

# Certificate of Testing and Compliance of PA003 PathoShield 3 to PI650 Biological Substance Category B Packaging

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Author Abigail Hargreaves

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#### 1. Product Description

1.1. The PathoShield P3 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 cm<sup>3</sup> per pouch.

Components	Component Description	Dimensions: L x W x H (mm)	Gross Mass (kg)
PathoShield P3 DGP Box	Fibreboard Box, E Flute FEFCO 0427	191 x 145 x 102	0.16
PathoPouch A4	Transparent heat sealed top opening pouch	228 x 250	0.02
Absorbent	Absorbent 6 bay absorbent		0.02

#### 2. Test Description and Results

- 2.1. The PAOO3 PathoShield 3 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 was 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 saline.
- 2.3. These vials were placed in a 6 bay 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 P3 box.
- 2.4. This is a drop test from a height of 1.2m after a variety of preparation conditions described below.

Te	est Procedure	Preparation	Result
	Flat onto base	Standard	Pass
	Flat onto top	Standard	Pass
Standard Drop Test	Flat onto longest surface	Standard	Pass
1030	Flat onto shortest surface	Standard	Pass
	Onto bottom back corner*	Standard	Pass
	Flat onto base	Exposed to >50mm rain > 1 hour	Pass
	Flat onto top	Exposed to >50mm rain > 1 hour	Pass
Wet Drop Test	Flat onto longest surface	Exposed to >50mm rain > 1 hour	Pass
1030	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 P3 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 (58<sup>th</sup> Ed 2017) under UN 3373 Category B.

#### 4. Change Control

Date of Issue	Previous Version		Reason for Change	Author
10/10/2017	N/A	TR17010	None - First Issue	Abigail Hargreaves

Report Produced By: Abigail Hargreaves

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Position Technical Support Scientist

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Signed

### 5. Appendix



Payload before drop test



P3 system before drop test



P3 system being dropped



P3 system after drop test



Payload after drop test



P3 system being dropped after simulated rain



P3 system after simulated rain drop test



Payload after simulated rain drop test