



Technical Data Sheet.

Product Name: Gerstley Borate.

Product Reference: P3356

Product Characteristics.

GERSTSLEY BORATE is an ore which contains a mixture of the minerals Colemanite ($\text{Ca}_2\text{B}_6\text{O}_{11} \cdot 5\text{H}_2\text{O}$) and Ulexite ($\text{NaCaB}_2\text{O}_9 \cdot 8\text{H}_2\text{O}$). In addition to these mineral, this ore also contains some associated gangue (commercially worthless material that surrounds, or closely mixed with the wanted mineral in an ore deposit).

The calcium borate and sodium calcium borate found in this ore offer a form of borate which is very slowly soluble in water.

Appearance: A cream-buff coloured fine ground powder.

Chemical Name: Oxide Composition(%).

Boric Oxide (B_2O_3): 28.0% (approximately)

Sodium Oxide (Na_2O): 5.3%

Calcium Oxide (CaO): 20.6%

Water of Crystallization: 25.0%

Free Water: 0.3%

Water insoluble (inert shales): 18.7%

Bulk Density: Pounds/cubic foot.

Loose Pack: 49

Tight Pack: 62

Uses.

Constituent in raw glazes and ceramic bodies also as a bonding agent in grinding wheels and as a fire retardant.