



Certificate of Testing and Compliance of PA002 PathoShield 4 to PI650 Biological Substance Category B Packaging

Document number

TR17011

Author

Abigail Hargreaves

Date of Issue

23rd October 2017

This Report is a controlled document governed by the Quality Management System of IntelSius and certified ISO 9001:2008 compliant by bsi.

Change control for this document in section 4 .

ISO 9001:2008 Certificate: FS 95921



Contents

1. Product Description.....	3
2. Test Description and Results.....	4
3. Conclusion.....	5
4. Change Control	5
5. Appendix	6

1. Product Description

- 1.1. The PathoShield P4 is part of the PathoShield range designed to carry a wide range of primaries, including blood vials, swabs and sample containers. It is made up of a fibreboard outer carton with a 95kPa A4 PathoPouch bag as the secondary packaging, containing a 6 bay absorbent, with an absorbency of 235 cm³ per pouch.

Components	Component Description	Dimensions: L x W x H (mm)	Gross Mass (kg)
PathoShield P4 DGP Box	Fibreboard Box, E Flute FEFCO 0427	291 x 191 x 102 mm	0.16
PathoPouch A4	Transparent heat sealed top opening pouch	228 x 250	0.02
Absorbent	6 bay white absorbent	230 x 245	0.02

2. Test Description and Results

- 2.1. The PA002 PathoShield 4 has been tested in accordance with Packing Instruction 650 (PI 650) as described in the IATA Dangerous Goods Regulations (58th Ed 2017). The PathoShield was subjected to the drop sequence outlined in section 6.5.4.4 with the exception that the product was dropped from a height no less than 1.2 m as required by PI 650.
- 2.2. The primary packaging consisted of six 8mL glass vials with a stopper, each of which was filled with water.
- 2.3. These vials were placed in a 6 bayed absorbent inside a PathoPouch A4. This secondary has been independently certified as leak proof under a differential pressure test in excess of 95kPa (see appendix 1). The outer packaging is the DGP PathoShield P4 box.
- 2.4. This is a drop test from a height of 1.2m after a variety of preparation conditions described below.

Test Procedure		Preparation	Result
Standard Drop Test	Flat onto base	Standard	Pass
	Flat onto top	Standard	Pass
	Flat onto longest surface	Standard	Pass
	Flat onto shortest surface	Standard	Pass
	Onto bottom back corner*	Standard	Pass
Wet Drop Test	Flat onto base	Exposed to >50mm rain > 1 hour	Pass
	Flat onto top	Exposed to >50mm rain > 1 hour	Pass
	Flat onto longest surface	Exposed to >50mm rain > 1 hour	Pass
	Flat onto shortest surface	Exposed to >50mm rain > 1 hour	Pass
	Onto bottom back corner*	Exposed to >50mm rain > 1 hour	Pass

**This orientation chosen as this provided the least protection to the payload.*

Pass – A system passes the test if the primary remains intact after a drop of 1.2m.

Fail – A system fails the test if the primary is damaged after a drop of 1.2m.

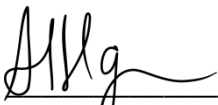
3. Conclusion

- 3.1. The system PathoShield P4 has passed all test procedures outlined in this report and is therefore compliant with the testing requirements of PI 650 as described in the IATA Dangerous Goods Regulations (58th Ed 2017) under UN 3373 Category B.

4. Change Control

Date of Issue	Previous Version	New Version	Reason for Change	Author
10/10/2017	N/A	TR17011	None - First Issue	Abigail Hargreaves

Report Produced by: Abigail Hargreaves

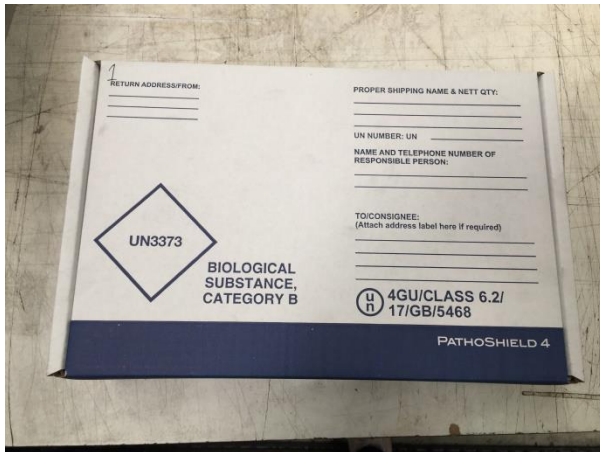
Signed  _____
Date: 10/10/2017

Position Technical Support Scientist

Report Verified: Richard Merchant

Signed  _____
Date: 23/10/2017

5. Appendix



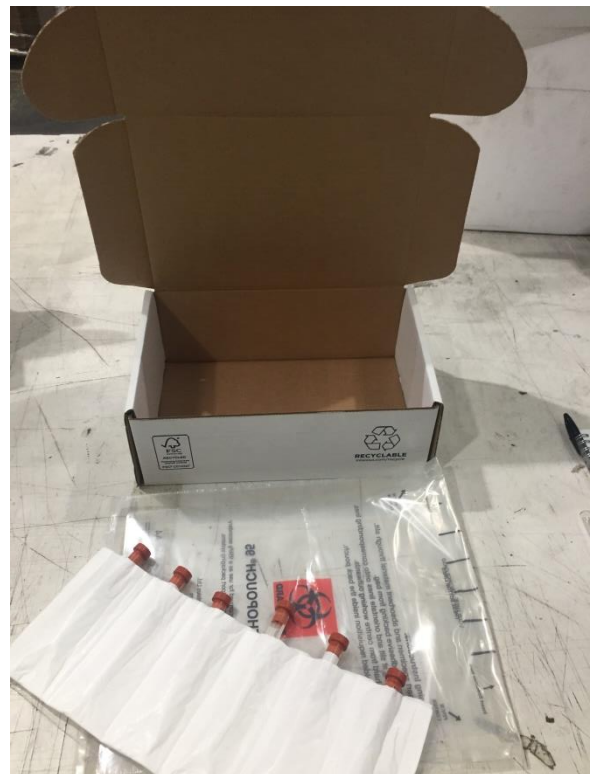
P4 system before drop test



Payload before drop test



P4 system being dropped



Payload after drop test



P4 system after drop test



P4 system being dropped after simulated rainfall



P4 system after simulated rain drop test



Payload system after simulated rain drop test