Ref: VX0543

United Nations Dangerous Goods Packaging Performance Test

Client: Hanson UK
Griff Clara Industrial Estate
Off St Davids Way
Nuneaton
Warks
CV10 7PP

Summary

Hanson Multicem (new hydro bag)

Packaging description: Multiwall, paper bag with valved closure, pasted back seam and block pasted base. Designated Hanson Multicem (new hydro bag). Packaging tested for Packing Group III solids up to 25.422 kg gross mass.

Specimens of the packaging shown at Appendix A were tested in accordance with the relevant provisions of Part 6.1.5 of Chapter 6.1 of the United Nations Model Regulations, 15th edition. The methods of preparation and test are detailed in the UK Operational Instructions for Test Stations, 6th revised edition, issued under arrangements with the Department for Transport.

The results were as follows.

Test	Intensity	Result
Drop to paragraph 6.1.5.3	0.8 m	Rupture and leakage

The specimens did not pass the tests.

Prepared by
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Senior Packaging Technologist
Date: 28th September 2015

Approved by
S McCallion
Project Manager UN Testing

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Description of packaging tested

The packaging is shown in the photographs which are included as appendices to this report.

No. of specimens submitted: 4 Date of receipt: 21st / 22nd September 2015

Specimen ID	Test content	Filled weight (kg)
1	Multicem high performance cement	25.390
2	Multicem high performance cement	25.422
3	Multicem high performance cement	24.972
4	Multicem high performance cement	24.895

Closure method: As per packaging description.

Tests performed and results

Drop Test

Test contents: Multicem high performance cement.
Typical gross weight for test: 25.261 kg (average)

Specimen ID	Drop Ht (m)	Impact Point	Results
1	0.8	Flat onto widest face	No rupture or leakage
1	0.8	Flat onto narrowest face	Not required
1	0.8	Onto one end (base)	Rupture and leakage
2	0.8	Flat onto widest face	No rupture or leakage
2	0.8	Flat onto narrowest face	Not required
2	0.8	Onto one end (base)	Rupture and leakage
3	0.8	Flat onto widest face	No rupture or leakage
3	0.8	Flat onto narrowest face	Not required
3	0.8	Onto one end (base)	Rupture and leakage

Pre-test conditioning: 23°C, 50% r.h. Test conditions: 20.3°C, 58.9% r.h.
Date of test: 24th September 2015

PERFORMANCE TESTS OF PACKAGINGS FOR DANGEROUS GOODS

PHOTO APPENDIX

Appendix A
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Sheet 1 of 2

	
Hanson Multicem multiwall paper bag (new hydro bag)	Valved base
	
Block pasted top	Pasted back seam
	
Specimen 1 – rupture to sidewall (2nd drop in sequence)	Specimen 2 – rupture to sidewall (2nd drop in sequence)

PERFORMANCE TESTS OF PACKAGINGS FOR DANGEROUS GOODS

PHOTO APPENDIX

Appendix A
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Sheet 2 of 2

Specimen 3 – rupture to sidewall
(2nd drop in sequence)