

## Microfume 106 UM

### General Description

Microfume 106 UM is an Undensified, constant pH, amorphous light grey silicon oxide powder. Microfume 106 UM improves the mechanical properties (compressive strength) and durability (via permeability decrease). Microfume 106 UM can be used as an extender for lightweight cements and a compressive-strength enhancer for low-temperature, lightweight cements. Microfume 106 offers a lower water content and improved flowability with a higher PAI (Pozzolonic Activity Index) for improved compressive strength development for light weight slurries.

### Applications

Microfume 106 UM improves the mechanical properties (compressive strength, creep, modulus of rupture) and durability (via permeability decrease).

### Packaging/Storage

Bulk super-sack, 50 lb. bags, other packaging options are available on request. Store in a dry area protected from moisture. Once bags are opened they must be sealed until all material is used.

### Health and Environmental Data

Before handling or using this product please refer to the Safety Data Sheet for complete health, safety and environmental information. Dispose of waste in accordance with local, state and federal regulations.

### Production Site:

Burnsville, MS (USA).  
Quality Control: Complies with ISO 9001:2008 Environment: Complies with the ISO 14001:2000

<b>Physical and chemical characteristics:</b>			
<b>Analysis**</b>	<b>Typical</b>	<b>Limits</b>	
		<b>Min</b>	<b>Max</b>
SiO <sub>2</sub> (%)	97.0	95.5	98.7
Free C (%)	1.1	0.6	2.2
Free Si (%)	0.12	0.1	0.16
Total CaO (%)	0.42	.19	.82
SO <sub>3</sub> (%)	0.01	0.008	.09
Na <sub>2</sub> O (%)	0.06	0.1	0.25
K <sub>2</sub> O (%)	0.38	0.35	0.6
Cl <sup>-</sup> (ppm)	15	10	20
Al <sub>2</sub> O <sub>3</sub> (%)	< 0.09	<0.07	0.15
Fe <sub>2</sub> O <sub>3</sub> (%)	< 0.03***	< 0.01***	< 0.1***
MgO (%)	0.11	< 0.1	0.25
H <sub>2</sub> O (%)	0.29	0.1	1
PH	7.6	6.75	8
Loss on Ignition (at 950°C during 1h) (%)	1.15	1	2.5
Specific surface (BET) (m <sup>2</sup> /g)	22.5	20	25
Bulk density (lb/ft <sup>3</sup> )	18	17	22
> 45 urn (%)	1.1	0.8	2
Brightness L*	47	45	50

\*\* % by weight of dry mass. \*\*\* Lower limit of detection.

*Typical properties given do not constitute a supply specification.*

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