

## Technical Data Sheet PW 40™

High-Purity Silica Sand

Chesapeake Minerals High-Purity Silica Sands are produced from high-purity raw quartz gravel with an extremely low iron content and few trace elements.

**PW 40<sup>TM</sup>** is crushed, milled and screened to maintain a top side of 40 US Mesh. Liberated magnetic and paramagnetic minerals are removed with rare-earth roll magnets to maintain a consistent iron content below 80 ppm. The precise control of particle size distribution and chemistry improves production processes, allowing better control of production costs and compliance with customers' chemistry demands.

Because of its reliable chemical composition and consistent gradation quality, **PW 40<sup>TM</sup>** is an excellent choice for a variety of applications requiring high-purity silica.

TYPICAL PARTICLE SIZE ANALYSIS (ASTM Sieve)		
40	1.5	
50	15.5	
60	15.4	
70	14.5	
100	33.5	
140	15.6	
200	2.9	
270	0.2	
PAN	0.0	

PHYSICAL PROPERTIES	
Tapped Bulk Density (lb/ft³)	89
Loose Bulk Density (lb/ft³)	79
LOI %	0.08
% Moisture	<0.1
Specific Gravity (SG)	2.6
Relative Density (OD)	2.6
Water Absorption (%)	0.2
Magnetic Properties	Negative
Mohs Hardness	7.5

## **CUSTOMER SERVICE:**

P: 443.318.2872

E: info@chesapeakeminerals.com

## SHIPPING:

- · I-95: Halfway between Baltimore & Philadelphia
- · CSX Rail System

## **DISTRIBUTION:**

· Bulk shipment by Truck and Rail

CHEMICAL ANALYSIS (Typical Median Reported as % by Weight)	
SiO <sub>2</sub> (Silicon Dioxide)	>99.97%
Fe <sub>2</sub> O <sub>3</sub> (Ferric Oxide)	0.0072
Al <sub>2</sub> O <sub>3</sub> (Aluminum Oxide)	0.0075
TiO <sub>2</sub> (Titanium Dioxide)	<0.0010 LLD
CaO (Calcium Oxide, Total)	<0.0055 LLD
Cr <sub>2</sub> O <sub>3</sub> (Chromium Oxide)	<0.0005 LLD
K₂O (Potassium Oxide)	<0.0015 LLD
MgO (Magnesium Oxide)	<0.0025 LLD
Na <sub>2</sub> O (Sodium Oxide)	<0.0050 LLD

TRACE CHEMISTRY (Typical – Reported as PPM)		
Pb (Lead)	<1.0	
As (Arsenic)	<1.0	
Ni (Nickel)	<1.0	
Cr (Chromium)	<1.0	
Cd (Cadmium)	<1.0	
Hg (Mercury)	<1.0	

TYPICAL COLOR PROPERTIES		
CIE Analysis - L	>87	
а	0.3	
b	0.2	
Brightness	76.7	
Whiteness Index	75.6	
Yellowness Index	0.3	