

Quality Management ISO 9001

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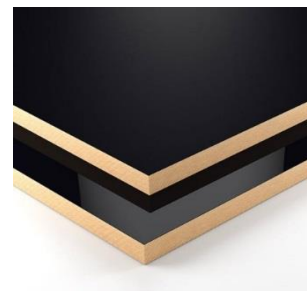
## Technical data sheet

### EGGER PerfectSense lacquered boards

#### Material description:

Decorative, UV coated wood-based material based on  
 EGGER MDF ST E1 CARB2/TSCA core boards

Use: Decorative wood-based panels for interior uses



### EGGER MDF ST E1 CARB2/TSCA board type according to EN 622 type 5

| Mechanical properties<br>Average values boards | Unit                 | Board thicknesses |          |          |
|--|----------------------|-------------------|----------|----------|
|  | [mm]                 | >10 - 12          | >12 - 19 | >19 - 25 |
| Density  | [kg/m <sup>3</sup> ] | Specific to plant |          |          |
| Internal bond strength EN 319                  | [N/mm <sup>2</sup> ] | >0.60             | >0.55    | >0.55    |
| Bending strength EN 310                        | [N/mm <sup>2</sup> ] | >22               | >20      | >18      |
| Modulus of elasticity EN 310                   | [N/mm <sup>2</sup> ] | >2500             | >2200    | >2100    |
| Thickness swelling 24 h EN 317                 | [%]                  | <15               | <12      | <10      |
| Surface soundness EN 311                       | [N/mm <sup>2</sup> ] | >1.0              |          |          |
| Screw withdrawal surface                       | [N]                  |                   | >1080    | >1080    |
| Screw withdrawal edge                          | [N]                  |                   | >900     | >810     |
| Sand content                                   | [%]                  | <0.02             |          |          |
| Moisture content * <sup>1</sup> ) EN 322       | [%]                  | 6±2               |          |          |
| Formaldehyde content * <sup>2a</sup> )         | Class                | E1                |          |          |
| Formaldehyde emission * <sup>2b</sup> )        | Class                | CARB 2/TSCA       |          |          |
| Reaction to fire EN 13501-1                    | Class                | D-s2,d0           |          |          |

### PerfectSense – General tolerances

|                             | Test standard | Unit   | Thickness range* <sup>3</sup> ) |                    |          |
|-----------------------------|---------------|--------|---------------------------------|--------------------|----------|
|                             |               |        | >10 - 12                        | >12 - 19           | >19 - 25 |
| Thickness                   |               |        |                                 |                    |          |
| with one-sided PerfectSense | EN 14323      | [mm]   | ±0,3                            |                    |          |
| Length and width            |               |        |                                 |                    |          |
| commercial available size   | EN 14323      | [mm]   | ±5                              |                    |          |
| cut-to-size boards          |               |        | ±2,5                            |                    |          |
| Flatness                    |               |        |                                 |                    |          |
|                             | EN 14323      | [mm/m] | --                              | ≤2* <sup>4</sup> ) |          |
| Edge damage                 |               |        |                                 |                    |          |
| commercial available size   | EN 14323      | [mm]   | ≤10                             |                    |          |
| cut-to-size boards          |               |        | ≤3                              |                    |          |

## PerfectSense - surface properties

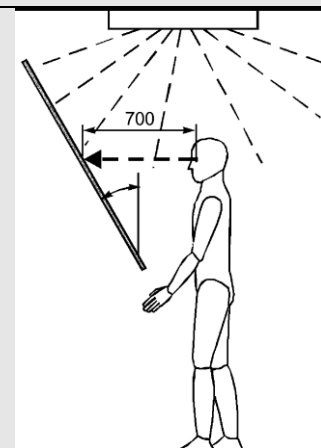
| Quality feature   | Test standard              | Class   | Value        | Unit |
|---|----------------------------|---|--------------|------|
| Scratch resistance  |                            |   |              |      |
| Gloss   | DIN 68861-4 / DIN EN 15186 | 4C  | ≥1.5         | [N]  |
| Matt  |                            | 4B  | ≥3           |      |
| Resistance to chemicals   |                            |   |              |      |
|   | DIN 68861-1 / DIN EN 12720 | 1B  | -            | -    |
| Cross-cut   |                            |   |              |      |
|   | DIN EN ISO 2409            | GT 0-1  | -            | -    |
| Gloss level   |                            |   |              |      |
| Gloss   | EN ISO 2813                | 60°   | 92 ±5        | GU   |
| Matt  |                            | 60°   | 3 ±2         | GU   |
| Resistance to dry heat  |                            |   |              |      |
|   | DIN 68861-7 / DIN EN 12722 | 7C  | 100          | °C   |
|   |                            | 7B *5)  | 140          | °C   |
| Resistance to wet heat  |                            |   |              |      |
|   | DIN 68861-8 / DIN EN 12721 | 8B  | 70           | °C   |
|   |                            | 8A *5)  | 100          | °C   |
| Abrasion resistance   |                            |   |              |      |
|   | DIN 68861-2                | 2B  | >350 to ≤650 | WR   |
| Light fastness  |                            |   |              |      |
|   | EN 15187                   | Blue scale ≥6 / Grey scale >4   |              |      |
| Wet climate resistance *6)  |                            |   |              |      |
| (Climate 40 ± 2 ° C; relative humidity 85 ± 5%; duration 14 days)   | AMK-MB-005, module 2       | No gap forming or edge breaking   |              |      |
| Alternating climate resistance *6)  |                            |   |              |      |
| (10 cycles: 1h Climate -20 ± 2 ° C; 3h Climate 20 ± 2 ° C / humidity 85 ± 5%; 3h Climate 60 ± 2 ° C / humidity 55 ± 5%) | AMK-MB-005, module 3       | No surface cracking, no discolouration, no gap forming or edge breaking |              |      |

### Surface defects according to AMK-MB- 009

On an even surface, defects must not appear at a distance of 0.7 meters. Where surfaces without any defects cannot be realised, small flaws and irregularities in the surface are admissible. Surface defects are only those defects, which are greater than 1.0mm<sup>2</sup> and recognised when examining the surface at a distance of 0.7 meters and an angle of view of about 30°. The defined maximum is 1 defect/m<sup>2</sup>.

The following framework conditions apply:

- Viewing distance: 700mm
- Lighting intensity: 1000 – 2000 lx
- Inclination angle: 30° to the vertical
- Type of light (daylight, colour temperature) D 65: 6500 K
- Viewing duration: max. 20 seconds



\*1) upon delivery

\*2a) formaldehyde content: According to the Regulation of Chemical Interdiction of October 1993 in connection with the DiBt Directive concerning the classification and monitoring of wood-based material boards with regard to formaldehyde emissions of June 1994, the Perforator threshold (photometric) of uncoated chipboard may not exceed 8 mg HCHO/100g dry board for a material moisture of 6.5%. The moving six-monthly average is max. 6.5 mg HCHO/100g dry board. Perforator value according to DIN EN 120 as sliding six-monthly average.

\*2b) Examination in accordance with American test chamber. According to CARB (California Air Resources Board) requirements Table 1 § 93120.2 Phase 2 ( $\leq 0.11$  ppm according to ASTM 1333 E) fulfilled and US EPA TSCA TITLE VI approved from TPC-4 (WKI) or TPC-17 (FCBA).

\*3) relative to the nominal value

\*4) only with balanced construction of surfaces

\*5) with gloss surfaces slight gloss changes are permitted

\*6) refers to the surface coating

## Quality features

The essential quality features of PerfectSense lacquered surfaces are described according to the above-mentioned table. For certain purposes, properties that are not part of this data sheet may be required. When necessary and upon request, they can be determined according to the relevant standards and specified testing procedures.

## Matching colours and surfaces

If the customer requires colour and surface coordination, only a slight deviation between original sample and test body is admissible. The test is subject to regulation AMK-MB 009 (table Surface defects).

## General notes

Careful inspection of incoming goods is an essential part of proper order processing and is included in the EGGER Group's payment and delivery terms. EGGER recommends that this inspection is carried out using statistical processes. PerfectSense lacquered boards must be transported and stored with care. It is expedient to store the boards lying down on a flat, level and dry ground, with a cover board in a closed building. Otherwise, sealing is necessary to avoid the possible swelling of the edges. The room temperature should not exceed the range of 10°C to 50°C.

**Note:** PerfectSense lacquered boards protective film must be removed immediately after processing, but no later than 5 months after delivery to ensure residue-free removal of the film can. Foiled products shall not be exposed to direct sunlight (UV radiation).

## Further documents

Technical datasheet EGGER MDF E1 EPF-S CARB2/TSCA ST CE

Processing instructions PerfectSense lacquered boards

Cleaning and care instructions PerfectSense lacquered boards

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 may result from the continuous development of PerfectSense lacquered boards, as well as from changes to standards and public law documents. The contents of this technical data sheet should therefore not be considered as instructions for use or as legally binding.