

High-performance chemical and mineral specialties. Since 1894.



## **KEMOLIT and FILLEX**

Wollastonite grades  
for foundry, ceramics,  
abrasives and industrial  
applications

# Properties and applications

## Technical properties

- Steel cover powder, slag conditioner
- CaO source, flux in welding.
- Increases green strength and burn resistance, low distortion
- Gloss preserving, less glaze defects, cracks, crazing
- Heat dissipating, increases dimensional stability
- Reinforcing effect, better bonding with other fillers



Foundry and steel production



Welding and Shop Primer



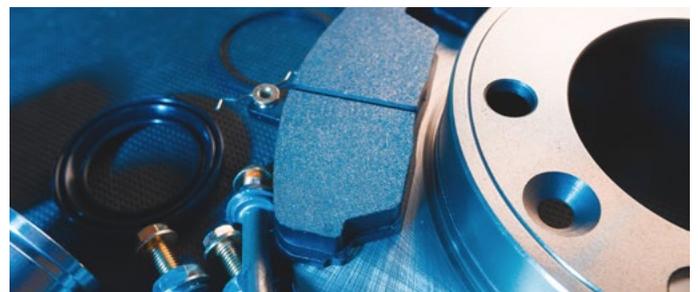
Ceramics, before and during firing



Glazes and engobes, frit additive



Abrasives and abrasive materials



Industrial friction linings, OEM brake linings



**Talk to our experts.**

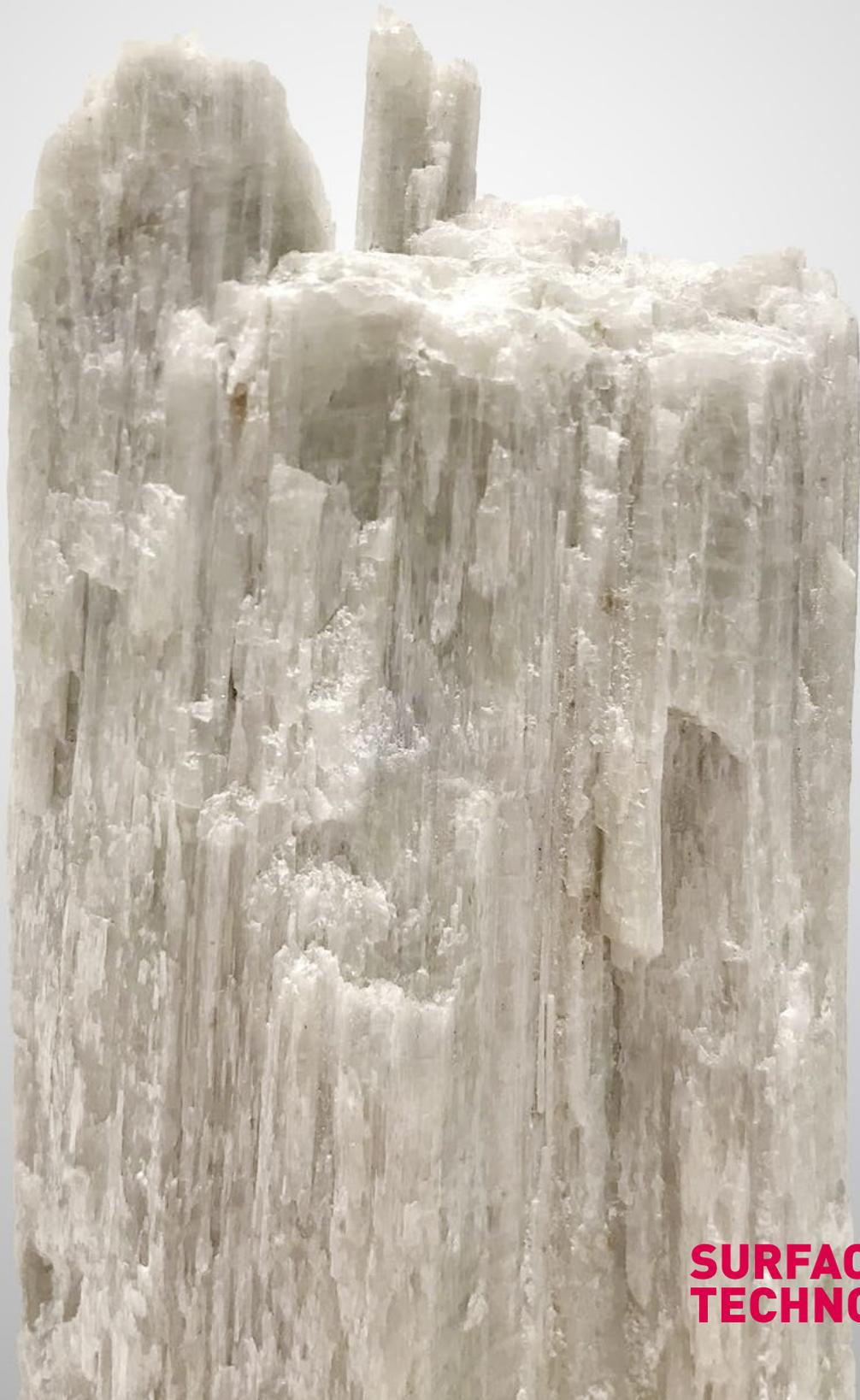
Scan the code for contact details.

[www.lehvoss-surfacetec.de](http://www.lehvoss-surfacetec.de)

## Wolkem India Ltd.:

Highly functional wollastonite grades for foundry, ceramics, abrasives and industrial applications

WOLLASTONITE of the KEMOLIT series is an acicular, naturally occurring calcium metasilicate, its chemical composition is  $\text{CaSiO}_3$ . Kemolite occurs in acicular, finely ground to micronised form depending on the aspect ratio. Wollastonite of the Fillex series are surface-treated and can be produced individually.

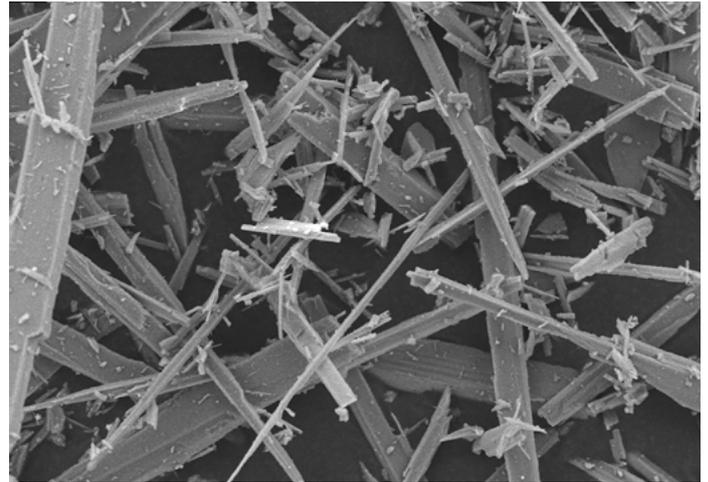


**SURFACE  
TECHNOLOGY**

# WOLKEM Wollastonit series

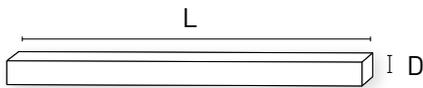
KEMOLIT has a rod length of 10 µm to max. 1,200 µm, in aspect ratio there are types with a low ratio of 3:1 as well as high ones with a ratio up to 10:1. The pH value of KEMOLIT is approx. 9, wollastonite is temperature resistant up to 1,540 °C, Moh's hardness is 4.5, chemically inert, low moisture. For individual end-uses, products with different LOI values can be offered on request.

FILLEX are surface-treated wollastonite grades especially for the plastics and adhesives industry. Depending on the industrial binder system, different silanes improve the mechanical properties of the moulded part with regard to embedding in the respective matrix. The needle-shaped wollastonite reduces warpage and increases heat distortion temperature even in high-temperature applications.

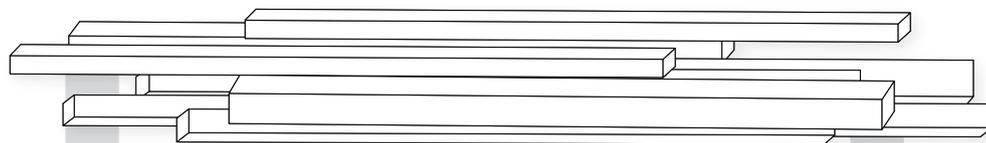


**Dosage**  
**Packaging**      Depending on the application  
 Bags of 25 kg netto / BigBag  
 750 kg / 900 kg / 1,000 kg

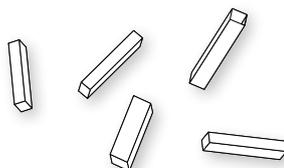
## What does the aspect ratio describe



Aspect Ratio =  $L / D$

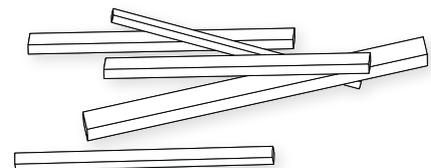


Standard Milling



Low Aspect Ratio 3:1 to 5:1  
 Blocky coarse and fine particles

Engineered Milling



High Aspect Ratio 6:1 to 10:1  
 Fine acicular needle structure

## Product data

The product is not a dangerous substance or mixture of dangerous substances according to Regulation (EC) No 1272/2008 and does not require labelling.

Product	Rod Length max.	Markets & Application good experience	Technical Performance	Aspect Ratio [L / Ø]	brightness [comp. 100% MgO]
<b>KEMOLIT KW-4</b>	55 µm	Ceramics, glazes, engobes, frit additive	Fire resistance, low distortion, gloss retaining, fewer glaze defects, high brightness	4:1	78
<b>KEMOLIT H-3</b>	70 µm	Industry, ceramics, friction pads	Thermal insulation and stability, fire resistance, low distortion, heat dissipating, economical	4:1	66
<b>KEMOLIT KW-3</b>	70 µm	Industry, ceramics, friction pads, abrasives	resistant up to 1.540°C, heat dissipating, higher dimensional stability, high brightness	4:1	78
<b>KEMOLIT KWB-200</b>	80 µm	Industry, ceramics, glazes, engobes	Burn resistance, low distortion, gloss retention, fewer glaze defects, high brightness	3:1	81
<b>KEMOLIT KW-1</b>	125 µm	Industry in general, friction pads, abrasives	resistant up to 1.540°C, heat dissipating, higher dimensional stability	5:1	76
<b>KEMOLIT H-60</b>	200 µm	Industry and ceramics in general	Thermal insulation and stability, fire resistance, low warpage, economical	6:1	Off white
<b>KEMOLIT KSV-60N</b>	250 µm	Industry, ceramics, glazes, engobes	Burn resistance, low distortion, gloss retention, fewer glaze defects, high brightness	9:1	72
<b>KEMOLIT KW-HW</b>	250 µm	Steel and ceramics in general, industry, friction pads	Thermal insulation and stability, resistant up to 1.540°C, heat dissipating, economical	10:1	68
<b>KEMOLIT K-60</b>	250 µm	Steel and ceramics, silicate boards, friction pads	Thermal insulation and stability, resistant up to 1.540°C, flux reaction, heat transferable	8:1	74
<b>KEMOLIT KW-60</b>	250 µm	Steel and ceramics, silicate boards, friction pads	Thermal insulation and stability, resistant up to 1.540°C, flux reaction, heat transferable	6:1	70±2
<b>KEMOLIT KM-60</b>	500 µm	Foundry, steel production, ceramic industry, friction pads	Slag conditioner, cover powder, improved green and burn resistance, heat transferring	7:1	-
<b>KEMOLIT D1</b>	1.100 µm	Foundry, steel production, ceramic industry, friction pads	Slag conditioner, cover powder, improved green and burn resistance, heat transferring	5:1	-
<b>KEMOLIT D2</b>	1.200 µm	Foundry, steel production, ceramic industry, friction pads	Slag conditioner, cover powder, improved green and burn resistance, heat transferring	5:1	-
<b>FILLEX® 1AF1 (KW)*</b>	250 µm	Brake, friction and clutch linings, grinding and abrasive bodies	*Surface treated, heat dissipating, higher dimensional stability, better bond in the binder	10:1	-
<b>FILLEX® 2AH3 (KW)*</b>	250 µm	Brake, friction and clutch linings, grinding and abrasive bodies	*Surface treated, heat dissipating, higher dimensional stability, better bond in the binder	8:1	70±2

\* Fillex products are surface-treated.

Further information on the application, properties and processing of this product is available on request. All data correspond to technical product information.

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