



# Minerals

## Corundum



### Crystallography:

Hexagonal-R;  $\bar{3}2/m$ . Crystals commonly tabular on {0001} or prismatic {11 $\bar{2}$ 0}; often rude barrel-shaped crystals. Usually massive; coarse or fine granular.

### Physical Properties:

**Cleavage:** None. Displays rhombohedral and basal parting; parting fragments may appear nearly cubic. Fracture: Uneven to conchoidal; hard, brittle.

**Hardness:** 9.0

**Specific Gravity:** 4.02

**Luster:** Adamantine to vitreous.

**Color:** Usually shades of brown, pink, or blue, but can be almost any color. Transparent to opaque.

**Streak:** White.

### Composition/Features:

An aluminum oxide, Al (52.9%), O (47.1%). May contain trace amounts of Cr, Fe, or Ti. Characterized by its great hardness, high luster, specific gravity, and parting. Infusible; insoluble.

### Occurrence/Use:

A common accessory or original component in some metamorphic and igneous rocks. Also found as crystals and rolled pebbles in detrital soil and stream sands. Gem varieties include *ruby* (red) and *sapphire* (non-red). *Emery* is black, granular corundum usually mixed with hematite or magnetite and used as an abrasive.