

53100 Mica, fine, wet grinding

Mica are potassium-aluminium silicates. Wet ground mica are a mixture of 36 % aluminium oxide (alumina) and 47 % potassium oxide (silicid acid). The remaining 17 % are 10 % potash and small amounts of iron oxide, fluorine, magnesium oxide, water and sodium carbonate.

Appearance: Very fine white powder; particle size between 15 and 40 µm.

Chemical Analysis:

SiO ₂	46.610 %
Al ₂ O ₃	34.670 %
K ₂ O	10.390 %
Fe ₂ O ₃	2.220 %
MgO	0.578 %
Na ₂ O	1.140 %
CaO	0.125 %
TiO ₂	0.145 %
MnO	0.010 %
P ₂ O ₅	0.096 %
Cr ₂ O ₃	0.010 %
ZnO	0.002 %
ZrO ₂	0.010 %

Ignition loss (2 hours at 1000°C): 5.340 %

Heavy Metal Analysis:

Mercury:	< 5 mg/kg
Lead:	< 5 mg/kg
Bismuth:	< 5 mg/kg
Tin:	< 5 mg/kg
Selenium:	< 5 mg/kg
Arsenic:	< 5 mg/kg
Antimony:	< 5 mg/kg

Physical Data:

Specific weight:	2.85
Bulk density:	0.32 g/cm ³
Vibration density:	0.50 g/cm ³
Refractive index:	1.5 -1.7
Color stability:	perfect
Heat stability:	600°C
Calcination:	600 – 1000°C



Melting point:	approx. 1500°C
Hardness (Mohs):	2.5
pH-Value:	7.5 – 9.5
Solubility:	not soluble
Oil absorption:	ca. 75 g linsed oil per 100 g mica

Particle size distribution:	
45 µm:	5.50 %
80 µm :	0.70 %
160 µm :	traces