

FIRECLAY, HAWTHORNE

SiO ₂	55.1%
Al ₂ O ₃	39.11
Fe ₂ O ₃	1.02
TiO ₂	2.08
MgO	0.85
CaO	0.15
K ₂ O	1.48
Na ₂ O	0.03
L.O.I.	13.0
P.C.E.	32 – 33.0

Geographical Source:

Missouri

Geological Source:

Sedimentary deposits in deep fresh water.

Ancient swamps metamorphosed into layers of coal and clay.

Characteristics:

Fire clays have a coarse particle size and a high resistance to heat with a minimum firing range of 2700°F. They are the backbone of stoneware claybodies.

Fireclays contain at least three primary minerals:

1. Up to 50% coarse grained crystalline quartz or sandstone
2. 15% or more fine-grained kaolinite or livesite, contributing to plasticity.
3. 30% or more hydrous mica

Hawthorne exhibits good plasticity.