

Application

This material, also known as lead alumina bisilicate, is specially formulated for use in pottery and wall-tile glazes. It is also used in low-loss dielectrics and reflective highway signs. Lead bisilicate is extremely resistant to leaching by dilute acids, including gastric juices, which reduces its toxicity and offers the maximum safety of any of the lead products. It is available in either granulated or ground form.

Physical Properties

Color.....Very Light yellow
 Form.....Granulated or ground
 Density.....4.60 - 4.65 g/cm³
 Melting Point.....788 - 816°C
 Coefficient of Expansion.....7.1 x 10⁻⁶
 Refractive Index.....1.72 - 1.74

Trace Elements

Element	Maximum (%)	Typical (%)
Fe ₂ O ₃	0.0500	0.0250
ZnO	0.0060	0.0030
Cu ₂ O	0.0006	0.0003
Ag	0.0030	0.0015
Bi ₂ O ₃	0.0300	0.0080
As ₂ O ₅ , Sb ₂ O ₃ , SnO ₂	0.0009	<0.0005
Ni, Te, Th	0.0006	<0.0004
Co, Mn, Se	0.0002	<0.0001
Cd	0.0300	0.0150
B	0.0550	0.0275

Chemical Composition

PbO (litharge)	65 +/- 0.8%
SiO ₂ (silica)	34 +/- 0.8%
Al ₂ O ₃ (alumina)	1.5 +/- 0.8%

Typical Screen Analysis (U.S. Standard Sieve)	Granular (%)	Ground (%)
greater than 3 mesh	0	0
between 3 – 10 mesh	1.3	0
between 10 – 20 mesh	81.3	0
between 20 – 40 mesh	10.0	0
between 40 – 80 mesh	134.8	0
	2.6	1
between 100 – 200 mesh	0	1.2
Between 200 – 325 mesh	0	7.8
Less than 325 mesh	0	90.0

Packaging

50 lb / 22.68 kg
Paper bags

Special packaging
available upon request

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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