

Test Report

No.: 70.431.23.10449.01

Dated: 2023-03-23



Greater China

Applicant: POLYCONCEPT GBS
Address: 4/F., HONGQIAO RONGGUANG BLDG., 11 CHANGSHUN ROAD SHANGHAI,
200051, PR CHINA
Product Name: Felta GRS cooler bp – mgrey
Felta GRS bottle cooler-mgrey
Model No.: 21074282/12066782
PO/Order No.: PO# 656708
Manufacturer: #10502
Factory Code: #13924/#13521
Country of Origin: China
Country of Destination: EU
Receipt Date of Sample: 2023-02-14
Date of Testing: 2023-02-14 to 2023-03-23
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. 2-methylimidazole Content - in Substances of Very High Concern (SVHC) published by European Chemicals Agency (ECHA)	Pass
4. Dibutylbis(pentane-2,4dionato-O,O')tin Content - in Substances of Very High Concern (SVHC) published by European Chemicals Agency (ECHA)	Pass
5. Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with $\geq 0.1\%$ w/w of 4-nonylphenol, branched and linear (4-NP) Content - in Substances of Very High Concern (SVHC) published by European Chemicals Agency (ECHA)	Pass
6. EU-Commission Regulation (EU) 2020/1245 amending Regulation (EU) No 10/2011 and its amendments - Overall Migration	Pass
7. EU- Commission Regulation (EU) 2020/1245 amending Regulation (EU) No 10/2011 and its amendments -Specific Migration of Heavy Metals	Pass
8. EU- Commission Regulation (EU) 2020/1245 amending Regulation (EU) No 10/2011 and its amendments -Specific Migration of Bisphenol A	Pass
9. EU-Commission Regulation (EU) 2020/1245 amending Regulation (EU) No 10/2011 and its amendments -Special Migration of Phthalates	Pass
10. EU- Commission Regulation (EU) 2020/1245 amending Regulation (EU) No 10/2011 and its amendments -Specific Migration of Primary Aromatic Amine	Pass
11. EU- Commission Regulation (EU) 2020/1245 amending Regulation (EU) No 10/2011 and its amendments -Specific Migration of Primary Aromatic Amine (29)	Pass
12. Specific Migration of Polycyclic Aromatic Hydrocarbons (PAHs)	Pass

Test Item	Conclusion
13. Germany-German Food & Feed Acts LFGB Section 31 and BfR Recommendation-Sensory Test	Pass
14. EU-Regulation (EU) No. 10/2011-Phthalates Content	Pass
15. Total Bisphenol A (BPA) Content	Pass

Remarks: 1. MDL = Method Detection Limit
2. ND = Not Detected (<MDL)
3. <= Less than
4. 1 mg/kg = 1 ppm = 0.0001%
5. mg/L = milligram per litre
6. mg/article = milligram per article
7. The migration results in this report were tested and expressed based on repeated use articles.
8. 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.: 70.431.23.10449.01
Dated: 2023-03-23



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.

Description of the Tested Subject

Sample	Description	Photo
001	Felta GRS cooler bp-mgrey	
002	Felta GRS bottle cooler-mgrey	

T. No	Sample	Description
T1	003	Grey soft plastic lining (001)

Test Report No.: 70.431.23.10449.01
Dated: 2023-03-23



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
003	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
003	mg/kg	10.0	500	<10.0	Pass

3. 2-methylimidazole Content - in Substances of Very High Concern (SVHC) published by European Chemicals Agency (ECHA)

Test with reference to in house method and determination by LC-MS.

Compound	CAS No.	Unit	MDL	Limit	Result(s) [%]
					003
2-methylimidazole	693-98-1	%	0.01	<0.1	<0.01
Conclusion					Pass

4. Dibutylbis(pentane-2,4dionato-O,O')tin Content - in Substances of Very High Concern (SVHC) published by European Chemicals Agency (ECHA)

Test with reference to in house method and determination by LC-MS.

Compound	CAS No.	Unit	MDL	Limit	Result(s) [%]
					003
Dibutylbis(pentane-2,4dionato-O,O')tin	22673-19-4 (245-152-0)	%	0.01	<0.1	<0.01
Conclusion					Pass

5. Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with $\geq 0.1\%$ w/w of 4-nonylphenol, branched and linear (4-NP) Content - in Substances of Very High Concern (SVHC) published by European Chemicals Agency (ECHA)

Test with reference to in house method and determination by LC-MS.

Compound	CAS No.	Unit	MDL	Limit	Result(s) [%]
					003
Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with $\geq 0.1\%$ w/w of 4-nonylphenol, branched and linear (4-NP)	--	%	0.01	<0.1	<0.01
Conclusion					Pass

6. EU-Commission Regulation (EU) 2020/1245 amending Regulation (EU) No 10/2011 and its amendments

- Overall Migration

- EN1186-3:2022 overall migration in evaporable simulants.
- Samples 003 Migration ratio: 4.0g/1.00dm²

Simulant(s) Used	Test Condition	Overall Migration Result(s) [mg/dm ²]			Maximum Permissible Limit [mg/dm ²]	Conclusion
		003 1 st Migration	003 2 nd Migration	003 3 rd Migration		
MPPO	40°C for 10 days	<3.0	<3.0	<3.0	10	Pass

7. EU- Commission Regulation (EU) 2020/1245 amending Regulation (EU) No 10/2011 and its amendments -Specific Migration of Heavy Metals

- With reference to EN 13130-1:2004, followed by ICP-MS.
- Test condition: MPPO, 40°C for 24 hours
- Samples 003 Migration ratio: 5.76g/1.44dm²

Test Item(s)	MDL [mg/kg]	Result(s) [mg/kg]			Limit [mg/kg]	Conclusion
		003 1 st Migration	003 2 nd Migration	003 3 rd Migration		
Iron (Fe)	1.0	ND	ND	ND	48	Pass
Zinc (Zn)	1.0	ND	ND	ND	5	Pass
Copper (Cu)	0.5	ND	ND	ND	5	Pass
Manganese (Mn)	0.05	ND	ND	ND	0.6	Pass
Cobalt (Co)	0.05	ND	ND	ND	0.05	Pass
Barium (Ba)	0.1	ND	ND	ND	1	Pass
Lithium (Li)	0.1	ND	ND	ND	0.6	Pass
Aluminium (Al)	0.1	ND	ND	ND	1	Pass
Nickel (Ni)	0.01	ND	ND	ND	0.02	Pass
Antimony (Sb)	0.01	ND	ND	ND	0.04	Pass
Arsenic (As)	0.01	ND	ND	ND	0.01	Pass
Cadmium (Cd)	0.002	ND	ND	ND	0.002	Pass
Chromium (Cr)	0.01	ND	ND	ND	0.01	Pass
Lead (Pb)	0.01	ND	ND	ND	0.01	Pass
Mercury (Hg)	0.01	ND	ND	ND	0.01	Pass
Europium	0.01	ND	ND	ND	Sum 0.05	Pass
Gadolinium	0.01	ND	ND	ND		Pass
Lanthanum	0.01	ND	ND	ND		Pass
Terbium	0.01	ND	ND	ND		Pass

8. EU- Commission Regulation (EU) 2020/1245 amending Regulation (EU) No 10/2011 and its amendments -Specific Migration of Bisphenol A

- With reference to EN 13130-1:2004, followed by LC/MS/MS
- Test condition: MPPO, 40°C for 24 hours
- Samples 003 Migration ratio: 5.76g/1.44dm²

Test Item(s)	Result(s) [mg/kg]	Method Detection Limit [mg/kg]	Maximum Permissible Limit [mg/kg]	Conclusion
	003			
Specific migration of BPA - 1 st Migration	ND	0.02	0.05	Pass
Specific migration of BPA - 2 nd Migration	ND	0.02	0.05	Pass
Specific migration of BPA - 3 rd Migration	ND	0.02	0.05	Pass

9. EU-Commission Regulation (EU) 2020/1245 amending Regulation (EU) No 10/2011 and its amendments -Special Migration of Phthalates

- With reference to EN 13130-1:2004, followed by GC-MS
- Test condition: MPPO, 40°C for 24 hours
- Samples 003 Migration ratio: 5.76g/1.44dm²

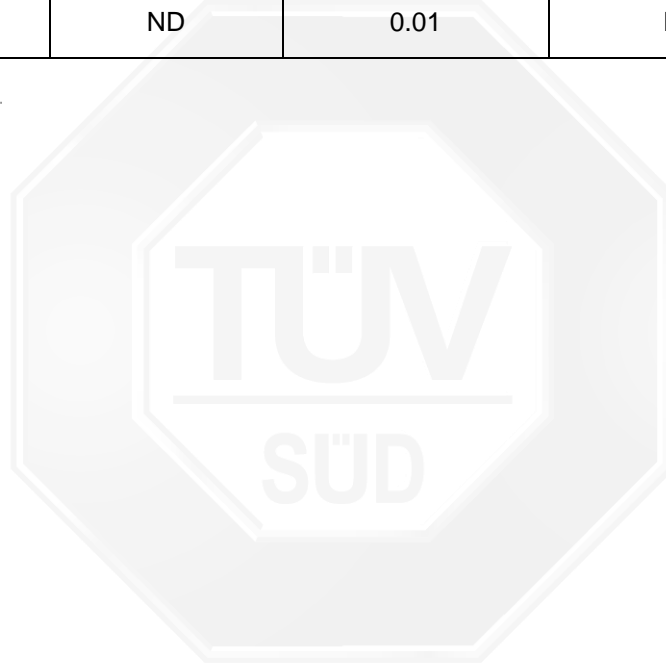
Test Items	CAS No.	MDL [mg/kg]	Maximum Permissible Limit [mg/kg]	Test Result [mg/kg]			Conclusion
				003 1 st Migration	003 2 nd Migration	003 3 rd Migration	
Benzylbutyl Phthalate (BBP)	85-68-7	0.5	30	<0.5	<0.5	<0.5	Pass
Dibutyl Phthalate (DBP)	84-74-2	0.1	0.3	<0.1	<0.1	<0.1	Pass
Di(2-ethylhexyl) phthalate (DEHP)	117-81-7	0.5	1.5	<0.5	<0.5	<0.5	Pass
Diisononyl Phthalate (DINP)	68515-48-0	0.5	Total 9	<0.5	<0.5	<0.5	Pass
Diisodecyl phthalate (DIDP)	26761-40-0	0.5		<0.5	<0.5	<0.5	
Adipic acid, bis(2-ethylhexyl) Ester (DEHA)	103-23-1	0.5	18	<0.5	<0.5	<0.5	Pass
Diallyl phthalate (DAP)	131-17-9	0.01	0.01	<0.01	<0.01	<0.01	Pass



10. EU- Commission Regulation (EU) 2020/1245 amending Regulation (EU) No 10/2011 and its amendments - Specific Migration of Primary Aromatic Amine

- With reference to EN 13130-1:2004, followed by Kunststoffe im Lebensmittelverkehr, Book 2, Teil B II,XXI
- Test condition: MPPO, 40°C for 24 hours
- Samples 003 Migration ratio: 5.76g/1.44dm²

Test Item(s)	Result(s) [mg/kg]	Method Detection Limit [mg/kg]	Maximum Permissible Limit [mg/kg]	Conclusion
	003			
Specific migration of primary aromatic amines – 1 st Migration	ND	0.01	ND	Pass
Specific migration of primary aromatic amines – 2 nd Migration	ND	0.01	ND	Pass
Specific migration of primary aromatic amines – 3 rd Migration	ND	0.01	ND	Pass



11. EU- Commission Regulation (EU) 2020/1245 amending Regulation (EU) No 10/2011 and its amendments - Specific Migration of Primary Aromatic Amine (29)

- With reference to EN 13130-1:2004.

- Test condition: MPPO, 40°C for 24 hours

- Samples 003 Migration ratio: 5.76g/1.44dm²

No.	Prohibited Amines	CAS No.	MDL [mg/kg]	Limit [mg/kg]	Result(s) [mg/kg]		
					003 1 st Migration	003 2 nd Migration	003 3 rd Migration
1	4-Aminobiphenyl	92-67-1	0.002	0.002	ND	ND	ND
2	4,4'-Benzidine	92-87-5	0.002	0.002	ND	ND	ND
3	4-Chloro-2-methylaniline	95-69-2	0.002	0.002	ND	ND	ND
4	2-Naphthylamine	91-59-8	0.002	0.002	ND	ND	ND
5	o-Aminoazotoluene	97-56-3	0.002	0.002	ND	ND	ND
6	5-Nitro-o-toluidine	99-55-8	0.002	0.002	ND	ND	ND
7	4-Chloroaniline	106-47-8	0.002	0.002	ND	ND	ND
8	4-Methoxy-1,3-phenylenediamine	615-05-4	0.002	0.002	ND	ND	ND
9	Bis-(4-aminophenyl) methane	101-77-9	0.002	0.002	ND	ND	ND
10	3,3'-Dichlorobenzidine	91-94-1	0.002	0.002	ND	ND	ND
11	3,3'-Dimethoxybenzidine	119-90-4	0.002	0.002	ND	ND	ND
12	o-Tolidine	119-93-7	0.002	0.002	ND	ND	ND
13	3,3'-Dimethyl-4,4'-diaminodiphenylmethane	838-88-0	0.002	0.002	ND	ND	ND
14	2-Methoxy-5-methylaniline	120-71-8	0.002	0.002	ND	ND	ND
15	4,4'-Methylene bis(o-chloroaniline)	101-14-4	0.002	0.002	ND	ND	ND
16	4,4'-Oxydianiline	101-80-4	0.002	0.002	ND	ND	ND
17	4,4'-Thiodianiline	139-65-1	0.002	0.002	ND	ND	ND
18	o-Toluidine	95-53-4	0.002	0.002	ND	ND	ND
19	2,4-Diaminotoluene	95-80-7	0.002	0.002	ND	ND	ND
20	2,4,5-Trimethylaniline	137-17-7	0.002	0.002	ND	ND	ND
21	o-Anisidine	90-04-0	0.002	0.002	ND	ND	ND
22	4-Amino-azobenzene	60-09-3	0.002	0.002	ND	ND	ND
23	1,3-Phenylenediamine	108-45-2	0.002	0.002	ND	ND	ND
24	2,4-Dimethylaniline	95-68-1	0.002	0.002	ND	ND	ND
25	2,6-Dimethylaniline	87-62-7	0.002	0.002	ND	ND	ND
26	Aniline	62-53-3	0.002	0.002	ND	ND	ND
27	1,4-Phenylenediamine	106-50-3	0.002	0.002	ND	ND	ND
28	1,5-Diaminonaphthalene	2243-62-1	0.002	0.002	ND	ND	ND
29	2,6-toluenediamine	823-40-5	0.002	0.002	ND	ND	ND
Conclusion					Pass	Pass	Pass

12. Specific Migration of Polycyclic Aromatic Hydrocarbons (PAHs)

- With reference to EN 13130-1:2004.
- Test condition: MPPO, 40°C for 24 hours
- Samples 003 Migration ratio: 5.76g/1.44dm²

Compounds	MDL [mg/kg]	Limit [mg/kg]	Result(s) [mg/kg]
			003
Naphthalene	0.01	ND	ND
Acenaphthylene	0.01	ND	ND
Acenaphthene	0.01	ND	ND
Fluorene	0.01	ND	ND
Phenanthrene	0.01	ND	ND
Anthracene	0.01	ND	ND
Fluoranthene	0.01	ND	ND
Pyrene	0.01	ND	ND
Chrysene	0.01	ND	ND
Benzo[a]anthracene	0.01	ND	ND
Benzo[b]fluoranthene	0.01	ND	ND
Benzo[j]fluoranthene	0.01	ND	ND
Benzo[k]fluoranthene	0.01	ND	ND
Benzo[e]pyrene	0.01	ND	ND
Benzo[a]pyrene	0.01	ND	ND
Indeno[1,2,3-cd]pyrene	0.01	ND	ND
Dibenzo[ah]anthracene	0.01	ND	ND
Benzo[ghi]perylene	0.01	ND	ND
Conclusion			Pass

Note: 1. Limit was according to client's requirement

13. Germany-German Food & Feed Acts LFGB Section 31 and BfR Recommendation-Sensory Test

- With reference to DIN 10955:2004
- Test condition: Distilled water, 40°C for 24 hours

Sample(s)	Testing Parameter	Grading result(s)	Recommended level	Conclusion
001	Transfer of taste	1	<3	Pass
	Transfer of smell	1	<3	Pass
002	Transfer of taste	1	<3	Pass
	Transfer of smell	1	<3	Pass

Note: Available grading are listed as follow:
 Grading 0: No perceptible taste/smell deviation
 1: Just perceptible taste/smell deviation
 2: Weak taste/smell deviation
 3: Clear taste/smell deviation
 4: Strong taste/smell deviation

14. EU-Regulation (EU) No. 10/2011-Phthalates Content

Test with reference to Solvent extraction, analysis was performed by GC-MS.

Parameter	CAS No.	Unit	MDL	Limit	Result(s)
					003
Dibutyl phthalate, (DBP)	84-74-2	%	0.005	<0.05	ND
Benzyl butyl phthalate, (BBP)	85-68-7	%	0.005	<0.1	ND
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	%	0.005	<0.1	ND
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	%	0.005	<0.1	ND
Di-isodecyl phthalate, (DIDP)	26761-40-0 , 68515-49-1	%	0.005	<0.1	ND
Conclusion					Pass

15. Total Bisphenol A (BPA) Content

With reference to in-house method, determination by LC-MS-MS.

Compound	CAS No.	Unit	MDL	Limit	Result
					003
Bisphenol A	80-05-7	mg/kg	0.1	<0.1	<0.1
Conclusion					Pass

Remark: 1. Limit was according to client's requirement

- End of Test Report -

