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New Technologies

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info@rst-labs.de**Summary report no. P60-18-8070en****Fire testing**Order number: 60-18-0235
Date: 16.07.2018
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3 page(s) and 0 enclosure(s).
Phone: +49 (0) 3302 49982 60**Delivery date specimen:** 08.05.2018**Test date:** From 23.05.2018 to 28.06.2018**Test specimen:** Sealing inserts
Material: SAP ID Nr. 71920-36 (Thickness 2,5mm to 10mm)**Test specification:** Test methods of requirement R22/R23 according to
DIN EN 45545-2 (02/2016) „Railway applications – Fire protection on
railway vehicles – Part 2: Requirements for fire behavior of materials
and components“**Objective:** Evaluation according to DIN EN 45545-2 (02/2016)
Requirement set R22/R23 (see table 5 – Set of material requirements)**Test results:** The material achieved the following results for requirement R22/R23:**Material :SAP ID Nr. 71920-36 (2,5 mm): Hazard Level 3 (HL3)**
Material :SAP ID Nr. 71920-36 (10,0 mm): Hazard Level 3 (HL3)Based on these results, the material fulfills requirement **R22/R23** with
Hazard Level 3 (HL3) for all thicknesses in between the tested ones.**Remark:** The classification is valid only in conjunction with the test reports listed
on page 2. Please refer to the test reports for details.
Stefan Harder
Head of Fire LabThe results refer only to the specimens mentioned above.
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1 Details about the specimens

Material or combination of materials:

Sealing inserts
Material: SAP ID Nr. 71920-36
Color: RAL 7035 light grey
Density: 1,17 g/cm³

Manufacturer:

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Dimensions of sample:

Test method reference:

T01 150 mm × 6,5 mm × 3,0 mm
T10.03 75mm × 75mm × 2,5 mm and 75mm × 75mm × 10,0 mm
T12 1 g

2 Summary of results

The material Sealing inserts, Material: SAP ID Nr. 71920-36 was tested for use in railway vehicles, requirement R22/R23 (Table 5 DIN EN 45545-2).

Sealing inserts, Material: SAP ID Nr. 71920-36 (thickness 2,5 mm)

Test report no.	Ref. test method	Standard	Parameter	Unit	Result	HL R22	HL R23
P60-18-5547en	T01	EN ISO 4589-2	OI	Vol. %	39,7	3	3
P60-18-4213en	T10.03	EN ISO 5659-2	Ds max	dimensionless	96	3	3
RE ET 2904/02/165 A	T12	NF X 70-100	CIT	dimensionless	0,15	3	3
Classification		EN 45545-2				3	3

Sealing inserts, Material: SAP ID Nr. 71920-36 (thickness 10 mm)

Test report no.	Ref. test method	Standard	Parameter	Unit	Result	HL R22	HL R23
P60-18-5547en	T01	EN ISO 4589-2	OI	Vol. %	39,7	3	3
P60-18-4212en	T10.03	EN ISO 5659-2	Ds max	dimensionless	86	3	3
RE ET 2904/02/165 A	T12	NF X 70-100	CIT	dimensionless	0,15	3	3
Classification		EN 45545-2				3	3

The **Hazard Level HL** depends on the operation category and design category according to DIN EN 45545-2 Table 1.

Operation category	Design category			
	N: Standard vehicles	A: Automatic vehicles having no emergency trained staff on board	D: Double decked vehicle	S: Sleeping and couchette cars double decked or single deck
1	HL1	HL1	HL1	HL2
2	HL2	HL2	HL2	HL2
3	HL2	HL2	HL2	HL3
4	HL3	HL3	HL3	HL3