all export consignments, bags will be placed on pallets ( 1200mm x 1000mm or 1100mm x 1000mm ) and will be wrapped with shrink films.

**Sub Packing:** 5 Kg, 25 Kg, 500 Kg and 1MT Bags.

Each company is unique in its own. And we respect their preferences.

\*We are offering various packing sizes looking at the demand from our world wide buyers.

**Storage:** When stored correctly has an indefinite shelf life like cement, it must be protected from contamination and moisture. The product can be stored in bulk in a clean, dry storage silo.





# **Environmental Friendly Fuel**

## **BIOMASS PELLETS**

**Rice husk pellets for Biofuel or Fodder**



# BIOMASS PELLETS

## In Flake Form and In Powder Form



Biomass Pellets is eco-friendly fuel, Which are mainly bieng used by industrial sectors as green energy, Global Microns factory is well equipped with all neccesarry machinerries and equipment having storage facilities. Being operating as a business that we are most familiar with a strategic location and with sufficient source of raw materials supply, to cop with our customer's increasing demand for the years to come. Thus, we will do the best on our part to ensure that our products and services are always at its best quality and we look forward to cooperate with buyers from local and overseas to create mutual benefits for all parties concers.

### Area of Application:

- Fuel in Power Plant
- High Calorific Values & Cost Effective
- Source of Silicon Dioxide
- As Fodder
- As Padding (Material for Fermented Mattress)
- Formation of Active Carbon
- Source of Silicon Dioxide Compounds
- As Environmental Friendly Fuel

### Specifications

<b>Core Product</b>	Rice Husk Pellet/ Rice Straw Pellet/ Pea Nut Shell Pellet (Made from 100% Rice Husk/ Sawdust)
<b>Pellet Size</b>	Dia - 6 mm to 8 mm Length - 10 to 20 mm Jumbo Bag ( 1000kg )
<b>Moisture</b>	6 - 8 %
<b>Calorific Value</b>	3700 kcal to 4300 kcal
<b>Ash Content</b>	6% to 12%



#### Container Capacity

##### 20' FCL

5 KGS Bags 9.250\* MT  
10 KGS Bags 9.600\* MT

##### 40' FCL

5 KGS Bags 18.500\* MT  
10 KGS Bags 21.600\* MT

For all export consignments, bags will be placed on pallets ( 1200mm x 1000mm or 1100mm x 1000mm ) and will be wrapped with shrink films.

**Sub Packing:** 5 Kg, 25 Kg, 500 Kg and 1MT Bags.

Each company is unique in its own. And we respect their preferences.

\*We are offering various packing sizes looking at the demand from our world wide buyers.

**Storage:** When stored correctly has an indefinite shelf life like cement, it must be protected from contamination and moisture. The product can be stored in bulk in a clean, dry storage silo.





# Global Microns

[hello@globalmicrons.com](mailto:hello@globalmicrons.com)

[www.microsilicafume.us](http://www.microsilicafume.us)

