

**Test Report
Non-Metallic Material & Products Testing**

Date of issue: 13-06-2017

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Castco LRN: 170217-0127

Details as supplied by customer

Name of Customer : Kwan Jiu Company Limited
Address : Flat 633 B & C, 6/F, Block 1, Wang Cheong Factory Estate, 781 Lai Chi Kok Road,
Cheung Sha Wan, Kowloon
Job Title : --
Customer's Ref. No. : --
Contract No. : --

Sample details as supplied by customer

Date of Sample Received : 17-02-2017
Test Period : 26-02-2017 to 06-06-2017
Sample Description : 多功能防水材料(底油)
Brand Name : Shalex
Manufacturer : --


Test Method(s):

Section 2.2 : BS 6920-2.2.1:2000 + A3:2014 Odour and Flavour of Water
Section 2.3 : BS 6920-2.3:2000 + A1:2014 Appearance of Water
Section 2.4 : BS 6920-2.4:2000 + A1:2014 Growth of Aquatic Micro-Organisms Test
Section 2.5 : BS 6920-2.5:2000 + A2:2014 The extraction of substances that may be of concern to public health
Section 2.6 : BS 6920-2.6:2000 + A2:2014 Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water - The extraction of metals

Remarks:

I. Test results only relate to the specimen tested.

Checked by :



Au Kwok Kin
Senior Chemist

Certified by :



Cheng Chi Fai
Senior Manager

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Section 2.2 : Odour and Flavour of Water

Extraction Temperature : 23°C

Surface area of the sample : 15000 mm²

Cal. Mark of test container : 1000 mL

Extraction Solution		Result	
		Chlorine-Free Water	Chlorinated Water
First extract	Odour	No	No
	Flavour	No	No
Seventh extract	Odour	--	--
	Flavour	--	--

Extraction Temperature : 40°C

Surface area of the sample : 15000 mm²

Cal. Mark of test container : 1000 mL

Extraction Solution		Result	
		Chlorine-Free Water	Chlorinated Water
First extract	Odour	No	No
	Flavour	No	No
Seventh extract	Odour	--	--
	Flavour	--	--

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Section 2.3 : Appearance of Water

Extraction Temperature : 23°C

Surface area of the sample : 15000 mm²

Cal. Mark of test container : 1000 mL

Extraction Solution		Result	Requirement of BS6920
First extract	Turbidity (FNU)	<0.5	≤0.5
	Color (CU)	<5	≤5
Seventh extract	Turbidity (FNU)	--	/
	Color (CU)	--	/

Extraction Temperature : 40°C

Surface area of the sample : 15000 mm²

Cal. Mark of test container : 1000 mL

Extraction Solution		Result	Requirement of BS6920
First extract	Turbidity (FNU)	<0.5	≤0.5
	Color (CU)	<5	≤5
Seventh extract	Turbidity (FNU)	--	/
	Color (CU)	--	/

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Section 2.4 : Growth of Aquatic Micro-Organisms Test

Extraction Temperature : 30°C

Surface area of the sample : 15000 mm²

Cal. Mark of test container : 1000 mL

Specimens	Result	
	Dissolved oxygen (mg/L)	
	*MDOD	BS Requirement
Test Product (Single sample)	0.3	<1.69
Glass (Negative reference)	0.3	MDOD = 0.0 ± 0.6
Paraffin wax (Positive reference)	7.5	MDOD = 7.5 ± 2.5

Remark(s):

The mean dissolved oxygen concentration of the control was 8.1 mg/L. (BS Requirement: 8.5 ± 2.5)

*MDOD = Mean dissolved oxygen difference

Section 2.5 : The extraction of substances that may be of concern to public health

Extraction Temperature : 23°C

Surface area of the sample : 15000 mm²

Cal. Mark of test container : 1000 mL

Specimens	Result	Remark
Test Product (All from a confluent health monolayer)	Yes	Non-cytotoxic
Test reagent Blank (All Form a confluent health monolayer)	Yes	Non-cytotoxic

Extraction Temperature : 40°C

Surface area of the sample : 15000 mm²

Cal. Mark of test container : 1000 mL

Specimens	Result	Remark
Test Product (All from a confluent health monolayer)	Yes	Non-cytotoxic
Test reagent Blank (All Form a confluent health monolayer)	Yes	Non-cytotoxic

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Section 2.6 : Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water - The extraction of metals

Extraction Temperature : 23°C

Surface area of the sample : 15000 mm²

Cal. Mark of test container : 1000 mL

Metal	Test results (µg/L)		Maximum allowable concentrations (µg/L)	Method
	Sample 1	Sample 2		
Boron	<100	<100	1000	ICP-MS
Aluminium	<20	<20	200	
Chromium	<5	<5	50	
Manganese	<5	<5	50	
Iron	<20	<20	200	
Nickel	<2	<2	20	
Arsenic	<1	<1	10	
Selenium	<1	<1	10	
Cadmium	<0.5	<0.5	5	
Antimony	<0.5	<0.5	5	
Mercury	<0.1	<0.1	1	
Lead	<1	<1	10	

Remark(s):

1) The maximum allowable concentrations are according to BS 6920:2014 (Part 1: Specification) Table 1

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Section 2.6 : Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water - The extraction of metals

Extraction Temperature : 40°C

Surface area of the sample : 15000 mm²

Cal. Mark of test container : 1000 mL

Metal	Test results (µg/L)		Maximum allowable concentrations (µg/L)	Method
	Sample 1	Sample 2		
Boron	<100	<100	1000	ICP-MS
Aluminium	<20	<20	200	
Chromium	<5	<5	50	
Manganese	<5	<5	50	
Iron	<20	<20	200	
Nickel	<2	<2	20	
Arsenic	<1	<1	10	
Selenium	<1	<1	10	
Cadmium	<0.5	<0.5	5	
Antimony	<0.5	<0.5	5	
Mercury	<0.1	<0.1	1	
Lead	<1	<1	10	

Remark(s):

1) The maximum allowable concentrations are according to BS 6920:2014 (Part 1: Specification) Table 1

Summary of Results

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Standard	Test	Compliance with BS 6920, Part 1:2014 (cold water)
BS 6920, Section 2.2.1 : 2014	Odour and Flavour	Pass
BS 6920, Section 2.3 : 2014	Appearance	Pass
BS 6920, Section 2.4 : 2014	Growth of aquatic micro-organisms	Pass
BS 6920, Section 2.5 : 2014	Extraction of substances that may be of concern to public health	Pass
BS 6920, Section 2.6 : 2014	Extraction of metal	Pass

Standard	Test	Compliance with BS 6920, Part 1:2014 (hot water)
BS 6920, Section 2.2.1 : 2014	Odour and Flavour	Pass
BS 6920, Section 2.3 : 2014	Appearance	Pass
BS 6920, Section 2.5 : 2014	Extraction of substances that may be of concern to public health	Pass
BS 6920, Section 2.6 : 2014	Extraction of metal	Pass

End of Report

Appendix I
(Photo of sample)

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Appendix II

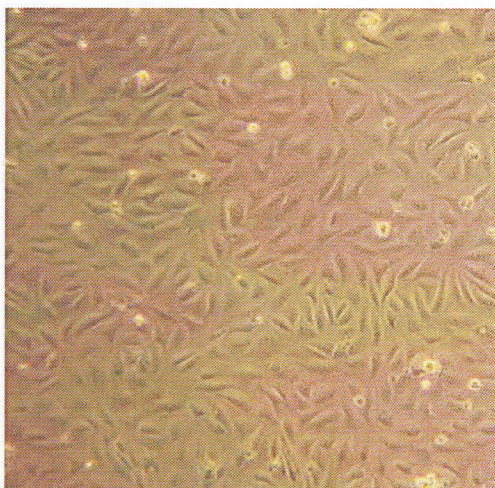
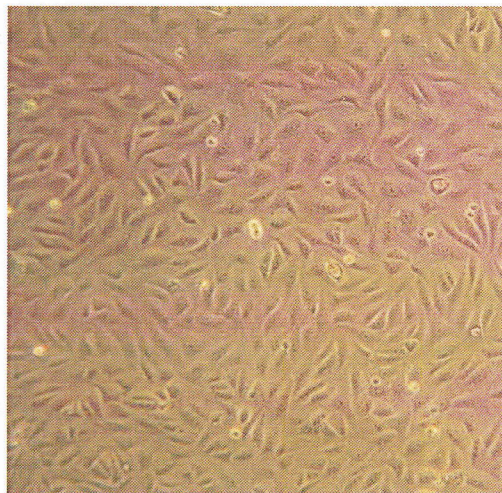
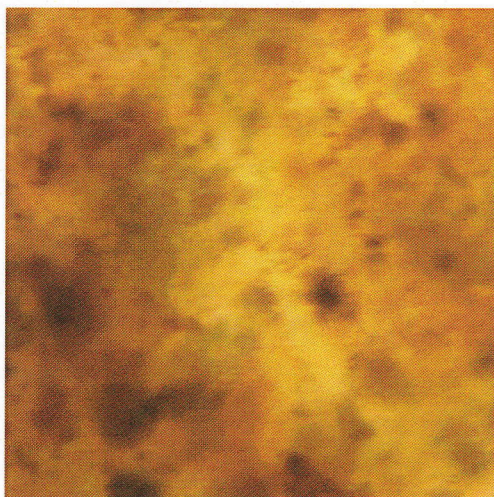
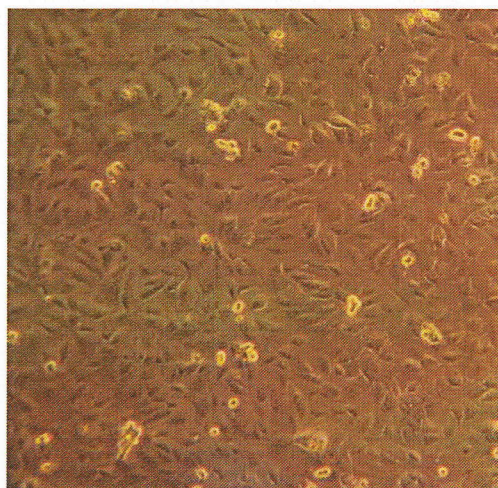
(BS 6920-2.5:2000 + A2:2014 The extraction of substances that may be of concern to public health)

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Sample: Shalex 多功能防水材料(底油) (cold water)

SampleBlankZinc SulphateCells only

Appendix II

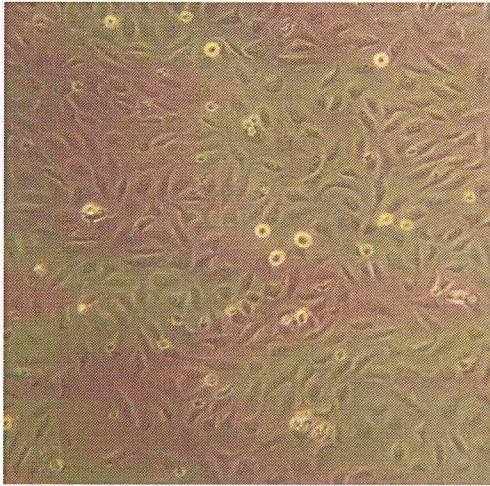
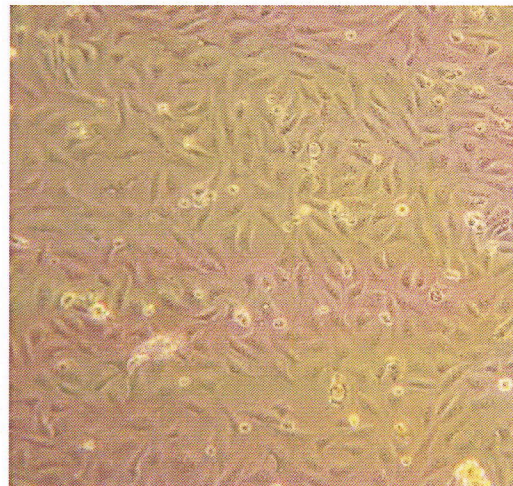
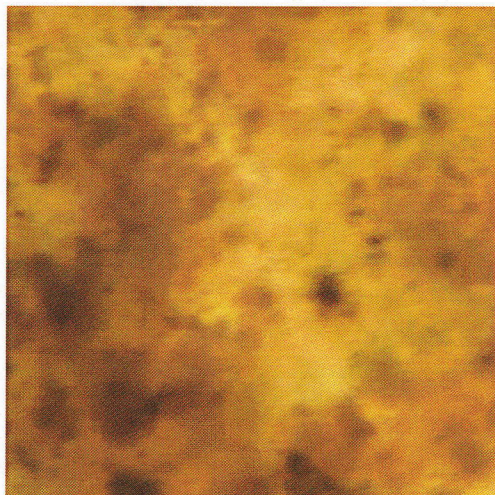
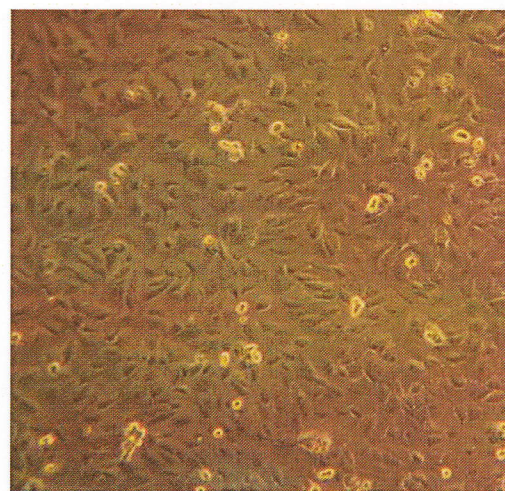
(BS 6920-2.5:2000 + A2:2014 The extraction of substances that may be of concern to public health)

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Sample: Shalex 多功能防水材料(底油) (hot water)

SampleBlankZinc SulphateCells only