

Nanovia PC-ABS Rail raw material EN 45455-2 Test results

Classification standard : EN 45455-2:2013+A1:2015
Railway applications – Fire protection on railway vehicles
Part 2: Requirements for fire behavior of materials and components

The tested product meets the following requirements of EN 45455-2 at 1,5 and 3 mm:

- Requirement set : R22, R33
- Hazard level : HL1, HL2, HL3

Test results

Test method	EN45455-2 designation	Thickness tested	Parameter	Test result
Oxygen index EN ISO 4589-2	T01	3,0 mm	OI (%)	≥ 32 %
Smoke density EN ISO 4589-2	T10.03 Irradiance 25 kW/m ²	1,5 mm	Ds max. (-)	18
Smoke density EN ISO 4589-2	T10.03 Irradiance 25 kW/m ²	3,0 mm	Ds max. (-)	33
Toxicity NF X 70-100-1/-2	T12 Furnace temperature 600 °C	-	CITNLP (-)	0,41

Requirement set	Test method	Parameter	Requirements			Performance
			HL1	HL2	HL3	
R 22	T01 EN ISO 4589-2	OI (%)	≥ 28	≥ 28	≥ 32	HL1, HL2, HL3
	T10.03 EN ISO 5659-2: 25 kW/m2	Ds max. (-)	≤ 600	≤ 300	≤ 150	HL1, HL2, HL3
	T12 NF X 70-100-1/-2: 600 °C	CIT _{NLP} (-)	≤ 1,2	≤ 0,9	≤ 0,75	HL1, HL2, HL3

Requirement set	Test method	Parameter	Requirements			Performance
			HL1	HL2	HL3	
R 23	T01 EN ISO 4589-2	OI (%)	≥ 28	≥ 28	≥ 32	HL1, HL2, HL3
	T10.03 EN ISO 5659-2: 25 kW/m2	Ds max. (-)	-	≤ 600	≤ 300	HL1, HL2, HL3
	T12 NF X 70-100-1/-2: 600 °C	CIT _{NLP} (-)	-	≤ 1,8	≤ 1,5	HL1, HL2, HL3

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