R-E-D INDUSTRIAL PRODUCTS

RELIABLE EFFICIENT DEPENDABLE

MISSISSIPPI SILICON

Product Data Sheet:
R-E-D Fume Refractory - 106 UM

R-E-D Fume Refractory 106 UM is undensified silica fume, with a constant pH, it is an amorphous light gray silicon dioxide powder that has a low impurity level and is consequently perfectly adapted to refractory castable. Use of silica Fume improves the mechanical properties, the compressive strength, creep, modulus of rupture and durability (via permeability decrease). 106 UM Conforms with ASTM C 1240 & CSA 3000 standards.

Applications: Low and Medium Cement Refractory, Grout, Castables, Vibrated or Self Consolidating Concrete (SCC).
Packaging: Bulk super-sack, 50 lb. bags, other packaging options are available on request.
Storage: Dry storage. Avoid contact with moisture.
Safety: Product totally amorphous. Safety data sheet available on request.
Particle distribution: Available on request.

Production Site: 80 Co Rd 210, Burnsville, MS 38833 (USA).
Quality Control: Complies with the ISO 9001:2008 norm.
Environment: Complies with the ISO 14001:2000 norm.

Customer Service/Inside Sales:
Lacey Frantz
Email: LFrantz@redindustrialproducts.com
Website: www.redindustrialproducts.com
Phone: (877) 733-2281 ext. 2
Fax: (877) 733-2281
Mobile: (724) 815-3363

Director Of Operations/Sales:
Rodney J. Chiodo
Email: Rjchiodo@redindustrialproducts.com
Website: www.redindustrialproducts.com
Phone: (877) 733-2281 ext. 1
Fax: (877) 733-2281
Mobile: (814) 673-1552

Physical and Chemical Characteristics

	Limits		
Analysis	**Typical**	**Min**	**Max**
SiO_2 (%)	95.0	93.0	98.1
Free C (%)	1.50	0.60	3.50
Free Si (%)	0.12	0.05	0.20
Total CaO (%)	0.42	0.19	1.60
SO_3(%)	0.10	< 0.01**	0.70
Na_2O (%)	0.10	< 0.01**	0.50
K_2O(%)	0.38	0.25	1.10
H_2O(%)	0.30	0.10	1.20
Al_2O_3(%)	0.11	< 0.01**	0.50
Fe_2O_3(%)	0.12	< 0.01**	0.50
MgO (%)	0.29	0.05	0.60
pH	7.80	6.75	8.80
Loss on ignition (950 C During 1 hour) (%)	1.70	1.10	3.70
Specific Surface (BET) (M^2/g)	20.0	18.0	22.0
Bulk Density (lb/ft^3)	19.0	17.0	23.0
>45 µ (%)	2.20	0.50	7.00
Brightness L*	47	45	50

*% By weight of dry mass
** Lower limit Detection

It is not recommended that substitutions be made without batch trialing, this helps ensure mixes are consistent with intended use.

Date of Revision: 8/1/2021
Revision number: 03

Serving the Refractory and Mineral Processing Industries!