

The plastic clay with low pit moisture develops friendly yellow colours in oxidation firing and a particularly beautiful range of colourful autumn shades in reduction firing. It is mainly used in structural ceramics, but it is also applied as an Al<sub>2</sub>O<sub>3</sub> source in glass mixtures or as filler.

## CLAY GFU

|  |                                |          |      |
|--|--------------------------------|----------|------|
| Chemical analysis calcined [%]                                     | SiO <sub>2</sub>               | 66,1     |      |
|  | Al <sub>2</sub> O <sub>3</sub> | 26,7     |      |
|  | TiO <sub>2</sub>               | 1,81     |      |
|  | Fe <sub>2</sub> O <sub>3</sub> | 3,42     |      |
|  | CaO                            | 0,48     |      |
|  | MgO                            | 0,86     |      |
|  | K <sub>2</sub> O               | 0,56     |      |
|  | Na <sub>2</sub> O              | 0,08     |      |
| Loss on ignition [%]   |                                | 9,30     |      |
| Mineralogical Composition [%]                                      | Kaolinit                       | 48,1     |      |
|  | Illit                          | 13,1     |      |
|  | Quarz                          | 34,9     |      |
| Particle size distribution [%]                                     | > 63 µm                        | 6,5      |      |
|  | 20-63 µm                       | 7,0      |      |
|  | 6,3-20 µm                      | 15,7     |      |
|  | 2-6,3 µm                       | 20,4     |      |
|  | < 2 µm                         | 50,4     |      |
| Dry bending strength [N/mm <sup>2</sup> ]                          |                                | 8,7      |      |
| Drying shrinkage [%]   |                                | 7,6      |      |
| Firing shrinkage [%]   | 1000°C                         | 2,4      |      |
|  | 1100°C                         | 5,1      |      |
|  | 1200°C                         | 6,6      |      |
| Water absorption [%]   | 1000°C                         | 9,6      |      |
|  | 1100°C                         | 6,6      |      |
|  | 1200°C                         | 4,1      |      |
| Coefficient of expansion<br>α [×10 <sup>-6</sup> K <sup>-1</sup> ] | pre fired 1070°C               | 20-500°C | 6,7  |
|  |                                | 20-600°C | 7,7  |
| Coefficient of expansion<br>α [×10 <sup>-6</sup> K <sup>-1</sup> ] | pre fired 1230°C               | 20-500°C | 10,2 |
|  |                                | 20-600°C | 10,1 |
| Refractoriness   | 1660°C                         | SK 29    |      |
| Firing colour  |                                | yellow   |      |

Available: • raw lumpy • shredded • directly ground • dry ground up to < 63 µm

The quoted data are mean values. Sale is by sample and according to our terms of delivery.