

Minerals

Quartz (variety Amethyst)

Si O₂

Crystallography:

Hexagonal -*R*;32 (low quartz). Hexagonal; 622 (high quartz). Crystals not common. Usually massive, coarsely crystalline.

Physical Properties:

Cleavage: Generally none; occasional indistinct rhombohedral parting.

Fracture conchoidal; brittle.

Hardness: 7.0.

Specific Gravity: 2.65.

Luster: Vitreous; dull to splendent.

Color: Shades of violet, due to small amounts of iron. Translucent to transparent.

Streak: White.

Composition/Features:

Most nearly a pure chemical compound of silicon and oxygen with constant physical properties. Characterized by its violet color, glassy luster, conchoidal fracture, hardness, and crystal form. Infusible. Insoluble except in hydrofluoric acid.

Occurrence/Use:

Crystals very common. Usually occurs in cavities lining volcanic rocks. Much used as an ornamental and semi-precious stone.

