

TALC



Geographical Source:

New York
California
Vermont

Geological Source:

Metamorphic, magnesium-silicate rocks of Precambrian age (over 600 million years ago). New York talc consists primarily of mineral tremolite ($2\text{CaO} \bullet 5\text{MgO} \bullet 8\text{SiO}_2 \bullet \text{H}_2\text{O}$). Pure mineral talc is often but a minor constituent of commercial talc deposits. It is formed in several stages by reaction of hot, silica-rich solutions with beds of quartzite and metamorphic dolomite (marble). Soapstone is a form of talc.

Characteristics:

Talc may be used to make satin and matt glazes and to add diversity to glossy glazes. Talc may be used in glazes where both magnesia and silica are desired. Talc contains some calcium as an impurity which contributes to its action as a flux in glazes. Talc is used as a flux for clay bodies, especially low-fired bodies. At low temperatures, talc forms the mineral enstatite which has a high thermal expansion rate which, when incorporated in a clay body, helps glaze fit and also decreases the amount of post-fired moisture-induced body expansion.

Talc also increases the thermal shock resistance of high-temperature clay bodies.

High talc bodies also fire white, encouraging brilliant glaze colors.

Talc is also used in making paper (as a filler), paints, face and talcum powder, soap, fireproof roofing, foundry facings, lubricants, linoleum and oilcloth and electrical insulation.



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INHILATION OF TALC
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