



Nach DIN EN ISO/IEC 17025 durch die Deutsche Akkreditierungsstelle GmbH akkreditiertes Prüflaboratorium.
Die Akkreditierung gilt für die in der Urkunde aufgeführten Prüfverfahren.

Gratnells Ltd
- Mr. Luigi Ghezzi -
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United Kingdom

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Your letter of

Your ref
Order-No.
MM190002

Our ref
2.5/As/mü

Phone extension
379-252

Date
19.02.2019

TEST REPORT

General

Test report – No.:	2.5 / 088 / 2019
Commissioned by:	see above
Objects tested:	2 samples: Gratnells Shallow Tray (F19), 312x427x75 mm, Colour Sunshine yellow + Colour Flame red see page 2 for details
Sampling:	by customer
Test:	Check of cadmium, lead, Migration of certain elements, organic tin substances and phthalates
Date received:	31.01.2019
Test period:	04.02. – 18.02.2019
Processed by:	1) Mr. Axthelm 2) Ms. Körfer
Test procedure:	1) see table page 2 No. 1 – 2 2) see table page 2 No. 3 – 4
Remarks:	none
Report copies:	1 copy for client, 1 copy for OMPG

Results of measurements and analyses refer only to the tested samples. This test report is legally valid with the signature of the head of laboratory or his / her representative only. Copies must be done completely. Copies, even in extracts, require the written permission of OMPG Ltd.. Processes marked with an asterisk (*) are not accredited.

Please note:

Results below the minimum detection limits are reported as „< [MDL]“

Tests of composite samples are carried out by customer order and can be a deviation from test standard. Although the results of composite samples pass the requirements, one or more single parts of the composite sample can exceed the limits.

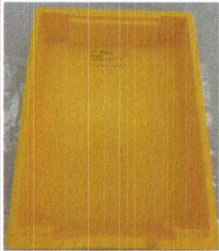

Krämer
Head of Analytics



Test standards and Requirements

No.	Parameter / Requirements	Test standards	Assessment of all samples
1	Cadmium and Lead <i>Regulation (EC) 1907/2006 (Reach)</i>	Digestion acc. to SOP2.5.L126 and ICP-OES acc. to DIN EN ISO 11885:2009-09	passed
2	Migration of certain elements <i>Directive 2009/48/EC</i>	DIN EN 71-3:2018-08	passed
3	Organic tin substances <i>Regulation (EC) 1907/2006 (Reach) Annex XVII No 20 and Directive 2009/48/EC</i>	DIN EN 71-3:2018-08 / SOP 2.5.L145	passed
4	Phthalates <i>Regulation (EC) 1907/2006 (Reach) Annex XVII No 51 + 52 and Annex XIV No 4 – 7</i>	SOP2.5.L144 (Extraction with CH ₂ Cl ₂ and GC-MS)	passed

Pictures, Objects tested

Sample	Pictures	Sample designation
2.5/088/01/2019		SK-F1_GELB Gratnells Shallow Tray (F1), 312 x 427 x 75 mm, Colour: Sunshine yellow
2.5/088/02/2019		SK-F1_ROT Gratnells Shallow Tray (F1), 312 x 427 x 75 mm, Colour: Flame red

Test results

Total amount of Cadmium

Sample designation	Parameter	Cadmium [mg/kg]	Limit	Assessment
Composite Sample 2.5/088/01 + 02/2019		< 1	100	passed

Total amount of Lead

Sample designation	Parameter	Lead [mg/kg]	Limit	Assessment
Composite Sample 2.5/088/01 + 02/2019		< 5	90	passed



Migration of certain elements

1) The total amount of chromium was determined with ICP-OES. The detection limit is < 0.04 mg/kg.

Sample designation		Composite Sample 2.5/088/01 + 02/2019		Limits DIN EN 71-3
Parameter				
Aluminium (Al)	mg/kg	< 10		70.000
Arsenic (As)	mg/kg	< 10		47
Boron (Bo)	mg/kg	< 10		15.000
Barium (Ba)	mg/kg	< 10		18.750
Cadmium (Cd)	mg/kg	< 3		17
Cobalt (Co)	mg/kg	< 10		130
Chromium III (Cr III)	mg/kg	< 0,04 ¹⁾		460
Chromium VI (Cr VI)	mg/kg	< 0,04 ¹⁾		0,2
Copper (Cu)	mg/kg	< 10		7.700
Mercury (Hg)	mg/kg	< 10		94
Manganese (Mn)	mg/kg	< 10		15.000
Nickel (Ni)	mg/kg	< 10		930
Lead (Pb)	mg/kg	< 3		23
Antimony (Sb)	mg/kg	< 10		560
Selenium (Se)	mg/kg	< 10		460
Tin (Sn)	mg/kg	< 10		180.000
Strontium (Sr)	mg/kg	< 10		56.000
Zinc (Zn)	mg/kg	47		46.000
Assessment		passed		---

Organotin compounds acc. to DIN EN 71-3 in connection with SOP 2.5.L145

Sample designation		Composite Sample 2.5/088/01 + 02/2019		Limits DIN EN 71-3	
Parameter					
MBT (Monobutyltin)	mg/kg	< 0,06			
DBT (Dibutyltin)	mg/kg	< 0,06			
TBT (Tributyltin)	mg/kg	< 0,06			
TeBT (Tetrabutyltin)	mg/kg	< 0,09			
MOT (Monooctyltin)	mg/kg	< 0,06			
DOT (Dioctyltin)	mg/kg	< 0,06			
TPhT (Triphenyltin)	mg/kg	< 0,06			
TcyT (Tricyclohexyltin)	mg/kg	< 0,06			
Methylzinn / Methyltin	mg/kg	< 0,06			
Di-n-Propylzinn / Di-n-Propyltin	mg/kg	< 0,06			
Diphenylzinn / Diphenyltin	mg/kg	< 0,09			
Σ Organozinn	mg/kg	< 12			12
Assessment		passed			---



Phthalates

Sample designation		Composite Sample 2.5/088/01 + 02/2019		Requirements acc. VO (EG) 1907/2006
DEHP (Di-2-ethylhexylphthalate)	%	< 0,05		0,1 %
DBP (Dibutylphthalate)	%	< 0,05		0,1 %
BBP (Benzylbutylphthalate)	%	< 0,05		0,1 %
DNOP (Di-n-octylphthalate)	%	< 0,05		
DIDP (Diisodecylphthalate)	%	< 0,05		
DINP (Di-iso-nonylphthalate)	%	< 0,05		
DIBP (Diisobutylphthalate)	%	< 0,05		0,1 %
Assessment		passed		---