

# TECHNICAL DATA SHEET

## EGGER MDF-MB E1 EPF-S CARB2

Recipe 615

Application: Base particle board with reduced formaldehyde release for interior fitments (including furniture) for use in dry conditions, suitable for 3D furniture quality (MB - Membrane quality)

### Board type meets EN 622-5 standard

Mechanical properties Board mean values	Unit	Board thickness		
		>12 - 19	>19 - 30	>30 - 40
<b>Density</b>	[kg/m <sup>3</sup> ]	Plant specific		
<b>Internal Bond strength EN 319</b>	[N/mm <sup>2</sup> ]	0.85	0.80	0.75
<b>Bending strength EN 310</b>	[N/mm <sup>2</sup> ]	35	31	26
<b>Modulus of elasticity EN 310</b>	[N/mm <sup>2</sup> ]	3200	3100	2900
<b>Swelling in thickness 24h EN 317</b>	[%]	≤10	≤8	≤7
<b>Surface soundness EN 311</b>	[N/mm <sup>2</sup> ]	1.2		
<b>Screw withdrawal surface</b>	[N]	1250		
<b>Screw withdrawal edge</b>	[N]	1080	1000	940
<b>Sand content</b>	[%]	≤0.02		
<b>Moisture content *1 EN 322</b>	[%]	6±2		
<b>Surface absorption</b>	[mm]	180		
<b>Formaldehyde content *2 EN 120</b>	[mg/100g]	E1, EPF-S, CARB 2		

General tolerances	Unit	Board thickness		
		>12 - 19	>19 - 30	>30 - 40
<b>Length tolerance EN 324</b>	[mm]	±2.0mm/m, maximum ±5.0		
<b>Width tolerance EN 324</b>	[mm]	±2.0mm/m, maximum ±5.0		
<b>Squareness EN 324</b>	[mm/m]	≤2.0		
<b>Edge straightness EN 324</b>	[mm/m]	≤1.5		
<b>Thickness tolerance EN 324</b>	[mm]	±0.2	±0.3	±0.3
<b>Standard sanding</b>		K180		

Building physical properties	Unit	Board thickness		
	[mm]	>12 - 19	>19 - 30	>30 - 40
<b>Fire behaviour category</b>				
Classification report Fire behaviour in line with EN 13501-1 (≥9 mm)		D-s2, d0		
<b>Water vapour diffusion resistance value</b>				
		μ moist	μ dry	
Mean density 600 kg/m <sup>3</sup>		12	20	
Mean density 800 kg/m <sup>3</sup>		20	30	
<b>Thermal conductivity EN 12524</b>				
Mean density 600 kg/m <sup>3</sup>	W/(m·K)	0.10		
Mean density 800 kg/m <sup>3</sup>		0.14		
<b>Air sound insulation EN 13986</b>				
EN 13986		R = 13 x lg(m <sub>A</sub> ) + 14 (m <sub>A</sub> = board surface weight kg/m <sup>2</sup> )		
<b>Sound absorption EN 13986 table 10</b>				
Frequency range				
250 Hz bis 500 Hz		0.10		
1000 Hz bis 2000 Hz		0.20		
<b>Biological durability EN 13986</b>				
EN 335-3		Harzard category 1 (no earth contact , dry 20°/65% relative humidity)		
<b>PCP content EN 13986</b>				
EN 13986	[ppm]	<5		

\*1 On delivery

\*2 Formaldehyde content - regulatory and voluntary regulation:

E1: According to the thresholds of the Chemicals Regulation of October 1993 in relation with the DiBt Directive regarding the classification and monitoring of wood-based boards regarding formaldehyde emissions of June 1994 (Germany), and the Formaldehyde Regulation of 1990 (Austria), uncoated fibreboards may not exceed a formaldehyde content corresponding to, according to the Perforator method DIN EN 120 (photometric), 8 mg HCHO/100g dry board at a material moisture of 6.5%. The moving six-monthly average is max. 7.0 mg HCHO/100g dry board. These thresholds correspond to the emissions class E1.

EPF-S: According to EPF (European Panel Federation), EPF-S boards with reduced formaldehyde emissions may not exceed a threshold of 5.0 mg HCHO/100g at 6.5% board moisture according to the Perforator method DIN EN 120 (photometric).

CARB 2: According to the California Air Resources Board (CARB) regulation CCR-17-93120.2(a) - Phase 2, fibreboards may not exceed 0.11 ppm according to ASTM 13333 E (American test chamber method).

IOS-MAT 0003: According to 2.2 and 2.3, the uncoated fibreboard complies with the IKEA formaldehyde specification IOS M AT 0003, version AA-10899-9.