

# SIGRAFINE® R7141H

**Material:** Carbon

**Forming:** Die moulded

**Application:** Glass technology

## Material data of SIGRAFINE® R7141H

| Typical properties                                | Units                            | Test standards    | Values*                |
|---|----------------------------------|-------------------|------------------------|
| Average grain size                                | µm                               | ISO 13320         | 150                    |
| Bulk density                                      | g/cm <sup>3</sup>                | DIN IEC 60413/204 | 1.53                   |
| Open porosity                                     | Vol. %                           | DIN 66133         | 18                     |
| Medium pore entrance diameter                     | µm                               | DIN 66133         | 12                     |
| Coefficient of permeability (ambient temperature) | cm <sup>2</sup> /s               | DIN 51935         | 12                     |
| Rockwell hardness HR <sub>10/60</sub>             |                                  | DIN IEC 60413/303 | 90                     |
| Resistivity                                       | µΩm                              | DIN IEC 60413/402 | 47                     |
| Flexural strength                                 | MPa                              | DIN IEC 60413/501 | 17                     |
| Compressive strength                              | MPa                              | DIN 51910         | 55                     |
| Dynamic modulus of elasticity                     | MPa                              | DIN 51915         | 10 x 10 <sup>3</sup>   |
| Thermal expansion (20 - 200 °C)                   | K <sup>-1</sup>                  | DIN 51909         | 3.1 x 10 <sup>-6</sup> |
| Thermal conductivity (20 °C)                      | Wm <sup>-1</sup> K <sup>-1</sup> | DIN 51908         | 4                      |
| Ash content                                       | ppm                              | DIN 51903         | max. 0.2 %             |

\* Typical average values of different rectangular and round block sizes. The actual individual block values might vary depending on dimension and format. For any engineering/design purposes please always contact our technical sales team.

