









## TEST REPORT

No. : GZMR110509896

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### Annex A

#### Classes of reaction to fire performance for floorings

class	Test methods	Classification	Additional classification
A1 <sub>n</sub>	EN ISO 1182 <sup>a</sup> and	$\Delta T \leq 30^\circ\text{C}$ , and $\Delta m \leq 50\%$ , and $t_f = 0$ (i.e. no sustained flaming)	-
	EN ISO 1716	$\text{PCS} \leq 2.0\text{MJ/kg}^a$ and $\text{PCS} \leq 2.0\text{MJ/kg}^b$ and $\text{PCS} \leq 1.4\text{MJ/m}^2^c$ and $\text{PCS} \leq 2.0\text{MJ/kg}^d$	-
A2 <sub>n</sub>	EN ISO 1182 <sup>a</sup> or	and $\Delta T \leq 50^\circ\text{C}$ , and $\Delta m \leq 50\%$ , and $t_f \leq 20\text{s}$	-
	EN ISO 1716		
	EN ISO 9239-1 <sup>e</sup>	Critical flux <sup>f</sup> $\geq 8.0\text{kW/m}^2$	Smoke productio <sup>g</sup>
B <sub>n</sub>	EN ISO 9239-1 <sup>e</sup> and	Critical flux <sup>f</sup> $\geq 8.0\text{kW/m}^2$	Smoke productio <sup>g</sup>
	EN ISO 11925-2 <sup>h</sup> Exposure = 15s	$F_s \leq 150\text{mm}$ within 20 s	-
C <sub>n</sub>	EN ISO 9239-1 <sup>e</sup> and	Critical flux <sup>f</sup> $\geq 4.5\text{kW/m}^2$	Smoke productio <sup>g</sup>
	EN ISO 11925-2 <sup>h</sup> Exposure = 15s	$F_s \leq 150\text{mm}$ within 20 s	-
D <sub>n</sub>	EN ISO 9239-1 <sup>e</sup> and	Critical flux <sup>f</sup> $\geq 3.0\text{kW/m}^2$	Smoke productio <sup>g</sup>
	EN ISO 11925-2 <sup>h</sup> Exposure = 15s	$F_s \leq 150\text{mm}$ within 20 s	-
E <sub>n</sub>	EN ISO 11925-2 <sup>h</sup> Exposure = 15s	$F_s \leq 150\text{mm}$ within 20 s	-

\*\*\*\*\*To be continued\*\*\*\*\*

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F <sub>n</sub>	No performance determined
<sup>a</sup>	For homogeneous products and substantial components of non-homogeneous products.
<sup>b</sup>	For any external non-substantial component of non-homogeneous products.
<sup>c</sup>	For any internal non-substantial component of non-homogeneous products.
<sup>d</sup>	For the product as a whole.
<sup>e</sup>	Test duration = 30 min.
<sup>f</sup>	Critical flux is defined as the radiant flux at which the flame extinguishes or the radiant flux after a test period of 30 min, whichever is the lower (i.e. the flux corresponding with the furthest extent of spread of flame).
<sup>g</sup>	s1 = Smoke ≤ 750 % minutes; s2 = not s1.
<sup>h</sup>	Under conditions of surface flame attack and, if appropriate to the end use application of the product, edge flame attack.

### Test item No.2: Clause 4.2 Content of pentachlorophenol (PCP)

Test Item(s)	Unit	Test Method (Reference)	Result	MDL
Pentachlorophenol	mg/kg	EN14041:2004 ANNEX B & EN12673:1999, GC-MS	N.D.	5.0

Note:

1. N.D. = Not Detected (< MDL)
2. MDL = Method Detection Limit

### Test item No.3: Clause 4.3 Formaldehyde Emission (In air)

Test Item(s)	Unit	Test Method (Reference)	Result	MDL
Formaldehyde Emission (In air)	mg/m <sup>3</sup>	EN 717-1:2004, UV-Vis	N.D.	0.080

Note:

1. N.D. = Not Detected (< MDL)
2. MDL = Method Detection Limit
3. mg/m<sup>3</sup> = milligramme per cubic meter

Reference Information (EN14041:2004(E) requirement):

Formaldehyde class E1: ≤0.124 mg/m<sup>3</sup>

Formaldehyde class E2: >0.124 mg/m<sup>3</sup>

\*\*\*\*\*To be continued\*\*\*\*\*

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### Test item No.5: Clause 4.5 Slip resistance

Test Item(s)	Test Method (Reference)	Result
Dynamic coefficients of friction	<p>The test was conducted in accordance with EN 13893:2002. Sliders made from the defined material and having a definite shape are loaded to impose a specified force on the floor covering. The loaded sliders are pulled parallel to the surface of floor covering at constant speed 0.2m/s to 0.3m/s. The horizontal force applied to pull the sliders is recorded over the length of a trace at least 0.30m. And the results were calculated by the formulae below:  <math>\mu = F/M</math>                      F—is the average horizontal force (in Newton).                      M— is the total vertical load on the sliders (in Newton). .....</p> <p>When declared, the floor covering intended to be used in dry and non-contaminated conditions shall have a dynamic coefficient of friction of <math>\geq 0.30</math> when tested ex-factory under dry conditions per EN 13893:2002 and shall be declared as technical class DS.....</p>	<p>Dynamic coefficients of friction: 0,36                      Class DS per EN 14041</p> <p>Tested surface: front view                      (see sample photo A.1, along the length of board)</p>

Note: The test item No.5 has been subcontracted to the accredited laboratory.

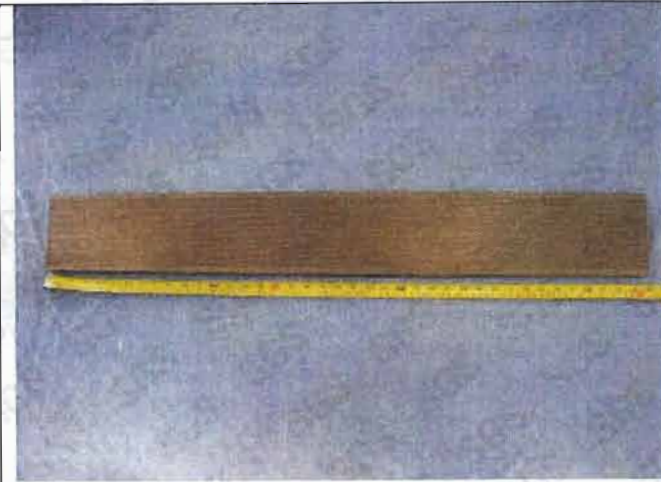
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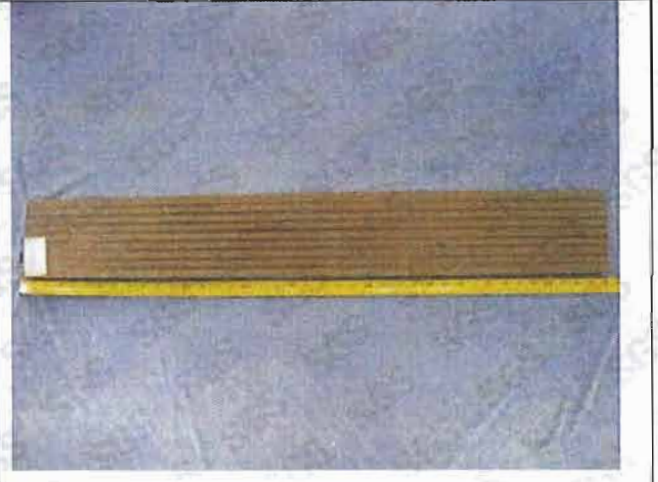
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Sample photo:



A.1 Front view  
Photo for Test item No.5



A.2 Back view  
Photo for Test item No.5



A.3 Section view  
Photo for Test item No.5



Photo for Test item No.2 and No.3

\*\*\*\*\*End of report\*\*\*\*\*

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