

# Mica

## Characteristics

Muscovite (white mica) and phlogopite (bronze mica) are the types of mica generally used. Muscovite is also called hard mica, and phlogopite is called soft mica, according to the relative hardness.

Mica has thin layers that can easily be sheared off, while also being elastic, so it is widely used as an insulating material for electrical devices.

The pearlescence of mica is also utilized in decorative coatings.

Characteristics include

1. Formed of thin sheets with a high aspect ratio
2. High coefficient of elasticity  
(the elasticity is 2.5 times greater than E-glass, and specific gravity is also about double.)
3. Low hardness
4. Fire resistance (High dehydration temperature, with almost no change in shape)
5. High withstand voltage

It is used as filler in a variety of fields, including plastics, rubbers, construction materials and paper manufacture, mainly to increase volume, enhance strength, and/or add functionality.

## Product List (representative values)

Mineral name		White mica /Muscovite	Bronze mica/ Phlogopite
Region of origin		China	Finland
Chemical composition (%)	lg.loss	4.8	1.2
	SiO <sub>2</sub>	45.2	41.0
	Al <sub>2</sub> O <sub>3</sub>	32.3	10.2
	Fe <sub>2</sub> O <sub>3</sub>	4.9	3.2
	MgO	0.9	23.5
	TiO <sub>2</sub>	0.2	0.2
	K <sub>2</sub> O	10.5	12.2
	F	tr	1.4

Consult us for the right size for your application, from 7.5 mm to 3μm

## Applications

Construction materials, resin filler

## Delivery formats

- Flexible containers
- Paper bag