

**PRODUCT SHEET** 

# **CERATOSIL® TK**



# **Description:**

CERATOSIL® TK is a activated calcium bentonite made from selected raw clays. It is especially suited for technologies in which the outstanding water retaining, swelling, lubricating, sealing, sorption or binding capability of an active bentonite is necessary. Further more it is improveing green strength and extrusion behaviour of ceramic bodies. Production processes especially of structural and technical ceramics are optimized.

CERATOSIL® TK ist ein aktivierter Calciumbentonit aus ausgewählten Rohtonen. Besonders geeignet für Technologien, bei denen die hervorragende Wasserhalte-, Quell-, Schmier-, Dicht-, Sorptions- oder Bindefähigkeit eines Aktivbentonits erforderlich ist. Weiter verbessert er die Rohbruchfestigkeit und das Extrusionsverhalten keramischer Massen. Die Herstellprozesse von Bau- und technischen Keramiken werden optimiert.

# **TYPICAL PROPERTIES**

Color	green-beige
Form	powder
Moisture content	6 - 13%
Bulk density	750-850 kg/m³
methylen blue adsorption	220-320 mg/g
Swelling volume (H2O dest.)	approx. 25 ml/2 g
Enslin-Neff (H20 dest., 24 h)	approx. 500%
pH value	9-11
Sieve residue (>63 µm dry)	10-30%

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## MINERALOGICAL COMPOSITION

Main mineral	Montmorillonite
Accompanying minerals:	
Quartz	3 - 7%
Mica	2 - 4%
Feldspar	1 - 3%
Calcite	0 - 1%
Dolomite	1 - 3%

# **CHEMICAL COMPOSITION**

SiO <sub>2</sub>	54%
$Al_2O_3$	19%
TiO <sub>2</sub>	0.3%
Fe <sub>2</sub> O <sub>3</sub>	6%
MgO	4%
CaO	4%
Na <sub>2</sub> O	2.5%
K <sub>2</sub> O	1.5%
MnO <sub>2</sub>	0.05%
Loss of ignition (1000°C)	9%
Fluoride	0.1%

The expressed values of the accompanying components can vary by  $\pm 20\%$  due to natural dispersion of the raw material.

Packaging: bulk, big bags, bags

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