



PRODUCT SHEET

Title **FRAMIAL®**
Aluminum hydroxide special

Standard TU 1711-015-40705684-2006

Grades FRAMIAL® -25, -15, -10, -05, -03, -01
Manufacturer GEOKOM, Russia, Kaluga region,
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Product description granular or fine dry powder of the white color

Mineral formula Aluminum hydroxide gibbsite structure

Chemical formula

| | |
|--------------------------------------------------------------------|---------|
| Al(OH) ₃ | >99,5% |
| Fe ₂ O ₃ | < 0,03% |
| Water-soluble salts | < 0,12% |
| SiO ₂ | < 0,1% |
| Na ₂ O+K ₂ O in account of Na ₂ O | < 0,4% |

Physical and other parameters

| | |
|-------------------------------------|-------------|
| Density, g/cm ³ | 2,4 |
| Hardness (Mohs) | 2,5÷3,5 |
| Refractive Index | 1,56÷1,58 |
| pH Index | 8÷10 |
| Humidity,% | < 0,3 |
| Permittivity (ISO 787-14) | < 100 µS/cm |
| Losses on ignition (800 °C, 1 hour) | > 34% |

Packaging:

- polypropylene containers with polyethylene liners, 250-1000 kg each;
- paper valve bags of 10-50 kg on pallets (up to 1200 kg) using transport protection materials.





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Typical technological quality parameters of special aluminium hydroxide FRAMIAL®

| Parameters | FRAMIAL® | | | | | | |
|------------------------------------------------------------------------------------------|----------|---------|---------|---------|---------|---------|---------|
| | 25 | 15 | 10 | 05 | 03 | 01 | 95 |
| Mass fraction of the sieve residue,% | | | | | | | |
| №0063 | 2,0 | 0,5 | | | | | |
| №0045 | 5,0 | 2,0 | 0,1 | 0,05 | 0,03 | 0,00 | 0.00 |
| Mass fraction of particles with an equivalent sphere diameter,%, size (Microsizer-201A): | | | | | | | |
| менее 20 µm | 45 | 70 | 95 | 98 | | | |
| менее 10 µm | 12 | 30 | 50 | 70 | 95 | | |
| менее 5 µm | 7 | 10 | 20 | 50 | 70 | 95 | 99 |
| менее 2 µm | 1 | 3 | 5 | 15 | 30 | 60 | 95 |
| Median particle diameter, µm (Microsizer-201A): | | | | | | | |
| medium (D ₅₀) | 25 | 15 | 10 | 5 | 3 | 1,8 | 1.3 |
| maximum (D ₉₈) | 80 | 60 | 35 | 25 | 18 | 12 | 4 |
| minimum (D ₁₀) | 10 | 5 | 3 | 2,5 | 1 | 0,8 | 0.6 |
| Chromatic preferences: | | | | | | | |
| whiteness CIELab (ISO 787/1, C/2°), % | 96 | 97 | 97,5 | 97,5 | 97,5 | 98 | 99 |
| lightness (L) by CIELab,% | 97 | 98 | 98,5 | 98,5 | 98,5 | 99 | 99.5 |
| brightness DIN 53163 (R _y , C / 2 °),% | 92 | 94 | 95 | 95 | 95 | 96 | 97 |
| yellowness according to ASTM D1925-70 (C / 2 °),% | 8 | 4,5 | 3,5 | 3,5 | 3,5 | 3,5 | 3.5 |
| brightness by ISO 2470 (R ₄₅₇), % | 88 | 93 | 94 | 94 | 94 | 95 | 96 |
| whiteness by ISO 11475 (D ₆₅ /10°), % | 79 | 84 | 87 | 87 | 87 | 88 | 90 |
| Oil absorption (ISO 787/5, g / 100 g) | 22 | 24 | 25 | 28 | 32 | 35 | 39 |
| DOP absorption (ISO 787/5, g / 100 g) | 32 | 33 | 35 | 37 | 39 | 42 | 45 |
| Density (ISO 787/11), g / cm3 | 1,0÷1,2 | 0,8÷1,0 | 0,6÷0,8 | 0,5÷0,7 | 0,4÷0,6 | 0,3÷0,5 | 0.2-0,3 |

The technical information provided here corresponds to the current production regulations, is confirmed by regular factory tests of the products, is as typical as possible, but should not be interpreted as a mandatory specification. It is subject to verification also if there are assumptions about unacceptable conditions of transportation and after-sale storage of products. This technical information may be updated without prior notice due to the introduction of new modes and production technologies, as well as the implementation of the relevant restrictions imposed by the state.

