

Application

This highly basic, high purity lead silicate is an economical compound for introducing lead into a glaze and as a source of lead in the glass industry. It is available in either granulated or ground form. In the finely powdered form, it is readily soluble in dilute hydrochloric and acetic acids.

Physical Properties

Color.....Light Yellow
 Form.....Granular or ground
 Density..... 6.50 - 6.65 g/cm³
 Melting Point..... 700 - 784°C
 Coefficient of Expansion.....9.3 x 10⁻⁶ (50 - 450°C)
 Refractive Index2.00 - 2.02

Chemical Composition

PbO (litharge)	85 +/- 0.8%
SiO ₂ (silica)	15 +/- 0.8%
This composition is the eutectic mixture of lead orthosilicate and lead metasilicate.	

Trace Elements

Element	Maximum (%)	Typical (%)
Fe ₂ O ₃	0.0120	0.0060
ZnO	0.0010	0.0004
Cu ₂ O	0.0006	0.0004
Ag	0.0030	0.0015
Bi ₂ O ₃	0.0300	0.0080
As ₂ O ₅ , Sb ₂ O ₃ , SnO ₂	0.0019	<0.0010
Ni, Te, Th, Cd	0.0008	<0.0005
Co, Cr, Mn, Se	0.0002	<0.0001

Granular Packaging
1,000 kg bulk bags
2,000 lb bulk bags
Ground Packaging
50 lb / 22.68 kg Paper bags
Special packaging may be available upon request

Typical Screen Analysis (U.S. Standard Sieve)	Granular (%)	Ground (%)
greater than 8 mesh	1	0
between 8 – 10 mesh	4	0
between 10 – 20 mesh	60	0
between 20 – 40 mesh	27	0
between 40 – 80 mesh	6	0
between 80 – 100 mesh	2	0
between 100 – 200 mesh	0	0.1
Between 200 – 325 mesh	0	1.3
Less than 325 mesh	0	98.6

Note

This data sheet illustrates typical values for this product. If specific characteristics are required that are different from these values or if custom packaging is required, please contact your area sales representative.



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