Labor Dr. Fülling GmbH & Co. KG
Chemische und mikrobiologische Untersuchungen

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Von der Industrie- und Handelskammer
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PPG Coatings Nederland BV
Christelle Tuffery
Amsterdamseweg 14

NL 1422 Netherland, Uithoorn

our reference: 166884-6_eng/db
Date: 02.01.2017

Test report for chemical investigation

sample receipt date :	15.07.2016
examination period :	15.07.2016 - 15.08.2016
delivered by :	PPG Coatings Nederland BV
Sample sign:	Sigma Contour Aqua PU Satin

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Investigation according to DIN EN 71-3 „Safety of toys – Part 3: Migration of certain elements“

Sample preparation
The material was applicated on a glas target and dried at ca. 40 °C. The dried film was scraped from the target and tested.

Determination of elements by ICP-MS according to DIN 38406-29 (E 29)
Investigation of the hydrochloric acid extract (0.07 m HCl) according to DIN EN 71-3
(contents relating to the original matter)

sample sign		Sigma Contour Aqua PU Satin	LoQ
aluminium	mg/kg	42	5
antimony	mg/kg	<1	1
arsenic	mg/kg	<0,5	0,5
barium	mg/kg	<0,5	0,5
lead	mg/kg	<0,5	0,5
boron	mg/kg	<5	5
cadmium	mg/kg	<0,1	0,1
chromium	mg/kg	<1	1
cobalt	mg/kg	<0,5	0,5
copper	mg/kg	<1	1
manganese	mg/kg	<1	1
nickel	mg/kg	<1	1
mercury	mg/kg	<0,5	0,5
selenium	mg/kg	<1	1
strontium	mg/kg	<5	5
zinc	mg/kg	<5	5
tin	mg/kg	<5	5

Determination of chromium-VI by liquid phase chromatography/ICP-MS (LC/ICP-MS)
Investigation of the hydrochloric acid extract (0.07 m HCl) according to DIN EN 71-3
(contents relating to the original matter)

sample sign		Sigma Contour Aqua PU Satin	LoQ
Chromium (VI)	mg/kg	<0,05	0,05

Determination of tin organic compounds according to mod. DIN EN ISO 17353
Investigation of the hydrochloric acid extract (0.07 m HCl) according to DIN EN 71-3
(contents relating to the original matter)

sample sign		Sigma Contour Aqua PU Satin	LoQ
dimethyl tin	mg/kg	< 0,1	0,1
monomethyl tin	mg/kg	< 0,1	0,1
di-n-propyl tin	mg/kg	< 0,1	0,1
monobutyl tin	mg/kg	< 0,1	0,1
dibutyl tin	mg/kg	< 0,1	0,1
tributyl tin	mg/kg	< 0,1	0,1
monooctyl tin	mg/kg	< 0,1	0,1
tetrabutyl tin	mg/kg	< 0,1	0,1
dioctyl tin	mg/kg	< 0,1	0,1
tricyclohexyl tin	mg/kg	< 0,1	0,1
trimethyl tin	mg/kg	< 0,1	0,1
trioctyl tin	mg/kg	< 0,1	0,1
diphenyl tin	mg/kg	< 0,1	0,1
triphenyl tin	mg/kg	< 0,1	0,1

LoQ = Limit of Quantitation

Judgement

The tested material meets the requirements according to DIN EN 71-3 „Safety of toys – Part 3: Migration of certain elements“ for category III (threadbare materials).

signature _____

Dr. M. Dierkes (laboratory manager)