

How much formaldehyde is there in wood-based materials?

Formaldehyde is released naturally by wood and is also contained in the usual binding agents of wood-based materials, e.g. in glues and resins based on urea, melamine, or phenol. A wood-based material today may only contain a maximum of 0.007% formaldehyde in order to meet the criteria of the emission class E1.



EGGER works against trivialising the risks of formaldehyde, supporting and shaping both national and international processes that deal with the topic of formaldehyde and air quality in buildings. All EGGER products fall below the limits for the European formaldehyde class E1. Some also meet the stricter requirements of voluntary guidelines or national laws, such as those in the USA and Japan.

Controlling Formaldehyde

OVERVIEW OF THE LIMIT VALUES FOR RAW CHIPBOARD

Emission classes	E1		EPF-S	CARB 2		IOS-MAT 0003		F****	
	European Chamber test according to EN 717 (ppm)	Perforator according to EN 120 (mg HCHO/100g ATRO board)***	Perforator according to EN 120 (mg HCHO/100g ATRO board)	American chamber test according to ASTM 13333 E (ppm)*	Comparative value, European chamber test according to EN 717 (ppm)**	ASTM 1333 E (ppm)	Perforator according to EN 120 (mg HCHO/100g ATRO board)***	Desiccator according to JIS A 1460 (mg/l)	Comparative value, European chamber test according to EN 717 (ppm)
Chipboard	0.1	max. 8	max. 4	0.09	0.065	0.09	max. 4	0.3	0.03–0.04
Thin MDF	0.1	max. 8	max. 5	0.13	0.14	0.13	max. 5	0.3	–
MDF	0.1	max. 8	max. 5	0.11	0.12	0.11	max. 5	0.3	–
OSB	0.1	max. 8	–	–	–	0.09	max. 4	0.3	–

* Chamber method: min. 23 m³, tests with various degrees of loading, temperature: 23 °C, relative humidity: 50%, air exchange rate: 0.5/hour

** European chamber method: uniform degree of loading, temperature: 23 °C, relative humidity: 45%, air exchange rate: 1/hour

*** For production control at the plant