"STANDARD KAOLIN"

Twin Pines Minerals LLC

TPM Crude Kaolin Product

Twin Pines Crude Kaolin product is produced from the Kaolin deposits in California, USA using gravity techniques.

Typical Chemical Analysis

Component	Range (%)
TiO ₂	2.0 - 3.0
Fe ₂ O ₃	1.0 – 1.5
Al ₂ O ₃	35.0 - 37.0
SiO ₂	45.0 – 47.0

Component	Range (%)
K ₂ O	0.25 - 0.28
MgO	0.28 - 0.33
LOI ₁₀₀₀	12.0 - 13.0
pH (20%w/v)	3.80 - 4.0
Others (<0.1%)	0.25 - 0.28

Due to the varying nature of the deposits, it must be expected that some variations in the chemical analysis and particle size distribution may occur. Details of other trace elements can be provided on request.

Typical Screen Analysis

PSD	%
< 2 Microns	56.7
< 10 Microns	91.2
D ₅₀ (Microns)	1.66
D ₈₀ (Microns)	5.55

The typical size distribution can be expected to vary depending on the nature of the ore body.

Physical Properties

GE Brightness	62.6
Loose Bulk Density (lb/ft3)	53.2
Tapped Bulk Density(lb/ft3)	58.0
+325 Mesh Residue (%)	5.10
Total Crystalline Silica (%)	3.26
Respirable Silica (%)	2.30

Contact August 2021

Dean Nixon Jr Twin Pines Minerals LLC 2100-B South Bridge Parkway Suite 540 Birmingham, Alabama 35209 USA Email – cdnixon@greenfuelsenergy.com

Tel +1 205 545 8172

Fax +1 205 262 9490

