

# METAPOR® HD 100 AL – Technical data

March 2000

## Physical properties at 20°C

Property	Standard	Units	Value
Density		g/cm <sup>3</sup>	<b>1.9</b>
Shore hardness D	DIN 53505		<b>81</b>
Flexural strength	DIN 53452	N/mm <sup>2</sup>	<b>43.6</b>
E module	DIN 53457-B3	N/mm <sup>2</sup>	<b>9200</b>
Impact strength	DIN 53453	kJ/m <sup>2</sup>	<b>11</b>
Coefficient of thermal expansion 25 – 125°C	DIN 53752	°C <sup>-1</sup> x 10 <sup>-6</sup>	<b>36</b>
Heat conductivity: at 100°C	DIN 52612	Wm <sup>-1</sup> °C <sup>-1</sup>	<b>20.5</b>
Dimensional stability according Martens	DIN 53462	°C	<b>108</b>
Mean pore diameter		µm	<b>12</b>
Total porosity		%	<b>16</b>

## Air flow rates

The numbers are average values for calculating air consumption for overpressure or underpressure applications. Specification in liter per minute per cm<sup>2</sup>.

Pressure difference in bar	Plate thickness in mm							
	10	15	20	25	30	40	60	100
<b>0.2</b>	0.21	0.17	0.11	0.09	0.07	0.06	0.04	0.01
<b>0.3</b>	0.25	0.21	0.13	0.12	0.09	0.07	0.05	0.02
<b>0.4</b>	0.29	0.25	0.16	0.14	0.11	0.09	0.06	0.03
<b>0.5</b>	0.33	0.28	0.18	0.16	0.13	0.11	0.07	0.03
<b>0.6</b>	0.38	0.32	0.20	0.18	0.15	0.12	0.09	0.04
<b>0.7</b>	0.42	0.36	0.23	0.20	0.16	0.14	0.10	0.05
<b>0.8</b>	0.46	0.39	0.25	0.23	0.18	0.15	0.11	0.06
<b>0.9</b>	0.50	0.43	0.27	0.25	0.20	0.17	0.12	0.07
<b>1.0</b>	0.54	0.46	0.30	0.27	0.22	0.18	0.14	0.08
<b>2.0</b>	0.91	0.80	0.51	0.47	0.38	0.33	0.25	0.16
<b>3.0</b>	1.24	1.09	0.71	0.64	0.53	0.46	0.36	0.23
<b>4.0</b>	1.53	1.34	0.88	0.80	0.66	0.57	0.45	0.30
<b>5.0</b>	1.77	1.56	1.02	0.94	0.77	0.67	0.54	0.37
<b>6.0</b>	1.97	1.74	1.14	1.05	0.86	0.76	0.61	0.43