



HAMMILL & GILLESPIE
Specialty Clays & Minerals

Petalite - 033

Chemical Comp.	Lithium Alumino Silicate
CAS Number	1302-66-5
Appearance	White Powder
Solubility	Insoluble (in water)
Specific Gravity	2.40
Melting Point	2,400°F
Thermal Expansion	Less than $1 \times 10^{-6} / ^\circ\text{C}$

Typical Properties

Li ₂ O	3.9%
Fe ₂ O ₃	0.049%
Al ₂ O ₃	16.66%
SiO ₂	78.36%
CaO	0.12%
MgO	0.24%
TiO ₂	0.11%
K ₂ O	0.20%
Na ₂ O	0.52%

Particle Sizing 200 mesh and 35 mesh standard



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APPLICATIONS:

Petalite can be used as a source of lithia in glasses and glazes where it acts as a powerful flux to reduce melting points and to lower thermal expansions. In container glasses, lithia has been shown to both reduce the melting temperatures and improve glass production.

Petalite can also be used in refractories, such as kiln furniture, where it strongly reduces the coefficient of thermal expansion, thereby increasing resistance to thermal shock and increasing the number of cycles without cracking.