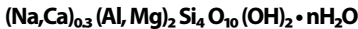




Minerals

Montmorillonite



Crystallography:

Monoclinic. Always in earthy masses; crystals not distinguishable.

Physical Properties:

Cleavage: None apparent; usually unctuous and plastic.

Hardness: 1.0-1.5.

Specific Gravity: 2.0-2.5.

Luster: Greasy or dull, earthy.

Color: Usually gray or greenish-gray, but may be white, yellow, greenish, pink or brown. Opaque.

Streak: White.

Composition/Features:

An aluminum-rich clay mineral known for its clay-like character, soapy feel, and the property of swelling to form a gel-like mass in water. Similar in composition to other clay minerals, and best distinguished by X-ray tests.

Occurrence/Use:

Montmorillonite is the dominant clay mineral in bentonite, an altered volcanic ash. Generally forms as an alteration product of aluminum-rich minerals. Useful in industry for its physical properties of cation exchange and expanding in water.