

HAMMOND SILICATE

LEAD MONOSILICATE STANDARD GRADE TECHNICAL DATA

APPLICATIONS

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/cm ³
Melting Point	700° - 784° C
Coefficient of Expansion	9.3 x 10 ⁻⁶ (50-450°C)
Refractive Index	2.00 - 2.02

CHEMICAL COMPOSITION

PbO (Litharge)	85 +/- 0.8%
SiO₂ (Silica)	15 +/- 0.8%

This composition is the eutectic mixture of lead orthosilicate and lead metasilicate.

TRACE ELEMENTS

Element	Maximum %	Typical %
Iron Oxide	0.0120	0.0060
Zinc Oxide	0.0010	0.0004
Copper Oxide	0.0006	0.0004
Silver	0.0030	0.0015
Bismuth Oxide	0.0300	0.0080
Arsenic Oxide	0.0019	<0.0010
Antimony Trioxide	0.0019	<0.0010
Tin Oxide	0.0019	<0.0010
Nickel	0.0008	<0.0005
Tellurium	0.0008	<0.0005
Thorium	0.0008	<0.0005
Cadmium	0.0008	<0.0005
Cobalt	0.0002	<0.0001
Chromium	0.0002	<0.0001
Manganese	0.0002	<0.0001
Selenium	0.0002	<0.0001
Typical Screen Analysis	Granular %	Ground %
>8 mesh	1	0
8-10 mesh	4	0
10-20 mesh	60	0
20-40 mesh	27	0
40-80 mesh	6	0
80-100 mesh	2	0
100-200 mesh	0	0.1
200-325 mesh	0	1.3
<325 mesh	0	98.6

PACKAGING

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

NOTES

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.

HAMMOND
THE CHANGE CATALYST®

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