

Minerals

Quartz (variety Chalcedony)

SiO₂

Crystallography:

Hexagonal -R; 32 (low-quartz). Hexagonal; 622 (high quartz). Cryptocrystalline; massive. Often, mammillary, botryoidal, or stalactitic.

Physical Properties:

Cleavage: Generally none; occasional indistinct rhombohedral parting.

Fracture conchoidal; brittle.

Hardness: 7.0.

Specific Gravity: 2.6. **Luster:** Usually waxy.

Color: White, grayish, blue, brown, or multicolored. Translucent to opaque.

Streak: White.

Composition/Features:

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

Occurrence/Use:

Deposited from aqueous solutions and often found lining or filling cavities in rocks. Some forms may be used as gemstones.

