



# Minerals

## Barite

**BaSO<sub>4</sub>** (Barite Group)

### Crystallography:

Orthorhombic;  $2/m2/m2/m$ . Crystals usually tabular on {001}; often diamond-shaped. May also be coarsely laminated; granular, earthy.

### Physical Properties:

**Cleavage:** {001} perfect, {210} less perfect. Fracture uneven; brittle.

**Hardness:** 3.0-3.5.

**Specific Gravity:** 4.5.

**Luster:** Vitreous; on some specimens pearly at base.

**Color:** Colorless, white and pale shades of blue, yellow, or red.

Transparent to translucent.

**Streak:** White.

### Composition/Features:

A barium end-member of a solid solution series where Ba, Sr, and Pb form an isostructural group of sulfate minerals. Group members include barite (Ba), celestite (Sr), and anglesite (Pb). Barite is recognized by its high specific gravity (feels heavy) and characteristic cleavage and crystal form.

### Occurrence/Use:

Barite is a common gangue mineral in hydrothermal ore veins. It is also found in limestone veins with calcite. It is the chief source of barium for chemicals and is used in oil and gas-well drilling as a heavy mud.