

Muscovite

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General Mineral Formula: $KAl_2(AlSi_3O_{10})(OH, F, Cl)_2$

Mineral Chemical Class: Inosilicates : Phyllosilicate

Specific Gravity: 2.7-3.0

Hardness: 2-2.5

Cleavage: 1,1

Luster: Pearly

Streak: Colorless

Characteristic Color(s): Colorless, white, beige, yellow

Crystal System: Monoclinic

Crystal Class:

Crystal Description (common forms, habit, etc.): Crystals are in thin flakes, micaceous masses and groupings. In tabular, foliated, flaky and scaly forms. May also be elongated with one dimension flat. Or, stubby triangular or hexagonally shaped crystals. Can form aggregates of dense bladed crystals with uniquely twinned star-shaped formations.

¹pure muscovite

²muscovite in a rock

Environment (where you find the material): Very common rock forming mineral. Found in granite pegmatites and contact metamorphic rocks and metamorphic schists or hydrothermal veins.

Common Mineral Associations (in samples, also consult text, notes): Albite, quartz, mirocline

Scientific Usage/Significance:

Industrial or Social Use/Significance: Insulator for various electrical products and semiconductors. Also used to produce automotive tires and cosmetics. Large sheets once used for oven windows.

Environmental Significance: