

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

Date of issue: 18-12-2017

Page 1A of 7

Castco LRN: EN0161005-29 & EN0161029-11

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 : 05-10-2016

Test Period : 25-10-2016 to 09-02-2017

Sample Description : 沙力士超力光油(面油)

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.
- II. This test report supersedes previous test report of Castco LRN: EN0161005-29 & EN0161029-11 issued on 15-02-2017.

Checked by :



Au Kwok Kin
Senior Chemist

Certified by :



Cheng Chi Fai
Senior Manager

Test Report
Non-Metallic Material & Products Testing

Date of issue: 18-12-2017

Page 2A of 7

Castco LRN: EN0161005-29 & EN0161029-11

Section 2.2 : Odour and Flavour of Water

Extraction Temperature : 23 °C

Surface area of the sample : 15000m²

Cal. Mark of test container : 1000mL

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

Extraction Temperature : 60 °C

Surface area of the sample : 15000m²

Cal. Mark of test container : 1000mL

Extraction Solution		Result	
		Chlorine-Free Water	Chlorinated Water
First extract	Odour	Yes (Adhesive)	Yes (Adhesive)
	Flavour	--	--
Seventh extract	Odour	No	No
	Flavour	No	No

Remark(s):

- I. This test report supersedes previous test report of Castco LRN: EN0161005-29 & EN0161029-11 issued on 15-02-2017.

Test Report

Non-Metallic Material & Products Testing

Date of issue: 18-12-2017

Page 3A of 7

Castco LRN: EN0161005-29 & EN0161029-11

Section 2.3 : Appearance of Water

Extraction Temperature : 23 °C

Surface area of the sample : 15000m²

Cal. Mark of test container : 1000mL

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

Surface area of the sample : 15000m²

Extraction Temperature : 60 °C

Cal. Mark of test container : 1000mL

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

Remark(s):

- I. This test report supersedes previous test report of Castco LRN: EN0161005-29 & EN0161029-11 issued on 15-02-2017.

Test Report

Non-Metallic Material & Products Testing

Date of issue: 18-12-2017

Page 4A of 7

Castco LRN: EN0161005-29 & EN0161029-11

Section 2.4 : Growth of Aquatic Micro-Organisms Test

Extraction Temperature : 30 °C

Surface area of the sample : 15000m²

Cal. Mark of test container : 1000mL

Specimens	Result	
	Dissolved oxygen (mg/L)	
	*MDOD	BS Requirement
Test Product (Single sample)	-0.1	<1.69 Refer to Appendix I
Glass (Negative reference)	0.2	MDOD = 0.0 ± 0.6
Paraffin wax (Positive reference)	7.2	MDOD = 7.5 ± 2.5

Remark(s):

The mean dissolved oxygen concentration of the control was 7.7 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 : 15000m²

Cal. Mark of test container : 1000mL

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 : 60 °C

Surface area of the sample : 15000m²

Cal. Mark of test container : 1000mL

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

Remark(s):

- I. This test report supersedes previous test report of Castco LRN: EN0161005-29 & EN0161029-11 issued on 15-02-2017.

Test Report
Non-Metallic Material & Products Testing

Date of issue: 18-12-2017

Page 5A of 7

Castco LRN: EN0161005-29 & EN0161029-11

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 : 15000m²

Cal. Mark of test container : 1000mL

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
- 2) This test report supersedes previous test report of Castco LRN: EN0161005-29 & EN0161029-11 issued on 15-02-2017.

Test Report

Non-Metallic Material & Products Testing

Date of issue: 18-12-2017

Page 6A of 7

Castco LRN: EN0161005-29 & EN0161029-11

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 : 60 °C

Surface area of the sample : 15000m²

Cal. Mark of test container : 1000mL

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
- 2) This test report supersedes previous test report of Castco LRN: EN0161005-29 & EN0161029-11 issued on 15-02-2017.

Summary of Results

Date of issue: 18-12-2017

Page 7A of 7

Castco LRN: EN0161005-29 & EN0161029-11

Standard	Test	Compliance with BS 6920, Part 1:2014 (cold water)
Extraction Temperature : 23 °C	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 2.4 : 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

Remark(s):

- I. This test report supersedes previous test report of Castco LRN: EN0161005-29 & EN0161029-11 issued on 15-02-2017.

Appendix I
(Specification of BS 6920-2.4:2000 + A1:2014)

Date of issue: 18-12-2017

Page 1A of 1

Castco LRN: EN0161005-29 & EN0161029-11

* Extracted from Clause 6 in BS 6920:2014 (Part 1: Specification)

When the material or product is tested in accordance with BS 6920-2.4, the mean dissolved oxygen difference (MDOD) shall be 2.39 mg/L or less. The product or material shall be deemed to conform to this requirement if either of the following requirements is met:

- a) the MDOD derived from testing a single sample of a material or product is 1.69 mg/L or less; or
- b) in the case of a single sample of a material or product giving an MDOD in the range that is greater than or equal to 1.7 mg/L but not more than 2.9 mg/L, the arithmetic mean of the 5 to 7 week MDOD value of the original test sample, together with the 5 to 7 week MDOD values obtained from testing two further test samples, is 2.39 mg/L or less.

Any product giving an MDOD value of 2.4 mg/L or greater, when tested and the results evaluated as given in a) and b), shall be deemed to have the potential to support appreciable microbial growth and shall be deemed not to conform to this standard.

NOTE The significance of any bacteriostatic/bacteriocidal effects observed, and/or any changes in the appearance of the tested samples, might be assessed by the National Regulator.

Remark(s):

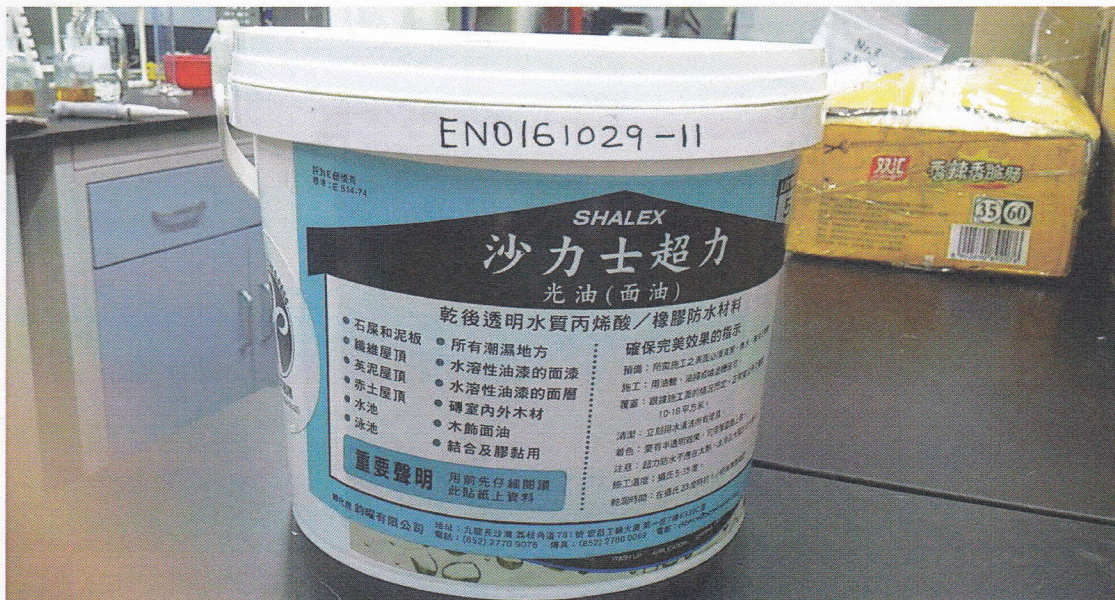
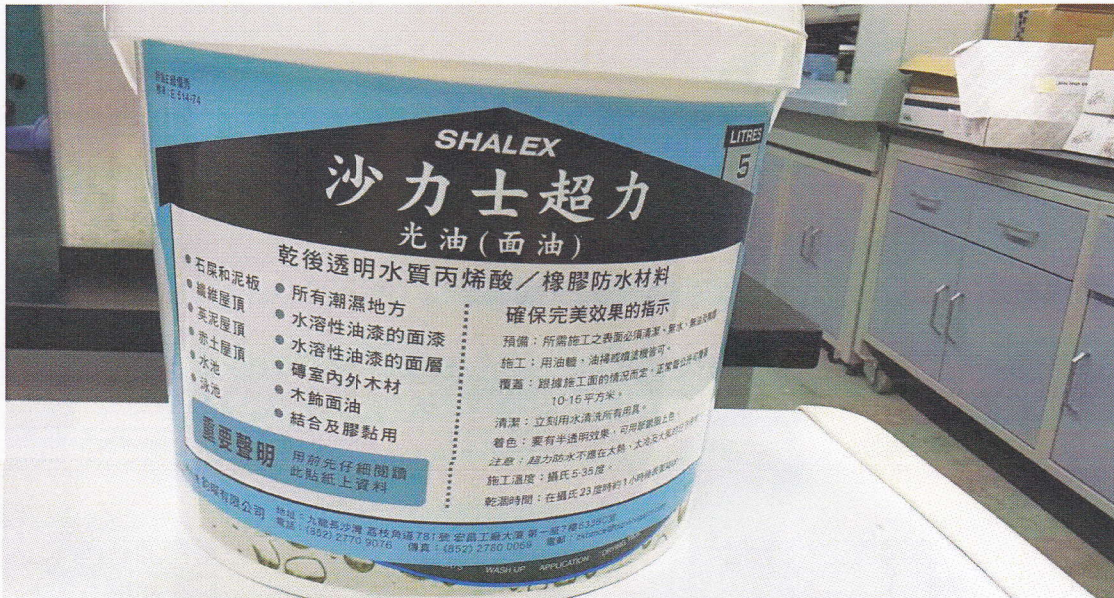
- I. This Appendix I supersedes previous Appendix I of Castco LRN: EN0161005-29 & EN0161029-11 issued on 15-02-2017.

Appendix II
(Photo of sample)

Date of issue: 18-12-2017

Page 1A of 1

Castco LRN: EN0161005-29 & EN0161029-11



Remark(s):

- I. This Appendix II supersedes previous Appendix II of Castco LRN: EN0161005-29 & EN0161029-11 issued on 15-02-2017.

Appendix III

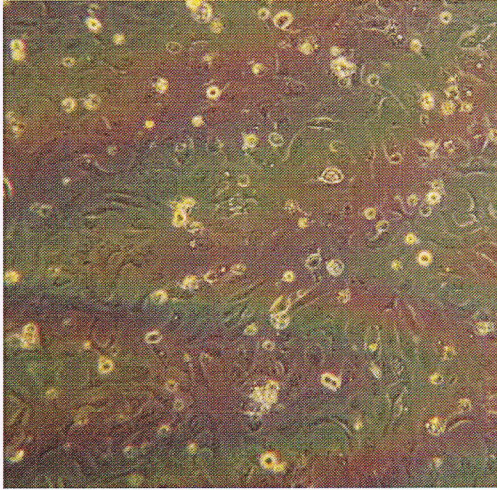
(BS 6920-2.5:2000 + A2:2014 The extraction of substances that may be of concern to public health)

Date of issue: 18-12-2017

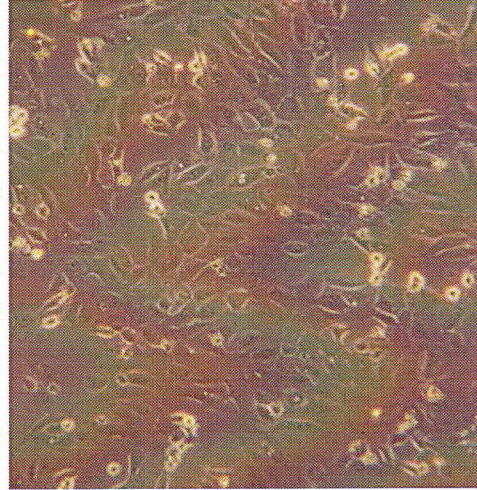
Page 1A of 2

Castco LRN: EN0161005-29 & EN0161029-11

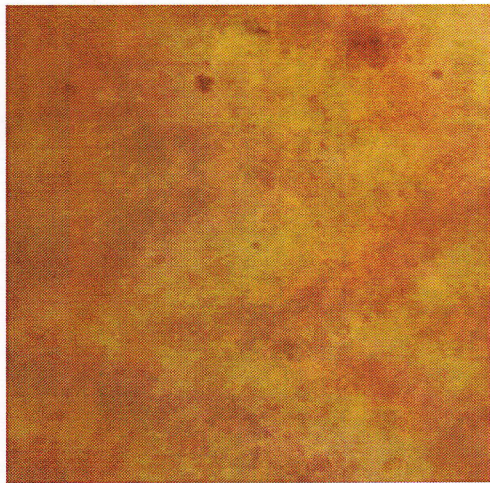
Sample: Shalex(cold)



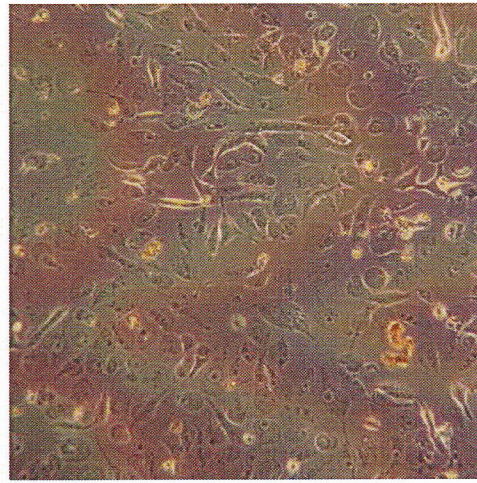
Sample



Blank



Zinc Sulphate



Cells only

Remark(s):

- I. This Appendix III supersedes previous Appendix III of Castco LRN: EN0161005-29 & EN0161029-11 issued on 15-02-2017.

Appendix III

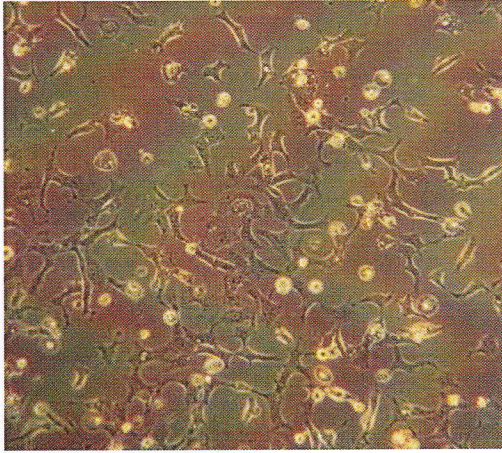
(BS 6920-2.5:2000 + A2:2014 The extraction of substances that may be of concern to public health)

Date of issue: 18-12-2017

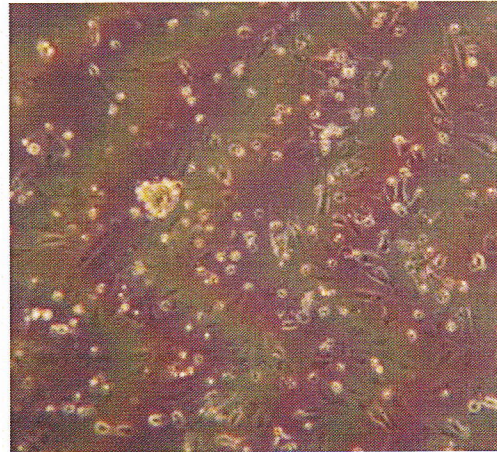
Page 2A of 2

Castco LRN: EN0161005-29 & EN0161029-11

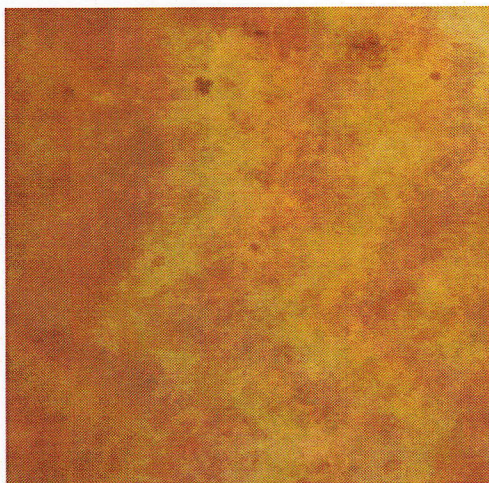
Sample: Shalex(hot)



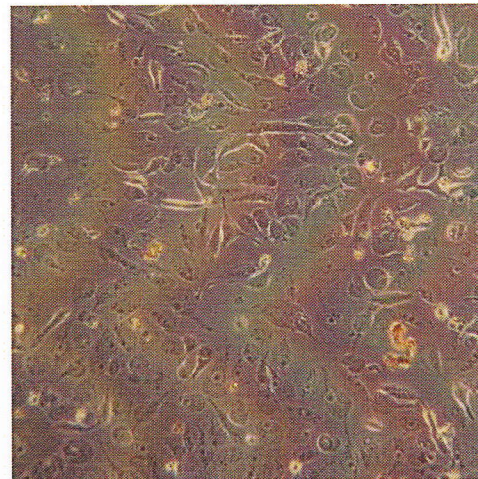
Sample



Blank



Zinc Sulphate



Cells only

Remark(s):

- I. This Appendix III supersedes previous Appendix III of Castco LRN: EN0161005-29 & EN0161029-11 issued on 15-02-2017.