

About Wollastonite

Wollastonite is a silicate mineral with the chemical formula CaSiO_3 . It is typically white to gray in color with a glassy luster. The crystalline form is spicular or massive.

Region of Origin

Major producers worldwide include China, USA, Mexico, and India. Our company uses sources in China and USA for the raw materials, and performs the pulverization at our headquarters and Chinese factories. We also handle products from NYCO (USA).

Typical Characteristics

Mineral name	Wollastonite
Chemical name	Calcium metasilicate
Chemical formula	CaSiO_3
Specific gravity	2.80~2.95
Melting point	1,540°C
Mohs scale hardness	4.5~5.0
pH (10% slurry)	9.5~10.5
Aspect ratio	3~20
Refractive index	1.63
Coefficient of thermal expansion	$6.5 \times 10^{-6} / ^\circ\text{C}$



China-sourced raw ore

Product List (representative values)

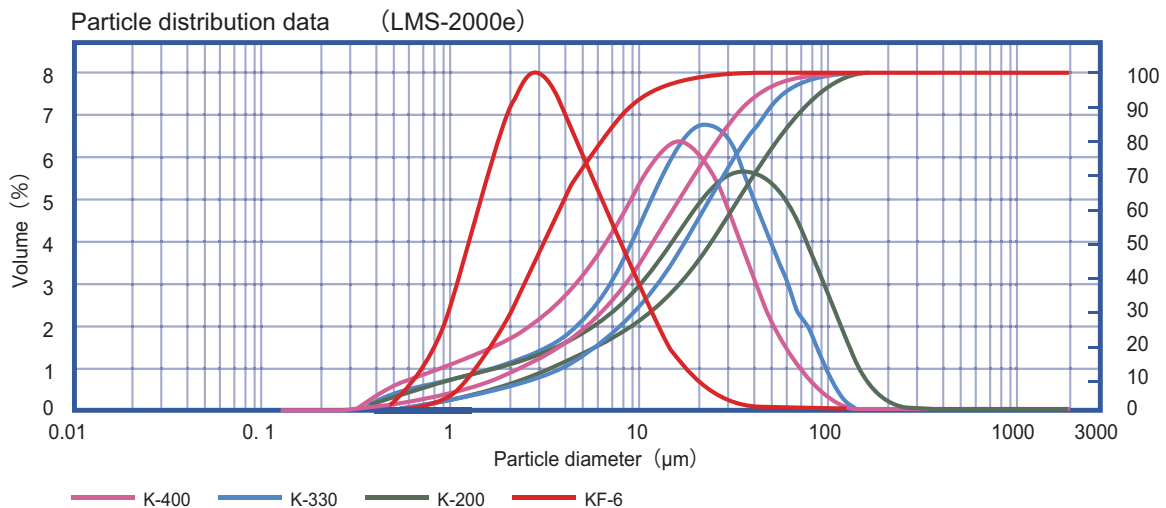
Product name		Short fiber products			Long fiber products			Fine fiber products	
		K-200	K-330	K-400	H-11	H-08	HD-12	KF-6	KH-6
Chemical composition (%)	Ig.loss	1.04			3.21			0.88	3.01
	SiO ₂	51.36			49.09			51.58	49.14
	Al ₂ O ₃	0.35			0.47			0.38	0.55
	Fe ₂ O ₃	0.29			0.35			0.32	0.37
	MgO	0.88			0.69			0.81	0.66
	CaO	46.05			46.07			45.86	46.10
	K ₂ O	0.02			0.08			0.12	0.09
	Na ₂ O	0.00			0.02			0.05	0.03
Properties Bulk specific gravity	Loose	0.87	0.84	0.75	0.55	0.46	0.30	0.18	0.20
	Tapping	1.27	1.16	1.15	0.90	0.75	0.71	0.50	0.52
	Wet volume (cc/g)	-	-	-	1.93	2.23	2.73	-	-

Features

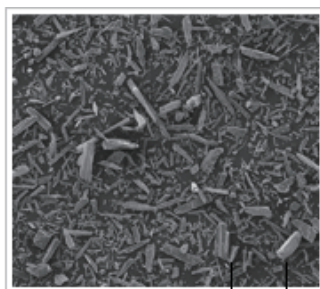
- For a Plastic : To improve flexural modulus, dimensional stability and surface smoothness.
- For a paint : Anti-sagging.Prevention of reflective cracking. To improve coating film strength.

Grain Distribution (typical values)

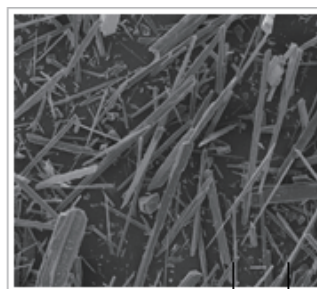
Product name		Short fiber products			Long fiber products			Fine fiber products	
		K-200	K-330	K-400	H-11	H-08	HD-12	KF-6	KH-6
Granularity (%) (low type)	+250(μm)	1.2	tr	tr	2.00	0.5	1.4		
	-45(μm)	75.0	99.5	99.8	12.0	19.0	17.2		
Average fiber length(μm)					300	200	250		
Average fiber diameter(μm)					15	8	12		
Average particle diameter(μm)		28.2	19.0	13.5				8.5	9.5



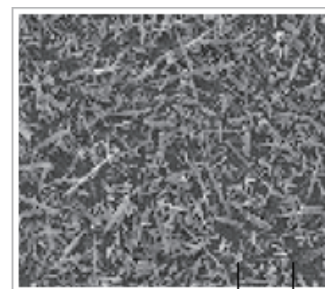
Microscope images



K-200 100 μm



H-08 100 μm



KF-6 100 μm

Applications

- Short fiber grade : Powder products
Used as a component in the production of steel, refractories and ceramic panels
- Long fiber grade : Products with good quality acicular crystal formation
Used mainly for construction materials, paints & coatings, and ceramic panels
- Fine fiber grade : Filler for a resin and paint, Filler for a rubber and bonding agent,
Glass fiber cost reduction

Delivery formats

- Flexible containers : 800 to 1,000kg (Short fiber), 650kg or less (Long fiber),
200 to 300kg (Fine fiber)
- Paper bags : 20kg or 25kg (Short fiber/Long fiber), 10kg (Fine fiber)
- Bulk carriers : Loose