



**BUREAU
VERITAS**

TEST REPORT

LAB NO. : (5508)025-0138-R1

DATE : January 30, 2008

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This report is amendment of
(5508)025-0138 dated January 28, 2008

APPLICANT : National Starch & Chemical (HK) Ltd
Unit 1601-6, Level 16, Metroplaza Tower 1,
No 233 Hing Fong Rd. Kwai Fong, N.T.

CONTACT PERSON : Phoebe Tong

DATE OF SUBMISSION : January 25, 2008

PERFORMANCE DATE : January 25, 2008 to January 28, 2008

NO. OF WORKING DAYS : 1

SAMPLE DESCRIPTION : LAMINATOR 3046A

TESTED ITEM(S): A1. White paste (LAMINATOR 3046A)

SUMMARY OF TEST RESULTS

TEST REQUESTED	CONCLUSION	REMARK
Heavy Metals Content in Paint and Similar Surface Coating Materials - ASTM F963-07 Section 4.3.5	PASS	-
Migration of Certain Elements - EN 71-3: 1994 with Amendment A1:2000 and AC:2002	PASS	-
Phthalates Content	PASS	-

REMARK

If there are questions or concerns on this report, please contact the following persons:

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BUREAU VERITAS HONG KONG LIMITED

PREPARED BY : _____ Ed _____

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Photo of the Submitted Sample





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TEST RESULT

I. Heavy Metals Content in Paint and Similar Surface Coating Materials - ASTM F963-07 Section 4.3.5

A. Total Lead Content

Parameter	Unit	Result	Maximum Allowable Limit
		A1	
Total Lead (Pb)	mg/kg	<50	600
Conclusion	-	PASS	-

Test Item A1: White paste (LAMINATOR 3046A)

Note: mg/kg = milligram per kilogram
“<” = less than

Method: Sample was digested in nitric acid and analyzed by Atomic Absorption Spectrophotometer.

Remark: 1. The sample was out of scope of the stated requirement. The test was performed as per client's request.
2. The tested part of the sample was specified.
3. The test method was specified by client.
4. The above results of item A1 is transferred form (5508)012-0148 dated on January 21, 2008



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TEST RESULT

I. Heavy Metals Content in Paint and Similar Surface Coating Materials - ASTM F963-07 Section 4.3.5

B. Soluble Heavy Metal Content

Parameter	Unit	Result	Maximum Allowable Limit
		A1	
Soluble Arsenic (As)	mg/kg	< 2.5	25
Soluble Barium (Ba)	mg/kg	< 5	1000
Soluble Cadmium (Cd)	mg/kg	< 5	75
Soluble Chromium (Cr)	mg/kg	< 5	60
Soluble Mercury (Hg)	mg/kg	< 5	60
Soluble Lead (Pb)	mg/kg	< 5	90
Soluble Antimony (Sb)	mg/kg	< 5	60
Soluble Selenium (Se)	mg/kg	< 5	500
Conclusion	-	PASS	-

Test Item	Description	Mass of Trace Amount (g)
A1	White paste (LAMINATOR 3046A)	NA

Note: mg/kg = milligram per kilogram
 g = gram
 "<" = Less than
 NA = Not applicable

Method: ASTM F963-07 Section 8.3. The heavy metals content was determined by Inductively Coupled Argon Plasma Spectrophotometer.

Remark: 1. All the reported results are adjusted analytical results with the analytical correction shown in the following table.

Element	As	Ba	Cd	Cr	Hg	Pb	Sb	Se
Analytical correction (%)	60	30	30	30	50	30	60	60

2. The sample was out of scope of the stated requirement. The test was performed as per client's request.
3. The tested part of the sample was specified.
4. The test method was specified by client.
5. The above results of item A1 is transferred form (5508)012-0148 dated on January 21, 2008



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TEST RESULT

II. Migration of Certain Elements - EN 71-3: 1994 with Amendment A1:2000 and AC:2002

Parameter	Unit	Result
		A1
Soluble Arsenic (As)	mg/kg	< 2.5
Soluble Barium (Ba)	mg/kg	< 5
Soluble Cadmium (Cd)	mg/kg	< 5
Soluble Chromium (Cr)	mg/kg	< 5
Soluble Mercury (Hg)	mg/kg	< 5
Soluble Lead (Pb)	mg/kg	< 5
Soluble Antimony (Sb)	mg/kg	< 5
Soluble Selenium (Se)	mg/kg	< 5
Conclusion	-	PASS

Tested Item	Description	Mass of Trace Amount (g)
Material Classification: Paints, varnishes lacquers, glazing powders and similar materials in solid or in liquid form		
A1	White paste (LAMINATOR 3046A)	-

Note: < = Less than
 mg/kg = milligram per kilogram
 g = gram

Method: EN 71-3: 1994 with amendment A1: 2000 and AC: 2002. The heavy metals content was determined by Inductively Coupled Argon Plasma Spectrophotometer.

Remark: 1. Limit and Analytical Correction

Element		As	Ba	Cd	Cr	Hg	Pb	Sb	Se
Maximum allowable limit (mg/kg)	All materials except modelling clay	25	1000	75	60	60	90	60	500
	Modelling clay	25	250	50	25	25	90	60	500
Analytical correction (%)		60	30	30	30	50	30	60	60

2. All the reported results are adjusted analytical results with the analytical correction shown in Remark 1.
3. The sample was out of scope of the stated requirement. The test was performed as per client's request.
4. The tested part of the sample was specified.
5. The test method was specified by client.
6. The above results of item A1 is transferred form (5508)012-0148 dated on January 21, 2008



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TEST RESULT

III. Phthalates Content

Parameter	CAS No.	Unit	Result	Client's Limit
			A1	
Dibutyl phthalate (DBP)	84-74-2	%	<0.005	-
Butyl benzyl phthalate (BBP)	85-68-7	%	<0.005	-
Di-2-ethylhexyl phthalate (DEHP)	117-81-7	%	<0.005	-
Di-n-octyl phthalate (DNOP)	117-84-0	%	<0.005	-
Di-iso-decyl phthalate (DIDP)	26761-40-0	%	<0.005	-
Di-iso-nonyl phthalate (DINP)	28553-12-0	%	<0.005	-
Dimethyl phthalate (DMP)	131-11-3	%	<0.005	-
Diethyl phthalate (DEP)	84-66-2	%	<0.005	-
Diisobuty phthalate (DIBP)	84-69-5	%	<0.005	-
Dinonyl phthalate (DNP)	84-76-4	%	<0.005	-
Diisooctyl phthalate (DIOP)	27554-26-3	%	<0.005	-
Di-n-hexyl phthalate (DHP)	84-75-3	%	<0.005	-
Dipropyl phthalate (DPrP)	131-16-8	%	<0.005	-
Dicyclohexyl phthalate (DCHP)	84-61-7	%	<0.005	-
Dipentyl phthalate (DPP)	131-18-0	%	<0.005	-
Sum	-	%	<0.075	0.1
Conclusion	-	-	PASS	-

Test Item A1: White paste (LAMINATOR 3046A)

Note: “<” = less than

Method: Sample was extracted with organic solvent and then analyzed by Liquid Chromatograph Mass Spectrometer / Gas Chromatograph Mass Spectrometer.

Remark: The above results of item A1 is transferred from (5508)012-0148 dated on January 21, 2008.

END