

Test Report No.: 70.431.22.12561.01

Dated: 2022-06-20



Applicant: POLYCONCEPT GBS
Address: 4/F., HONGQIAO RONGGUANG BLDG., 11 CHANGSHUN ROAD SHANGHAI, 200051, PR CHINA
Product Name: Ceramic mug cork base-WH
Ceramic mug cork base-GY
Ceramic mug cork base-BK
Model No.: 10090101/ 10090182/ 10090190
PO/Order No.: #652561
Manufacturer: 11700
Factory Code: 12331
Country of Origin: CHINA
Country of Destination: EU
Receipt Date of Sample: 2022-06-07
Date of Testing: 2022-06-07 to 2022-06-20
Sample Submitted: The sample(s) was (were) submitted by applicant and identified.
Test Result: Refer to the data listed in following pages

Test Item	Conclusion
1. Total Cadmium Content Requirement in Annex XVII, Item 23 of the REACH Regulation(EC) No 1907/2006 with its Amendments	Pass
2. Total Lead Content Requirement in Annex XVII, Item 63 of the REACH Regulation (EC) No 1907/2006 with its Amendments	Pass
3. Pentachlorophenol (PCP) Content - European Parliament and Council Regulation (EU) 2019/1021 on Persistent Organic Pollutants (POPs)	Pass
4. Disodium tetraborate, anhydrous , Tetraboron disodium heptaoxide, hydrate and Diboron trioxide, Cobalt - in Substances of Very High Concern (SVHC) published by European Chemicals Agency (ECHA)	Pass
5. Dutch-Verpakkingen en Gebruiksartikelen (Warenwet Packaging and Consumer Articles) Annex Part A, Chapter VI - Overall Migration Test	Pass
6. EU-Directive 84/500/EEC-Extractable Lead and Cadmium	Pass
7. Dutch-Verpakkingen en Gebruiksartikelen (Warenwet Packaging and Consumer Articles) Annex Part A, Chapter VI - Specific migration of certain elements	Pass

Remarks: 1. MDL = Method Detection Limit
2. ND = Not Detected (<MDL)
3. <= Less than
4. 1 mg/kg = 1 ppm = 0.0001%
5. The migration results in this report were tested and expressed based on repeated use articles.
6. The testing approach, the testing methods, and the reported results in this report demonstrate compliance or non-compliance to the client's requirements which were mutually agreed at the contract review and stipulated in the quotation. The testing approach, the testing methods, and the reported results may not or only partially fulfil the associated requirements of the applicable regulations.

Test Report **No.: 70.431.22.12561.01**
Dated: 2022-06-20



TÜV SÜD Certification and Testing (China) Co.,Ltd. Shanghai Branch
Testing Center

Prepared by:

Jenny Yao
Technical Engineer



Authorized by:

Sawyer Tang
Technical Manager

Note:

- (1) The TÜV SÜD Certification and Testing (China) Co., Ltd. "General Terms & Conditions" applied.
Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production.
For further details, please see "Testing and certification regulation", chapter A-3.4
For full version, please visit: EN : <https://www.tuvsud.cn/zh-cn/resource/terms-and-conditions---en> ; SCN: <https://www.tuvsud.cn/zh-cn/terms-and-conditions> ; TCN: <https://www.tuvsud.com/zh-tw/terms-and-conditions>
- (2) The results relate only to the items tested.
- (3) The test report shall not be reproduced except in full without the written approval of the laboratory
- (4) **Disclaimer Measurement Uncertainty:**
Unless otherwise agreed upon, Pass or Fail verdicts are given based on the measured values without any considerations of measurement uncertainties.
Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO/IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as Pass nor as Fail.

Test Report **No.: 70.431.22.12561.01**
Dated: 2022-06-20



Description of the Tested Subject

Sample	Description	Photo
001	Ceramic mug cork base-WH Ceramic mug cork base-GY Ceramic mug cork base-BK	

T. No	Sample	Description
T1	002	Shiny black ceramic (inner body)
T2	003	Shiny white ceramic (inner body)
T3	004	Shiny grey ceramic (inner body)
T4	005	Shiny black/dull black ceramic (body)
T5	006	Shiny grey/dull grey ceramic (body)
T6	007	Cork (bottom of body/all styles)
T7	008	Shiny White/dull white ceramic (body)

Test Report

No.: 70.431.22.12561.01

Dated: 2022-06-20



Test Results

1. Total Cadmium Content Requirement in Annex XVII, Item 23 of the REACH Regulation(EC) No 1907/2006 with its Amendments

Test with reference to Acid digestion and EN 1122:2001 Method B, determination by ICP-OES/ICP-MS.

Sample	Unit	MDL	Limit	Result(s)	Conclusion
007	mg/kg	5	<100	<5.0	Pass

2. Total Lead Content Requirement in Annex XVII, Item 63 of the REACH Regulation (EC) No 1907/2006 with its Amendments

Test with reference to in house method, determination by ICP-OES/ICP-MS.

Sample	Unit	MDL	Limit	Result(s)	Conclusion
005+006+008	mg/kg	10.0	500	<10.0	Pass
007	mg/kg	10.0	500	<10.0	Pass

3. Pentachlorophenol (PCP) Content - European Parliament and Council Regulation (EU) 2019/1021 on Persistent Organic Pollutants (POPs)

Test with reference to CEN/TR 14823:2003, determination by GC-MS.

Parameter	CAS No.	Unit	MDL	Limit	Result(s)
					007
Pentachlorophenol	87-86-5	mg/kg	1	<5	<1
Conclusion					Pass

4. Disodium tetraborate, anhydrous , Tetraboron disodium heptaoxide, hydrate and Diboron trioxide, Cobalt - in Substances of Very High Concern (SVHC) published by European Chemicals Agency (ECHA)

Test with reference to in house method and determination by ICP-OES/ICP-MS.

Compound	CAS No.	Unit	MDL	Limit	Result(s) [%]
					005+006+008
Disodium tetraborate, anhydrous	1303-96-4/ 1330-43-4/ 12179-04-3	%	0.01	<0.1	<0.01
Tetraboron disodium heptaoxide, hydrate	12267-73-1	%	0.01	<0.1	<0.01
Diboron trioxide	1303-86-2	%	0.01	<0.1	<0.01
Conclusion					Pass

Compound	CAS No.	Unit	MDL	Limit	Result(s) [%]
					005+006+008
Cobalt dichloride**	7646-79-9	% w/w	0.01	<0.1	NA
Cobalt(II) sulphate**	10124-43-3	% w/w	0.01	<0.1	NA
Cobalt(II) dinitrate**	10141-05-6	% w/w	0.01	<0.1	NA
Cobalt(II) carbonate**	513-79-1	% w/w	0.01	<0.1	NA
Cobalt(II) diacetate**	71-48-7	% w/w	0.01	<0.1	NA
Conclusion					-

R Remark: 1 Upon further test verification on the specific detected element(s) of SVHC and also information provided from client, the possibility that the element(s) content originate from SVHC is very unlikely, even though their presence cannot be exclude entirely. It may be assumed that the detected element(s) have a non-SVHC source

2. ** The test result is based on the calculation of selected marker(s) and to the worst-case scenario

5. Dutch-Verpakkingen en Gebruiksartikelen (Warenwet Packaging and Consumer Articles) Annex Part A, Chapter VI - Overall Migration Test

- EN1186-1:2002 for selection of test methods;
- EN1186-9:2002 aqueous food simulants by article filling method;
- Sample 002-004 migration ratio: 400ml/3.01dm²

Simulant(s) Used	Test Condition	Result(s) [mg/kg]	Maximum Permissible Limit [mg/kg]	Conclusion
		002		
50% Ethanol	70°C for 2 hours	<20.0	60	Pass
3% Acetic acid	70°C for 2 hours	<20.0	60	Pass

Simulant(s) Used	Test Condition	Result(s) [mg/kg]	Maximum Permissible Limit [mg/kg]	Conclusion
		003		
50% Ethanol	70°C for 2 hours	<20.0	60	Pass
3% Acetic acid	70°C for 2 hours	<20.0	60	Pass

Simulant(s) Used	Test Condition	Result(s) [mg/kg]	Maximum Permissible Limit [mg/kg]	Conclusion
		004		
50% Ethanol	70°C for 2 hours	<20.0	60	Pass
3% Acetic acid	70°C for 2 hours	<20.0	60	Pass

6. EU-Directive 84/500/EEC-Extractable Lead and Cadmium

- With reference to DIN EN 1388: Part 1: 1995 and DIN EN 1388: Part 2: 1995
- Test condition: 4% acetic acid, 22°C for 24 hours

Test Item(s)	Result(s) [mg/L]	Maximum Permissible Limit (category 2) [mg/L]	Conclusion
	005		
Extractable Lead	<0.05	4.0	Pass
Extractable Cadmium	<0.01	0.3	Pass

Test Item(s)	Result(s) [mg/L]	Maximum Permissible Limit (category 2) [mg/L]	Conclusion
	006		
Extractable Lead	<0.05	4.0	Pass
Extractable Cadmium	<0.01	0.3	Pass

Test Item(s)	Result(s) [mg/L]	Maximum Permissible Limit (category 2) [mg/L]	Conclusion
	008		
Extractable Lead	<0.05	4.0	Pass
Extractable Cadmium	<0.01	0.3	Pass

7. Dutch-Verpakkingen en Gebruiksartikelen (Warenwet Packaging and Consumer Articles) Annex Part A, Chapter VI - Specific migration of certain elements

- Test with reference to in house method, determination by ICP-OES.
- Test condition: 3% Acetic acid, 70°C for 2 hours
- Sample 002-004 migration ratio: 450ml/3.01dm²

Test Item(s)	Result(s) [mg/kg]	Method Detection Limit [mg/kg]	Maximum Permissible Limit* [mg/kg]	Conclusion
	002			
Arsenic (As)	<0.001	0.001	0.01	Pass
Barium (Ba)	0.002	0.001	1	Pass
Boron (B)	<0.01	0.01	1	Pass
Cadmium (Cd)	<0.001	0.001	0.01	Pass
Chromium (Cr)	<0.001	0.001	0.1	Pass
Cobalt (Co)	<0.001	0.001	0.05	Pass
Mercury (Hg)	<0.001	0.001	0.005	Pass
Lithium (Li)	<0.001	0.001	0.6	Pass
Lead (Pb)	<0.001	0.001	0.1	Pass
Rubidium (Rb)	<0.001	0.001	1	Pass
Selenium (Se)	<0.001	0.001	0.01	Pass
Strontium(Sr)	<0.001	0.001	1	Pass

Test Report

No.: 70.431.22.12561.01

Dated: 2022-06-20



Greater China

Test Item(s)	Result(s) [mg/kg]	Method Detection Limit [mg/kg]	Maximum Permissible Limit* [mg/kg]	Conclusion
	003			
Arsenic (As)	<0.001	0.001	0.01	Pass
Barium (Ba)	0.001	0.001	1	Pass
Boron (B)	<0.01	0.01	1	Pass
Cadmium (Cd)	<0.001	0.001	0.01	Pass
Chromium (Cr)	<0.001	0.001	0.1	Pass
Cobalt (Co)	<0.001	0.001	0.05	Pass
Mercury (Hg)	<0.001	0.001	0.005	Pass
Lithium (Li)	<0.001	0.001	0.6	Pass
Lead (Pb)	<0.001	0.001	0.1	Pass
Rubidium (Rb)	<0.001	0.001	1	Pass
Selenium (Se)	<0.001	0.001	0.01	Pass
Strontium(Sr)	<0.001	0.001	1	Pass

Test Report

No.: 70.431.22.12561.01

Dated: 2022-06-20



Test Item(s)	Result(s) [mg/kg]	Method Detection Limit [mg/kg]	Maximum Permissible Limit* [mg/kg]	Conclusion
	004			
Arsenic (As)	<0.001	0.001	0.01	Pass
Barium (Ba)	0.001	0.001	1	Pass
Boron (B)	<0.01	0.01	1	Pass
Cadmium (Cd)	<0.001	0.001	0.01	Pass
Chromium (Cr)	<0.001	0.001	0.1	Pass
Cobalt (Co)	<0.001	0.001	0.05	Pass
Mercury (Hg)	<0.001	0.001	0.005	Pass
Lithium (Li)	<0.001	0.001	0.6	Pass
Lead (Pb)	<0.001	0.001	0.1	Pass
Rubidium (Rb)	<0.001	0.001	1	Pass
Selenium (Se)	<0.001	0.001	0.01	Pass
Strontium(Sr)	<0.001	0.001	1	Pass

- End of Test Report -