

## Microfume 104 OG

### General Description

Microfume 104 OG is a semi-densified, constant pH, amorphous light grey silicon oxide powder. Microfume 104 OG improves the mechanical properties (compressive strength) and durability (via permeability decrease). Microfume 104 OG can be used as an extender for lightweight cements and a compressive-strength enhancer for low-temperature, lightweight cements. Microfume 104 OG was developed to capture the benefits of handling with a higher PAI (Pozzolonic Activity Index) for improved compressive strengths / strength development and free water control for light weight slurries.

### Applications

Microfume 104 OG can be used in the grout as a hydraulic seal in the well bore, to fix leak repairs, splits, and the closing of depleted zones.

### 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

Physical and Chemical Characteristics			
Limits			
Analysis	Typical	Min	Max
SiO <sub>2</sub> (%)	96.0	95.0	97.75
Free C (%)	1.1	0.6	2.2
Free SI (%)	0.12	0.1	0.18
Total CaO (%)	0.42	.19	.82
SO <sub>2</sub> (%)	0.01	0.008	.09
Na <sub>2</sub> O (%)	0.06	0.01	0.25
K <sub>2</sub> O(%)	0.38	0.35	0.6
Cl(ppm)	90	50	250
Al <sub>2</sub> O <sub>3</sub> (%)	< 0.03**	< 0.01**	< 0.1**
Fe <sub>2</sub> O <sub>3</sub> (%)	0.11	< 0.1	0.25
MgO(%)	0.29	0.1	1
H <sub>2</sub> O(%)	.3	.1	1.5
PH	7.5	6.75	8.0
Loss on ignition (950 C During 1 hour) (%)	1.7	1.1	3.7
Specific Surface (BET) (M <sup>2</sup> /g)	20.5	19.5	23
Bulk Density (#/ft <sup>3</sup> )	30	28	33
>45 urn (5)	3.2	1.1	4.5
Brightness L*	47	45	50
*% By weight of dry mass			
** Lower limit Detection			

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

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