


thermoset high-performance insulating material

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| application | for universal use in the insulation and construction area and thermal insulation of technical facilities |  |
| assembly | unlaminated blocks, boards or pre-cut parts dimensions at customer's option upon request dimensional tolerances acc. to puren factory standard | |

puren-PIR NE 75 **Technical data PU rigid foam**

| Characteristic | Standard/test procedure | Unit | Indicator |
|---|---|-------------------|------------------------------------|
| Material | Polyurethane rigid foam (PU) in compliance with EN 13165 and EN 14308, harmless from a biological and building ecology point of view, recyclable, rotproof, resistant to mildew and decay. | | |
| Bulk density | EN 1602 | kg/m ³ | 73 - 76 |
| Thermal conductivity Fresh values ²⁾ | | W/(m·K) | 0,024 - 0,025 |
| Compressive strength | | | measured values ²⁾ |
| Compressive stress at 10% compression | EN 826 | kPa | 560 - 650 |
| E-modulus (compressive stress) ²⁾ | | MPa | 16,0 - 23,0 |
| Tensile strength perpendicular to panel plane | | | |
| Transverse tensile strength | EN 1607 | kPa | 600 - 700 |
| E-modulus (transverse tensile stress) ²⁾ | | MPa | 20,0 - 25,0 |
| Bending strength ²⁾ | EN 12089 | kPa | 900 - 1100 |
| Transverse strength ²⁾ | EN 12090 (in compliance with DIN 53427) | kPa | 310 - 400 |
| Shear strength ²⁾ | EN 12090 (in compliance with DIN 53294) | kPa | 350 - 450 |
| Fire behaviour | non-smouldering, non-melting, non-dripping | | |
| Reaction to Fire Class / RtF (EU) | EN 13501-1 | | E |
| Closed cell content ²⁾ | ISO 4590 | % | 90 - 95 |
| Temperature resistance | | °C | -30 bis +120, short-term to 250 °C |
| Moisture absorption ²⁾ | EN 12087 | Vol.-% | ≤ 3 |
| Specific heat capacity ¹⁾ C | EN 12524 | J/(kg·K) | 1400 |
| Water vapour diffusion resistance factor ¹⁾ μ | EN 12086 | | 40 - 200 |
| Linear expansion coefficient ¹⁾ | EN 1604 | 1/K | 5 - 8 · 10 ⁻⁵ |
| | 1) Literature value, not part of the factory production control and external supervision. 2) Average values calculated on a regular basis under production conditions as part of factory production control. It is ensured that mechanical characteristic values do not fall below their minimum level by more than 10%.. | | |