



# Minerals

## Quartz (variety Jasper)

$\text{SiO}_2$

### Crystallography:

Hexagonal -R; 32 (low-quartz). Hexagonal; 622 (high quartz). Cryptocrystalline; massive granular.

### Physical Properties:

**Cleavage:** Generally none; occasional indistinct rhombohedral parting. Fracture conchoidal; brittle.

**Hardness:** 7.0

**Specific Gravity:** 2.60

**Luster:** Dull to sub-vitreous.

**Color:** Commonly red, also yellow, dark green, grayish-blue. Subtranslucent to opaque.

**Streak:** White.

### Composition/Features:

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

### Occurrence/Use:

An opaque, impure, colored quartz associated with iron ores and containing iron-oxides that give the material its various colors. Sometimes used as a lapidary material.