



biosil® exhaust technology biosoluble mineral wool

PRODUCT CHARACTERISTICS

Rolls, cuttings, pressed and moulded parts based on **biosoluble mineral wool** for a good **acoustic absorption** and **thermal insulation** in the **Exhaust Technology Area**.

TECHNICAL CHARACTERISTICS

| | | | |
|---|--------------------------------------|--|------------------------------------|
| Material | biosoluble mineral wool | Resistance to acid (16% HCl / 23 °C / 10min) * | > 99,0 % |
| Colour | nature | (16% HCl / 23 °C / 240h) * | ≥ 98,0 % |
| Transformation temperature (DIN ISO 7884-8) | 654 °C | Fasonaire (PA 001) * | 70 ± 15 |
| Filament structure | glass (amorph) | Flammability (DIN 4102/part 4) | non-combustible A1 (loose wool) |
| Ignition loss (PA 007-2; analogous to DIN / ISO 1887) * | ≤ 3,0 % pressed and moulded parts | Biopersistance (i.t.- test) ** | < 40 days half life |
| Moisture content (PA 007-2; analogous to ISO 3344) | ≤ 0,5 % loose wool | Shot content (PA 007-1) * | < 20% |

| CHEMICAL COMPOSITION | SiO ₂ | Al ₂ O ₃ | Fe ₂ O ₃ total | MgO+CaO | K ₂ O+Na ₂ O | MnO | | | | | | | | | |
|---|------------------|--------------------------------|--------------------------------------|-----------------|------------------------------------|--------------|------------|------------|------|------|------|------|------|------|------|
| Wt. - % | 60,2 ± 2 | 1,1 ± 1 | 5,5 ± 1,5 | 28,1 ± 2 | 5,0 ± 1,5 | ≤ 1,1 | | | | | | | | | |
| THERMAL CONDUCTIVITY λ (DIN 52612-2) | W/m*K | 0,034 | 0,042 | 0,063 | 0,093 | 0,135 | 0,189 | 0,259 | | | | | | | |
| (by density 120 kg/m ³) | °C | 50 | 100 | 200 | 300 | 400 | 500 | 600 | | | | | | | |
| ACOUSTIC ABSORPTION (DIN EN ISO 10534-2) (density 120 kg/m ³ , Fas. 65) | | | | | | | | | | | | | | | |
| Frequency (Hz) | 125 | 200 | 250 | 315 | 400 | 500 | 630 | 800 | 1000 | 1250 | 1600 | 2000 | 2500 | 3150 | 4000 |
| α [%] | 16 | 19 | 30 | 39 | 42 | 60 | 70 | 83 | 93 | 98 | 95 | 95 | 97 | 92 | 98 |

* DBW testing specifications

** intratrachialer test

A technical rejection rate of 2-3 % cannot be avoided due to the manufacturing process and the associated partial agglomeration of binders. The above information does not constitute a guarantee of characteristics. Suitability for the respective application must be checked. Subject to change without notice.

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