

# TECHNICAL DATA SHEET

## EGGER MDF-ST E1 CE

Recipe: 500

Application: Base particle board for interior fitments (including furniture) for use in dry conditions.



### Board type meets EN 622-5 standard

Mechanical properties Board mean values	Unit	Board thickness				
		>6 - 9	>9 - 12	>12 - 19	>19 - 30	>30 - 40
	[mm]	>6 - 9	>9 - 12	>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> ]	>0.65	>0.60	>0.55	>0.55	>0.50
<b>Bending strength EN 310</b>	[N/mm <sup>2</sup> ]	>23	>22	>20	>18	>17
<b>Modulus of elasticity EN 310</b>	[N/mm <sup>2</sup> ]	>2700	>2500	>2200	>2100	>1900
<b>Swelling in thickness 24h EN 317</b>	[%]	<17	<15	<12	<10	<8
<b>Surface soundness EN 311</b>	[N/mm <sup>2</sup> ]	>1.0				
<b>Screw withdrawal surface</b>	[N]			>1080	>1080	>1080
<b>Screw withdrawal edge</b>	[N]			>900	>810	>750
<b>Sand content</b>	[%]	<0.02				
<b>Moisture content *1 EN 322</b>	[%]	6±2				
<b>Surface absorption</b>	[mm]	>210				
<b>Formaldehyde content *2 EN 120</b>	[mg/100g]	E1				

General tolerances	Unit	Board thickness				
		>6 - 9	>9 - 12	>12 - 19	>19 - 30	>30 - 40
	[mm]	>6 - 9	>9 - 12	>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	±0.2	±0.2	±0.3	±0.3
<b>Standard sanding</b>		K150				

Building physical properties	Unit	Board thickness				
		>6 - 9	>9 - 12	>12 - 19	>19 - 30	>30 - 40
<b>Fire behaviour category</b>						
Board thickness < 9 mm		class E				
Board thickness ≥ 9 mm and density ≥ 600 kg/m <sup>3</sup> in line with EN 13986		D-s2, d0				
<b>Water vapour diffusion resistance value EN 13986</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 13986</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		$R = 13 \times \lg(m_A) + 14$ (m <sub>A</sub> = board surface weight kg/m <sup>2</sup> )				
<b>Sound absorption EN 13986</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

According to the "Regulation on the Prohibition of Chemicals (ChemVerbotsV)" annex to § 1, clause 3 from 14<sup>th</sup> October, 1993 in connection with the publication of the BGA in the federal health sheet 10/91 (S. 487-489) about "testing method for particleboard", uncoated MDF board must not exceed a perforator limit value (photometrical) of 8 mg HCHO/100g over-dry board at moisture content of 6.5 %. The flexible half-years mean value is max. 7 mg HCHO/100g over-dry board.

**Provisional note:**

This technical data sheet has been carefully drawn up to the best of our knowledge. We accept no liability for any mistakes, errors in standards or printing errors. In addition, technical modifications can result from the continuous further development, as well as from changes in standards and documents originating from statutory bodies. The contents of this technical leaflet should therefore not be considered as instructions for use or as legally binding.