HAMMOND SILICATE

CERAFLUX® (LEAD ALUMINA BISILICATE) TECHNICAL DATA

APPLICATIONS

This material, also known as lead alumina bisilicate, is specially formulated for use in pottery and wall-tile glazes. It is also used is 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	Granular 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

CHEMICAL COMPOSITION

PbO (Litharge)	65 +/- 0.8%
SiO_2 (Silica)	34 +/- 0.8%
Al_2O_3 (Alumina)	1.5 +/- 0.8%

IMPURITIES

Element	**Maximum %**	**Typical %**
Iron Oxide	0.0500	0.0250
Zinc Oxide	0.0060	0.0030
Copper Oxide	0.0006	0.0003
Silver	0.0030	0.0015
Bismuth Oxide	0.0300	0.0080
Arsenic Oxide	0.0009	<0.0005
Antimony Trioxide	0.0009	<0.0005
Tin Oxide	0.0009	<0.0005
Nickel	0.0006	<0.0004
Tellurium	0.0006	<0.0004
Thorium	0.0006	<0.0004
Cobalt	0.0002	<0.0001
Manganese	0.0002	<0.0001
Selenium	0.0002	<0.0001
Cadmium	0.0300	0.0150
Boron	0.0550	0.0275
Typical Screen Analysis	**Granular %**	**Ground %**
>3 mesh	0	0
3-10 mesh	1.3	0
10-20 mesh	81.3	0
20-40 mesh	10.0	0
40-80 mesh	134.8	0
80-100 mesh	2.6	1
100-200 mesh	0	1.2
200-325 mesh	0	7.8
<325 mesh	0	90.0

PACKAGING

50 lb / 22.68 kg Paper 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®

Hammond Lead Products
2901 Carlson Drive, Suite 200
Hammond, IN 46323 USA
Phone: (219) 931-9360
Fax: (219) 931-2140