

METAPOR® HD 100 AL – Technical data

March 2000

Physical properties at 20°C

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

Air flow rates

The numbers are average values for calculating air consumption for overpressure or underpressure applications. Specification in liter per minute per cm².

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