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WILCKENS FARBEN GMBH
Attn: Frau Maren Westphalen
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25348 Glückstadt

Braunschweig, 27.01.2023

Test report No. MAIC-2023-0197

Customer:	WILCKENS FARBEN GMBH, Glückstadt.	
Objective of the test:	Determination of migratable elements of a lacquered glass plate sample.	
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This report comprises 4 pages.

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Sample description:

WKI no.	Date of reception	Sample Name (this information is provided by the customer)	Product No.	Manufacturer-Code	Date-Stamp
P96212	24.01.2023	1. SPWE glänzend (1. SPWE.... glänzend mit höchstem Pigmentanteil (Titandioxid-weiß) Handelsnamen: Wilckens Buntlack 2 in 1 glänzend Wilckens Weißlack 2 in 1 glänzend Renolin Buntlack 2in1 glänzend Renolin Weißlack 2in1 glänzend)	n.a.	Wilckens Farben GmbH	n.a.

(Sample P96212: paper/cardboard/wrapped separately, wrapping ok)

Notice: Sample material will be stored for 2 months after test report date. Please contact us if an extended storage time is required or if sample material needs to be returned.



Methods:

Determination of migratable elements according to DIN EN 71-3:2019+A1:2021-06

Category III: scraped-off materials

100 - 200 mg of the scraped-off material was weighed into a vial and shaken with the 50-fold amount of a 0.07 mol/l HCl solution for 1 min. The pH-value was checked and, if necessary, adjusted to 1.10 – 1.20 using a 2 or 6 mol/l HCl solution, respectively. Afterwards, the solution was agitated for 1 h at 37 (±2) °C and then left for another hour at the same temperature.

The extract was filtered using a membrane filter and measured via ICP/MS. The concentration of migrated elements was calculated using a certified and matrix-adjusted multi-element standard.

Determination of chromium species Cr (VI) according to DIN EN 71-3:2019+A1:2021-06
Category III: scraped-off materials

An aliquot of the filtrated migration solution was neutralized with ammoniac solution and diluted with thinned mobile phase. Afterwards, Cr (VI) was measured via HPLC-ICP/MS and calculated using a certified and matrix-adjusted element standard.

Results:
Results of the element determination of sample P96212 (1. SPWE glänzend)

Elements	Migration element content [mg/kg]	Limit of detection (LoD) [mg/kg]	Limit of determination (LoQ) [mg/kg]	Limit values category III [mg/kg]
Al	122	0.3	0.9	28130
Sb	< LoD	0.3	0.9	560
As	< LoD	0.3	0.9	47
Ba	4.4	0.3	0.9	18750
B	< LoD	0.3	0.9	15000
Cd	< LoD	0.3	0.9	17
Cr	< LoD	0.3	0.9	460
Cr (III)	< LoD	0.3	0.9	460
Cr (VI)	< LoD	0.002	0.006	0.053
Co	< LoD	0.3	0.9	130
Cu	< LoQ	0.3	0.9	7700
Pb	< LoD	0.3	0.9	23
Mn	< LoD	0.3	0.9	15000
Hg	< LoD	0.02	0.06	94
Ni	< LoD	0.3	0.9	930
Se	< LoD	0.3	0.9	460
Sr	< LoQ	0.3	0.9	56000
Sn	< LoQ	0.3	0.9	180000
Zn	3.8	0.3	0.9	46000

Parameters of the element determination (DIN EN 71-3:2019+A1:2021-06)

Elution: 0.07 mol HCl solution. 2 h at 37 °C.

pH value after elution: 1.25

Analysis: Agilent ICP-MS 7700

Calibration: Matrix-adjusted multi-element standards

Testing date: 24.01.2023

Remarks: The migrated element contents of sample P96212 were below the limit values according to DIN EN 71-3:2019+A1:2021-06. IOS-MAT-0054 (AA-92520-13). IOS-MAT-0195 (AA-2208470-3) and IOS-PRG-0010 (AA-15857-15).

Recalculated results of migratable elements according to ISO 8124-3:2020-03

According to IKEA IOS regulations IOS-MAT0054 (AA-92520-13). IOS-MAT0195 (AA-2208470-3) and IOS-PRG-0010 (AA-15857-15) the analysis results of DIN EN 71-3:2019+A1:2021-06 can be recalculated using correction factors stated in ISO 8124-3:2020-03. The used correction factors and the recalculated results are shown in the following table.

The values according to ISO 8124-3:2020-03 are recalculated for information purposes only.

Recalculated results of migratable elements according to ISO 8124-3:2020-03

Elements	DIN EN 71-3		ISO 8124-3	
	Analyzed migration element content [mg/kg]	analytical correction factors [%]	recalculated migration element content [mg/kg]	*Limit values any toy material [mg/kg]
Sb	< LoD	60	-	60
As	< LoD	60	-	25
Ba	4.4	30	3.1	1000
Cd	< LoD	30	-	75
Cr	< LoD	30	-	60
Pb	< LoD	30	-	90
Hg	< LoD	50	-	60
Se	< LoD	60	-	500

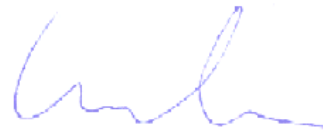
*except modelling clay and finger paint

Officer in Charge



A. Omelan

For the department



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