

Platelet-Shaped Corundum *PLK*



Coated quality (PLK-SIL) is available.

► Product Description

Platelet-shaped corundum (PLK) is a highly pure aluminium oxide (Al_2O_3) with platelet-shaped particle morphology. The material is characterized by its high chemical purity as well as its pronounced mechanical and thermal properties and is used as a functional filler and as an abrasive in industrial applications. The special particle shape enables targeted influencing of surface properties and material systems.

► Technical Properties

Colour:	white
Density:	approx. 3.9 g/cm ³
Mohs hardness:	9
Melting point:	Approx 2040 °C
Thermal conductivity:	approx. 41.9 W/(m·K)

► Chemical Composition (average analysis)

Component	PLK Z 360 (wt.%)	PLK Z 800 (wt.%)
Al_2O_3	99.64	99.78
SiO_2	0.03	0.03
Fe_2O_3	0.10	0.05
Na_2O	0.15	0.07
CaO	0.02	0.02
Loss on ignition (1025 °C)	-0.22	-0.13

Additional trace components (K_2O , MgO , TiO_2 , ZrO_2 , Mn_3O_4 , Cr_2O_3 , P_2O_5 , SrO) ≤ 0.01 wt.% each.

► Grain Sizes and Classification

Type	d_3	d_{50}	d_{94}
360	< 40	16.3 – 24.3	> 8
500	< 25	8.3 – 13.8	> 3
600	< 19	5.5 – 10.3	> 2
800	< 14	3.7 – 7.5	> 1
1000	< 10	2.5 – 5.3	> 0.85
1200	< 7	1.6 – 3.5	> 0.8

► Typical Applications

- ▶ Additive for scratch resistance in coatings and paints
- ▶ Polishing applications
- ▶ Electrically insulating, thermally conductive filler

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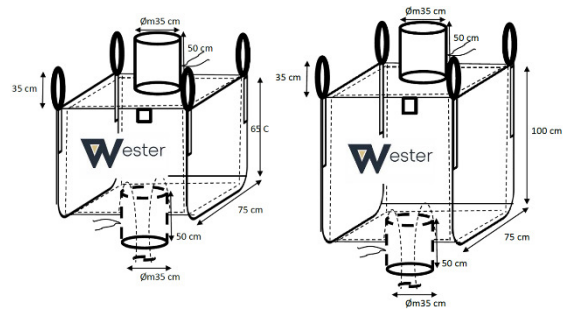
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► Performance Characteristics

- ▶ platelet-shaped particle morphology
- ▶ high hardness
- ▶ high thermal conductivity
- ▶ electrically insulating behaviour
- ▶ suitable for functional filler applications

► Packaging and Delivery

- ▶ 25 kg paper sacks
Shipping up to 50 kg per package
From 75 kg on pallet with shrink hood
- ▶ 0.5 – 1.5 t PP big bags (ISO 21898)
with or without inliner
on pallet with shrink hood.
- ▶ Each batch is labelled with:
product name, batch number, quantity, and production date.



► Storage

For optimal product quality:

- ▶ protect from moisture
- ▶ avoid excessive sun exposure
- ▶ store at moderate temperatures
- ▶ reseal opened containers
- ▶ store on stable surfaces

► Note

The above information reflects our current experience. Users are responsible for verifying suitability for their specific application. Liability is governed by contractual agreements unless otherwise specified by law.

► Contact

If you have any questions regarding shelf life and storage, please feel free to contact us – we will be happy to advise you at any time. The selection of the appropriate grain size and specification depends on the application and process parameters; technical support is also available upon request.