

# **Minerals**

## **Beryl**

## Be<sub>3</sub> Al<sub>2</sub> Si<sub>6</sub> O<sub>18</sub>

### Crystallography:

Hexagonal; 6/m2/m2/m. Strong prismatic habit; frequently vertically striated and grooved. Forms usually present consist only of  $\{10\overline{1}0\}$  and  $\{0001\}$ .

#### **Physical Properties:**

Cleavage: {0001} imperfect and indistinct. Fracture conchoidal to uneven; brittle.

Hardness: 7.5-8.0.

Specific Gravity: 2.65-2.8.

Luster: Vitreous.

Color: Commonly bluish-green or light yellow; may be deep emerald green,

gold-yellow, pink, white, or colorless. Transparent to translucent.

Streak: White.

#### Composition/Features:

A beryllium aluminum silicate usually recognized by its hexagonal crystal form and color. Color serves as the basis for several varietal names of gem beryl, including aquamarine (blue-green), emerald (deep green), and morganite (rose pink). Beryl is distinguished from apatite by greater harness and from quartz by higher specific gravity. Insoluble in acids.

#### Occurrence/Use:

In non-gem varieties, beryl is rather common and found in granitic rocks or pegmatites. The principle source of beryllium.

