
Title

EN 45545-2:2020 Classification
Summary report for R6:

Product Reference “SEP60RAIL
and/or SEP120RAIL”

Report No.:

548379

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Version Number:

1

Valid Until:

12th November 2029

Prepared for:

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1 Introduction

This report has been commissioned by Bowman Stor. Ltd. and relates to the fire performance of “SEP60RAIL and/or SEP120RAIL” which Bowman Stor Ltd. states is used in the production of an air compressor oil-water condensate separator according to EN 45545-2: 2020.

This report has been written using appropriate test evidence generated at UKAS accredited laboratories, to the relevant test standard. The supporting test evidence has been deemed appropriate to support the stated product and is summarised in section 3. It is the responsibility of users to check that the cited versions of such supporting documentation remain valid at the time of use.

Specimens of a product have been tested in accordance with the test methods

- “T03.01” (ISO 5660-1: 2015; Heat release rate (Cone Calorimeter Method) & Smoke Production Rate (Dynamic Measurement)
- “T10.01” / “T10.02” (ISO 5659-2: 2017; Plastics – Smoke Generation. Part 2 Determination of Optical Density by a Single Chamber Method)
- “T11.01” (Gas Analysis in the Smoke Box EN ISO 5659-2, using FTIR Technique) as specified in EN 17084:2018 + AC:2020; “Railway applications – Fire protection on railway vehicles – Toxicity test of materials and components. Method 1: Smoke chamber

The results of the tests are fully reported in the Warringtonfire test reports 548087 (Issue 2) & 548088 (Issue 2).

A full detailing of the relevant test reports can be found in Annex A.

2 Description of System

The description of the specimens given below has been prepared from information provided by the sponsor of the test. This information has not been independently verified by Warringtonfire. All values quoted are nominal, unless tolerances are given.

General description	Plastic material that the sponsor has confirmed is utilised in the production of an air compressor oil-water condensate separator
Product reference	“SEP60RAIL and / or SEP120RAIL”
Detailed description/ composition details	See Note 1 below
Name of manufacturer	Bowman Stor Ltd
Thickness	3.26mm (stated by sponsor) 3.12mm (determined by Warringtonfire)
Density	1.02g/cm ³ (stated by sponsor) 1.07g/cm ³ (determined by Warringtonfire)
Colour reference	“SEPURA Black”
Colour	Black
Flame retardant details	See Note 2 below
Brief description of manufacturing process	Injection moulding

Note 1. The sponsor of the test has provided this information but at the specific request of the sponsor, these details have been omitted from the report and are instead held on the confidential file relating to this investigation.

Note 2. The sponsor was unwilling to provide this information.

3 Test Results

The following results were obtained for the specimens, which were tested.

Test Method Reference	Test Method	Test Result
“T03.01”	ISO 5660-1: 2015	MARHE = 82.7 kW/m ²
“T10.01” “T10.02”	ISO 5659-2: 2017	D _s (4) = 116 VOF4 = 308 min
“T11.01”	EN 17084: 2018 Method 1 Gas Analysis in the Smoke Box ISO, Using FTIR Technique	CIT _{4mins} = 0.23 CIT _{8mins} = 0.39

The test results relate only to the behaviour of the test specimens of the product under the conditions of the test, they are not intended to be the sole criterion for assessing the potential hazard of the product in use.

The test results relate only to the specimens of the product in the form in which they were tested. Small differences in the composition or thickness of the product may significantly affect the performance during the test and will therefore invalidate the test results. It is the responsibility of the supplier of the product to ensure that the product which is supplied is identical with the specimens which were tested.

4 Conclusion

Classification achieved by “SEP60RAIL and / or SEP120RAIL”		
EN 45545-2: 2020	R6	HL1 and HL2

This evaluation is conducted based on the test reports in relation to the testing completed on the product described in Section 2.

This report should be read in conjunction with, and not accepted as a substitute for the test reports used to claim that the necessary performance has been achieved. Those test reports may include additional information which may be relevant to the evaluation of the potential fire hazard of the product.

All tests must have been conducted within the last 5 years or the test reports must have been reviewed within the last five years where the system is used on:

- Rolling stock used in European Union covered by the Technical Specification for Interoperability (LOC&PAS TSI (Commission Regulation (EU) No. 2023/1694))

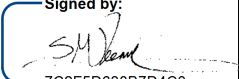
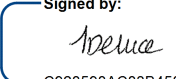
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This report is issued on the basis of test data and information to hand at the time of issue. If contradictory evidence becomes available to Warringtonfire, the report will be unconditionally withdrawn, and the applicant will be notified in writing.

The sponsor is not aware of any information that could affect the conclusions of this report. If the sponsor subsequently becomes aware of any such information, they agree to ask the reporting authority to withdraw the report.

5 Validity

The report is initially valid 12th November 2029 after which time it must be re-appraised.

Position:	Prepared by	Authorised by
Signature:	Signed by:  7C2F5D630B7D4C0...	Signed by:  C928598AC83B458...
Name:	Stacey Deeming	Tracy Deluce
Title:	Principal Product Assessor	Product Assessor

* For and on behalf of Warringtonfire

6 Appendix A: Test Evidence

6.1 Primary Test Evidence

6.1.1 Test Report 548087 (Issue 2)

Date of Test:	13 th & 14 th November 2024
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 0249
Sponsor:	Bowman Stor Ltd
Tested Product:	“SEP60RAIL and/or SEP120RAIL”
Test Standard:	ISO 5660-1: 2015
Performance:	MARHE = 82.7 kW/m ²

6.1.2 Test Report 548088 (Issue 2)

Date of Test:	21 st & 22 nd January 2025
Identification of Test Body:	Warringtonfire Testing and Certification Ltd. UKAS No. 0249
Sponsor:	Bowman Stor Ltd
Tested Product:	“SEP60RAIL and/or SEP120RAIL”
Test Standard:	EN 17084: 2018 Method 1 Gas Analysis in the Smoke Box ISO, Using FTIR Technique
Performance:	D _s (4) = 116 VOF4 = 308 min CIT _{4mins} = 0.23 CIT _{8mins} = 0.39

7 Revision History

Issue No:	Re - Issue Date:
Revised By:	Approved By:
Reason for Revision:	