

# Silica Glass

## **Alternative Designations**

SiO2

Key Features

Inert to most substances • Resistance to thermal shock • High purity

## Description

Silica glass is an isotropic material commonly seen as the glassy form of quartz. It is tough, hard, and expands slowly. Vitreous silica is the generic term that describes all forms of silica glass. The two major types of silica glass are: fused quartz and fused silica. Both materials allow transparent fusions from the sand. This material works well in electrical and thermal insulation due to its appealing electrical properties and high electrical resistivity.

### **Mechanical Properties**

### **Thermal Properties**

Tensile modulus	7400 MPa	Melting temperature (20°C/min)	1600°C
Tensile strength	49 MPa		
Flexural strength	65 – 95 MPa		
Hardness (Shore D)	5.5 – 5.6		

## **Physical Properties**

Density 2.2 g/cm<sup>3</sup>

#### Reference

Datasheets provided by Xometry contain materials sourced through trusted OEMs, material distributors, and databases. Please visit <u>Materialdatacenter.com</u> for further information on this material.