

USM 200 US Silica Flour - Cementing



U.S. Silica Flour is a very pure ground a-quartz (alpha-quartz) sand. The sand is mined from the St. Peter and Oil Creek formations. Whole grain sand is mined, washed, attrition scrubbed, hydraulically sized and dried. The dry sand is then ground and sized to meet the specific requirements for use.

ADVANTAGES AND BENEFITS:

- Particle size is optimum for application in oil well hydraulic cement slurries where strength retrogression and increasing permeability can be serious problems.
- U.S. Silica Flour has found application from BHT about 230° F up to at least 450° F.
- Nominal usage is from about 35% to 80% based on the weight of dry cement.
- For more information contact your local well cementing expert.

TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

Property		Typical Properties		
Physical State		Crystalline solid		
Nominal Particle Size		200-mesh		
Appearance, color in bright light		White to light tan		
Hardness	(Mho)	7		
Melt Point	(°F)	3,100		
Bulk Density, loose	(lbm/ft ³)	44		
Bulk Density, tapped	(lbm/ft ³)	87		
Particle Density	(g/cm ³)	2.65		
Particle Size Distribution		Weight	Retained %	Weight passing %
U.S. Sieve No.	Micron	Individual	Cumulative	Cumulative
100	150	0	0	100
200	75	3	3	97
325	45	21	24	76
pan	< 45	76	100	100
Typical Chemical Analysis				
Mineral				A-quartz
SiO ₂ , silicon dioxide	(%)	Minimum		98
Color				White to light tan
Moisture	(%)	Maximum		0.25
LOI, loss on ignition	(%)	Maximum		0.1
pH				Neutral
Water Soluble Content	(%)	Maximum		0.25
All Other	(%)	Maximum		0.2

Disclaimer: The information set forth in this Product Data Sheet represents typical properties of the product described; the information and the typical values are not specifications. U.S. Silica Company makes no representation or warranty concerning the products, expressed or implied, by this product data sheet.

Warning: The product contains respirable crystalline silica - quartz, which can cause silicosis (an occupational lung disease) and lung cancer. For detailed information on the potential health effects of respirable crystalline silica - quartz, see the U.S. Silica Company Safety Data Sheet.

