



Test Report

No. : 160219030GZU-003S1

Date : Mar 04, 2016

Applicant: Zhongshan Patton Paints Co., Ltd
Hengdang Industry Park, Zhongshan Patton Paints Co., Ltd

This is to supersede Report No. 160219030GZU-003 dated Feb, 29 2016

Sample Description:

The following submitted sample(s) said to be:

Item Name : 900Primer/ 911 Primer & 909 transparent coatings
Supplier : Foshan Shunzhao Packing Materials Co., Ltd / Zhongshan Patton Paints Co., Ltd
Date of Sample Received : Feb 23, 2016
Testing Period : Feb 23, 2016 to Feb 26, 2016

Tests conducted:

As requested by the applicant, refer to following page(s) for details.

Conclusion:

<u>Tested Sample</u>	<u>Test item</u>	<u>Result</u>
Submitted sample	Bisphenol –A Content	See Test Conducted
	<u>Standard</u>	<u>Result</u>
	Phthalates content requirement in Annex XVII Items 51 & 52 of the REACH Regulation (EC) No. 1907/2006 & Amendment No. 552/2009 (formerly known as Directive 2005/84/EC)	Pass
	<u>Standard</u>	<u>Result</u>
	EN71-3:2013+A1:2014 for migration of certain elements	Pass

Authorized by:
For Intertek Testing Services Shenzhen Ltd.
Guangzhou Branch

Silva Zhou
Project Engineer



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Tests Conducted

Tested sample: (1) Semi-transparent wet paint

1 Bisphenol-A Content

By solvent extraction and followed by Liquid Chromatographic- Mass Spectrometric (LC-MS) analysis.

<u>Tested Sample</u>	<u>Result (mg/kg)</u>
(1)	<0.1

mg/kg=milligram per kilogram

2 Phthalate Content

With reference to EN14372, by Gas Chromatographic-Mass Spectrometric (GC-MS) analysis.

	<u>Result (%)</u>
	<u>(1)</u>
Dibutyl phthalate (DBP)	<0.01
Di-(2-ethyl hexyl) phthalate (DEHP)	<0.01
Benzyl butyl phthalate (BBP)	<0.01
Sum of three phthalates	<0.01
Limit	0.1%

	<u>Result (%)</u>
	<u>(1)</u>
Di-iso-nonyl phthalate (DINP)	<0.01
Di-n-octyl phthalate (DNOP)	<0.01
Di-iso-decyl phthalate (DIDP)	<0.01
Sum of three phthalates	<0.01
Limit	0.1%

The above limit was quoted according to Annex XVII Items 51 & 52 of the REACH Regulation (EC) No. 1907/2006 & Amendment No. 552/2009(formerly known as Directive 2005/84/EC) for phthalate content in toys and child care articles.



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3 19 Toxic Element Migration Test

(A) Test Result

As per EN71-3:2013+A1:2014 and followed by Inductively Coupled Plasma Atomic Emission Spectrometry, Inductively Coupled Argon Mass Spectrometry.

Category (III): Scraped-off toy material

<u>Element</u>	<u>Result (mg/kg)</u>	<u>Limit (mg/kg)</u>
	(1)	
Aluminium (Al)	< 300	70000
Antimony (Sb)	< 10	560
Arsenic (As)	< 10	47
Barium (Ba)	< 10	18750
Boron (B)	< 50	15000
Cadmium (Cd)	< 5	17
Chromium (III) (Cr III) **	<10	460
Chromium (VI) (Cr VI) **	< 0.1	0.2
Cobalt (Co)	< 10	130
Copper (Cu)	< 10	7700
Lead (Pb)	< 10	160
Manganese (Mn)	< 10	15000
Mercury (Hg)	< 10	94
Nickel (Ni)	< 10	930
Selenium (Se)	< 10	460
Strontium (Sr)	< 100	56000
Tin (Sn)	< 10	180000
Organic tin **	< 2.0	12
Zinc (Zn)	< 100	46000

Remark : mg/kg = milligram per kilogram based on dry weight of sample.

++ = Unless the test results were marked with "#" or "Δ", Chromium (III) & Chromium (VI) and Organic tin contents were not directly determined and were derived from migration results of total chromium and tin respectively.

- Organic tin test result was expressed as tributyl tin.

- As per General Court of the European Union Judgment in Case T-198/12 dated 14 May 2014, the General Court confirmed that Germany could maintain its limit value for Lead(Pb)(90mg/kg) in toys but not for Antimony (Sb), Arsenic (As), Mercury (Hg) and Barium (Ba).



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(B) Categories of various toy materials

Category I: Dry, brittle, powder like or pliable

Solid toy material from which powder-like material is released during playing and semi-solid materials that may also leave residues on the hands during play. The material can be ingested. Contamination of the hands with the material may contribute to the oral exposure of the material. (e.g. the cores of colouring pencils, chalk, crayons, modelling clays and plaster).

Category II: Liquid or sticky

Fluid or viscous toy material, which can be ingested or to which dermal exposure may occur during playing. (e.g. liquid paints, finger paints, liquid ink in pens, glue sticks, slimes, bubble solution).

Category III : Scraped-off

Solid toy material with or without a coating, which can be ingested as a result of biting, tooth scraping, sucking or licking. (e.g. coatings, lacquers, plastics, paper, textiles, glass, ceramic, metallic, wooden, bone , leather and other materials).

Remark: The results in this report are based on dry weight of sample

Sample photo



End of report

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