

Test Report

No.: 70.431.26.13859.01

Date: 2026-05-14



Applicant: PF CONCEPT INTERNATIONAL COÖPERATIEF U.A.
Address: SCHIPHOLWEG 59, 2316 ZL LEIDEN, THE NETHERLANDS
Item No: 13015432-Brick/ 13015451-OBL/ 13015464-HGRN/ 13015490-Bik/ 13015532-Brick/ 13015551-OBL/ 13015564-HGRN/ 13015590-Bik/ 13015632-Brick/ 13015651-OBL/ 13015664-HGRN/ 13015690-Bik
Description: Paper straw zipped pouch/ Paper straw tote/ Paper straw beach tote
PO No.: #675445/675413/675414
Vendor No.: #11953
Factory No.: #14351
Country of Origin: CHINA
Country of Destination: EU
Receipt Date of Sample: 2026-05-07
Date of Testing: 2026-05-07 ~ 2026-05-14
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. Regulation (EC) No.1907/2006 (REACH) Annex XVII, Item 63 - Lead Content	Pass
2. Regulation (EC) No.1907/2006 (REACH) Annex XVII, Item 23 - Cadmium Content	Pass
3. Regulation (EC) No.1907/2006 (REACH) Annex XVII, Item 43 - Azocolourants Content	Pass
4. Regulation (EC) No.1907/2006 (REACH) Annex XVII, Item 72 - Azo Dyes Content	Pass
5. Regulation (EC) No.1907/2006 (REACH) Annex XVII, Item 72 - Dyestuff Content	Pass
6. Regulation (EC) No.1907/2006 (REACH) Annex XVII, Item 72 - Extractable heavy metals	Pass
7. Regulation (EC) No.1907/2006 (REACH) Annex XVII, Item 72 - Quinoline	Pass
8. Regulation (EC) No.1907/2006 (REACH) Annex XVII, Item 72 - Chlorotoluenes content	Pass
9. Regulation (EC) No.1907/2006 (REACH) Annex XVII, Item 72 - Polycyclic Aromatic Hydrocarbons (PAHs)	Pass
10. Regulation (EC) No.1907/2006 (REACH) Annex XVII, Item 72 - Formaldehyde Content	Pass
11. Regulation (EC) No.1907/2006 (REACH) Annex XVII, Item 72 - Dimethylformamide, N,N-dimethylacetamide (DMAC), N-Methyl-2-pyrrolidone Content	Pass
12. Substances of Very High Concern (SVHC) published by European Chemicals Agency (ECHA) - UV-320,UV-326,UV-327,UV-328,UV-329,UV-350	<0.1%(W/W)
13. Substances of Very High Concern (SVHC) published by European Chemicals Agency (ECHA) - Dibutylbis(pentane-2,4dionato-O,O')tin Content	<0.1%(W/W)
14. Substances of Very High Concern (SVHC) published by European Chemicals Agency (ECHA) -2-methylimidazole Content	<0.1%(W/W)
15. Substances of Very High Concern (SVHC) published by European Chemicals Agency (ECHA) - Tris(4-nonylphenyl, branched and linear) phosphite (TNPP)	<0.1%(W/W)



- Remarks:
1. MDL = Method Detection Limit
 2. ND = Not Detected (<MDL)
 3. <= Less than
 4. 1 mg/kg = 1 ppm = 0.0001%

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

Prepared by:

Authorized by:



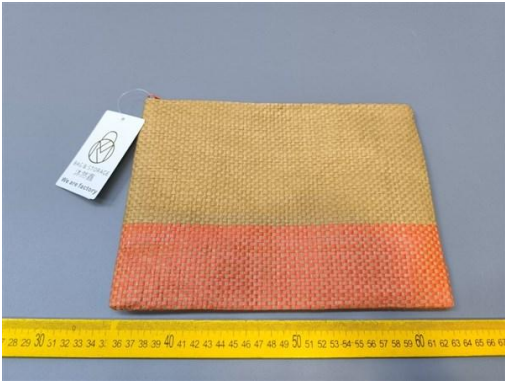



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- (3) The testing results are only valid for the sample tested.
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- (5) Disclaimer Measurement Uncertainty:
Unless otherwise agreed upon, Pass or Fail verdicts are given based on the measured values 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 Tested Subject:

Sample	Description	Photo
001	Paper straw zipped pouch 13015432-Brick	
002	Paper straw zipped pouch 13015451-OBL	
003	Paper straw zipped pouch 13015464-HGRN	
004	Paper straw zipped pouch 13015490-Blk	

Sample	Description	Photo
005	Paper straw tote 13015532-Brick	
006	Paper straw tote 13015551-OBL	
007	Paper straw tote 13015564-HGRN	
008	Paper straw tote 13015590-Blk	

Sample	Description	Photo
009	Paper straw beach tote 13015632-Brick	
010	Paper straw beach tote 13015651-OBL	
011	Paper straw beach tote 13015664-HGRN	
012	Paper straw beach tote 13015690-Blk	

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T. No	Sample	Description
T1	013	Brown paper (001~012)
T2	014	Brick red paper (001/005/009)
T3	015	Blue paper (002/006/010)
T4	016	Green paper (003/007/011)
T5	017	Black paper (004/008/012)
T6	018	Brown fabric (lining, 001~012)
T7	019	Brick red plastic (zipper teeth, 001/009)
T8	020	Blue plastic (zipper teeth, 002/010)
T9	021	Green plastic (zipper teeth, 003/011)
T10	022	Black plastic (zipper teeth, 004/012)
T11	023	Brick red fabric (zipper tape, 001/009)
T12	024	Blue fabric (zipper tape, 002/010)
T13	025	Green fabric (zipper tape, 003/011)
T14	026	Black fabric (zipper tape, 004/012)
T15	027	Brick red coated metal (zipper head, 001/009)
T16	028	Blue coated metal (zipper head, 002/010)
T17	029	Green coated metal (zipper head, 003/011)
T18	030	Black coated metal (zipper head, 004/012)
T19	031	White non-woven fabric (inner, 001~012)
T20	032	Brick red belt fabric (handle, 005/009)
T21	033	Blue belt fabric (handle, 006/010)
T22	034	Green belt fabric (handle, 007/011)
T23	035	Black belt fabric (handle, 008/012)
T24	036	White coated fabric with black printing (label, 001~012)
T25	037	Silvery metal buckle (iron, 005~008)
T26	038	Silvery metal buckle (copper, 005~008)
T27	039	White paper card (back of buckle, 005~008)

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Test Result(s):

1. Regulation (EC) No.1907/2006 (REACH) Annex XVII, Item 63 - Lead Content

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

Sample	Unit	MDL	Limit	Result(s)	Conclusion
013+014+015	mg/kg	10.0	500	ND	Pass
016+017+039	mg/kg	10.0	500	ND	Pass
018+023+024	mg/kg	10.0	500	ND	Pass
019+020+021	mg/kg	10.0	500	ND	Pass
022	mg/kg	10.0	500	ND	Pass
025+026+031	mg/kg	10.0	500	ND	Pass
027+028	mg/kg	10.0	500	17.3	Pass
029+030	mg/kg	10.0	500	15.2	Pass
032+033+034	mg/kg	10.0	500	ND	Pass
035+036	mg/kg	10.0	500	ND	Pass
037+038	mg/kg	10.0	500	ND	Pass

2. Regulation (EC) No.1907/2006 (REACH) Annex XVII, Item 23 - Cadmium Content

Test with reference to EN 1122:2001 Method B, determination by ICP-OES.

Sample	Unit	MDL	Limit	Result(s)	Conclusion
013+014+015	mg/kg	10.0	100	ND	Pass
016+017+039	mg/kg	10.0	100	ND	Pass
018+023+024	mg/kg	10.0	100	ND	Pass
019+020+021	mg/kg	10.0	100	ND	Pass
022	mg/kg	10.0	100	ND	Pass
025+026+031	mg/kg	10.0	100	ND	Pass
027+028	mg/kg	10.0	100	ND	Pass
029+030	mg/kg	10.0	100	ND	Pass
032+033+034	mg/kg	10.0	100	ND	Pass
035+036	mg/kg	10.0	100	ND	Pass



3. Regulation (EC) No.1907/2006 (REACH) Annex XVII, Item 43 - Azocolourants Content
 Test with reference to EN ISO 14362-1:2017,determination by GC-MS,HPLC-DAD..

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					018 Direct reduction	032+033+034 Direct reduction
4-aminobiphenyl	92-67-1	mg/kg	5.0	30	ND	ND
Benzidine	92-87-5	mg/kg	5.0	30	ND	ND
4-chloro-o-toluidine	95-69-2	mg/kg	5.0	30	ND	ND
2-naphthylamine	91-59-8	mg/kg	5.0	30	ND	ND
o-aminoazotoluene	97-56-3	mg/kg	5.0	30	ND	ND
5-nitro-o-toluidine	99-55-8	mg/kg	5.0	30	ND	ND
4-chloroaniline	106-47-8	mg/kg	5.0	30	ND	ND
2,4-diaminoanisole	615-05-4	mg/kg	5.0	30	ND	ND
4,4'-diaminodiphenylmethane	101-77-9	mg/kg	5.0	30	ND	ND
3,3'-dichlorobenzidine	91-94-1	mg/kg	5.0	30	ND	ND
3,3'-Dimethoxybenzidine	119-90-4	mg/kg	5.0	30	ND	ND
3,3'-dimethylbenzidine	119-93-7	mg/kg	5.0	30	ND	ND
4,4'-methylenedi-o-toluidine	838-88-0	mg/kg	5.0	30	ND	ND
p-cresidine	120-71-8	mg/kg	5.0	30	ND	ND
4,4'-methylene-bis-(2-chloro-aniline)	101-14-4	mg/kg	5.0	30	ND	ND
4,4'-oxydianiline	101-80-4	mg/kg	5.0	30	ND	ND
4,4'-thiodianiline	139-65-1	mg/kg	5.0	30	ND	ND
o-toluidine	95-53-4	mg/kg	5.0	30	ND	ND
2,4-toluenediamine	95-80-7	mg/kg	5.0	30	ND	ND
2,4,5-trimethylaniline	137-17-7	mg/kg	5.0	30	ND	ND
2-methoxyaniline	90-04-0	mg/kg	5.0	30	ND	ND
2,4-xylidine	95-68-1	mg/kg	5.0	30	ND	ND
2,6-xylidine	87-62-7	mg/kg	5.0	30	ND	ND
4-aminoazobenzene	60-09-3	mg/kg	5.0	30	ND	ND
Conclusion					Pass	Pass

Parameter	CAS No.	Unit	MDL	Limit	Result(s)
					035 Direct reduction
4-aminobiphenyl	92-67-1	mg/kg	5.0	30	ND
Benzidine	92-87-5	mg/kg	5.0	30	ND
4-chloro-o-toluidine	95-69-2	mg/kg	5.0	30	ND
2-naphthylamine	91-59-8	mg/kg	5.0	30	ND
o-aminoazotoluene	97-56-3	mg/kg	5.0	30	ND
5-nitro-o-toluidine	99-55-8	mg/kg	5.0	30	ND
4-chloroaniline	106-47-8	mg/kg	5.0	30	ND
2,4-diaminoanisole	615-05-4	mg/kg	5.0	30	ND
4,4'-diaminodiphenylmethane	101-77-9	mg/kg	5.0	30	ND
3,3'-dichlorobenzidine	91-94-1	mg/kg	5.0	30	ND
3,3'-Dimethoxybenzidine	119-90-4	mg/kg	5.0	30	ND
3,3'-dimethylbenzidine	119-93-7	mg/kg	5.0	30	ND
4,4'-methylenedi-o-toluidine	838-88-0	mg/kg	5.0	30	ND
p-cresidine	120-71-8	mg/kg	5.0	30	ND
4,4'-methylene-bis-(2-chloro-aniline)	101-14-4	mg/kg	5.0	30	ND
4,4'-oxydianiline	101-80-4	mg/kg	5.0	30	ND
4,4'-thiodianiline	139-65-1	mg/kg	5.0	30	ND
o-toluidine	95-53-4	mg/kg	5.0	30	ND
2,4-toluenediamine	95-80-7	mg/kg	5.0	30	ND
2,4,5-trimethylaniline	137-17-7	mg/kg	5.0	30	ND
2-methoxyaniline	90-04-0	mg/kg	5.0	30	ND
2,4-xylidine	95-68-1	mg/kg	5.0	30	ND
2,6-xylidine	87-62-7	mg/kg	5.0	30	ND
4-aminoazobenzene	60-09-3	mg/kg	5.0	30	ND
Conclusion					Pass

Interpretation of test results:

- (1) In the case of the measured value per amine component ≤ 30 mg/kg and according to the analysis carried out, the azo colourants banned under the Annex XVII of Regulation (EC) No. 1907/2006, REACH are not detected in the article submitted.
- (2) Banned AZO dyes in accordance to REACH regulation (EC) No. 1907/2006 and Amendment No. 552/2009 Annex XVII Item 43 (formerly known as 2002/61/EC)



4. Regulation (EC) No.1907/2006 (REACH) Annex XVII, Item 72 - Azo Dyes Content
 Test with reference to EN ISO 14362-1:2017,determination by GC-MS,HPLC-DAD.

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					032+033+034 Colorant extraction	035 Colorant extraction
4-Chloro-o-toluidinium chloride	3165-93-3	mg/kg	5.0	30	ND	ND
2-Naphthylammoniumacetate	553-00-4	mg/kg	5.0	30	ND	ND
4-Methoxy-m-phenylene diammonium sulphate	39156-41-7	mg/kg	5.0	30	ND	ND
2,4,5-Trimethylaniline hydrochloride	21436-97-5	mg/kg	5.0	30	ND	ND
Conclusion					Pass	Pass

5. Regulation (EC) No.1907/2006 (REACH) Annex XVII, Item 72 - Dyestuff Content
 Test with reference to DIN 54231:2022, determination by LC-MS-MS.

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					032+033+034	035
C.I. Basic Red 9	569-61-9	mg/kg	7.5	50	ND	ND
C.I. Disperse Blue 1	2475-45-8	mg/kg	7.5	50	ND	ND
Basic Violet 3	548-62-9	mg/kg	7.5	50	ND	ND
Conclusion					Pass	Pass

6. Regulation (EC) No.1907/2006 (REACH) Annex XVII, Item 72 - Extractable heavy metals
 Test with reference to EN 16711-2:2015, determination by ICP-MS.

Parameter	MDL [mg/kg]	Limit [mg/kg]	Result(s) [mg/kg]	
			032	033
Cadmium As (Cd)	0.1	1	ND	ND
Arsenic As (As)	0.2	1	ND	ND
Chromium VI (Cr VI)*	0.5	1	ND	ND
Lead As (Pb)	0.2	1	ND	ND
Conclusion			Pass	Pass



Parameter	MDL [mg/kg]	Limit [mg/kg]	Result(s) [mg/kg]	
			034	035
Cadmium As (Cd)	0.1	1	ND	ND
Arsenic As (As)	0.2	1	ND	ND
Chromium VI (Cr VI)*	0.5	1	ND	ND
Lead As (Pb)	0.2	1	ND	ND
Conclusion			Pass	Pass

Remark: *=Chromium VI was determined by screening of chromium.

7. Regulation (EC) No.1907/2006 (REACH) Annex XVII, Item 72 - Quinoline

Test with reference to DIN 54231:2022, determination by LC-MS.

Parameter	MDL [mg/kg]	Limit [mg/kg]	Result(s) [mg/kg]	
			032+033+034	035
Quinoline	10	50	10.3	ND
Conclusion			Pass	Pass

8. Regulation (EC) No.1907/2006 (REACH) Annex XVII, Item 72 - Chlorotoluenes content

Test with reference to EN 17137:2024, determination by GC-MS.

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					032+033+034	035
p-Chlorobenzotrichloride	5216-25-1	ppm	0.1	1	ND	ND
Benzotrichloride	98-07-7	ppm	0.1	1	ND	ND
BenzylChloride	100-44-7	ppm	0.1	1	ND	ND
Conclusion					Pass	Pass

9. Regulation (EC) No.1907/2006 (REACH) Annex XVII, Item 72 - Polycyclic Aromatic Hydrocarbons (PAHs)

Test with reference to AfPS GS 2019:01PAK, determination by GC-MS.

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					032+033+034	035
Benzo[b]fluoranthene (BbFA)	205-99-2	mg/kg	0.1	1	ND	ND
Benzo[a]anthracene (BaA)	56-55-3	mg/kg	0.1	1	ND	ND
Benzo[a]pyrene (BaP)	50-32-8	mg/kg	0.1	1	ND	ND
Benzo[e]pyrene (BeP)	192-97-2	mg/kg	0.1	1	ND	ND
Benzo[j]fluoranthene (BjFA)	205-82-3	mg/kg	0.1	1	ND	ND
Benzo[k]fluoranthene (BkFA)	207-08-9	mg/kg	0.1	1	ND	ND
Chrysene (CHR)	218-01-9	mg/kg	0.1	1	ND	ND
Dibenzo[a,h]anthracene (DBA _h A)	53-70-3	mg/kg	0.1	1	ND	ND
Conclusion					Pass	Pass

10. Regulation (EC) No.1907/2006 (REACH) Annex XVII, Item 72 - Formaldehyde Content

Test with reference to ISO 14184-1:2011, determination by UV-Vis.

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					032+033+034	035
Formaldehyde	50-00-0	mg/kg	16	75	ND	ND
Conclusion					Pass	Pass

11. Regulation (EC) No.1907/2006 (REACH) Annex XVII, Item 72 - Dimethylformamide, N,N-dimethylacetamide (DMAC), N-Methyl-2-pyrrolidone Content

Test with reference to ISO 16189:2021, determination by GC-MS.

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					032+033+034	035
Dimethylformamide (DMFA)	68-12-2	mg/kg	100	3000	ND	ND
1-Methyl-2-pyrrolidone	872-50-4	mg/kg	100	3000	ND	ND
N,N-dimethylacetamide (DMAC)	127-19-5	mg/kg	100	3000	ND	ND
Conclusion					Pass	Pass

12. Substances of Very High Concern (SVHC) published by European Chemicals Agency (ECHA) - UV-320,UV-326,UV-327,UV-328,UV-329,UV-350

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

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					013+014+015+016+017 +018+019+020+021+022	023+024+025+026+031 +032+033+034+035
2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	mg/kg	100	1000	ND	ND
2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	mg/kg	100	1000	ND	ND
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	mg/kg	100	1000	ND	ND
2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	mg/kg	100	1000	ND	ND
2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol (UV-329)	3147-75-9	mg/kg	100	1000	ND	ND
Bumetrizole (UV-326)	3896-11-5	mg/kg	100	1000	ND	ND

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

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

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					013+014+015+016+017 +018+019+020+021+022	023+024+025+026+031 +032+033+034+035
Dibutylbis(pentane-2,4dionato-O,O')tin	22673-19-4 (245-152-0)	% w/w	0.01	0.1	ND	ND

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

Test with reference to in house method and determination by GC-MS,HPLC-DAD..

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					013+014+015+016+017 +018+019+020+021+022	023+024+025+026+031 +032+033+034+035
2-methylimidazole	693-98-1	% w/w	0.01	0.1	ND	ND



15. Substances of Very High Concern (SVHC) published by European Chemicals Agency (ECHA) - Tris(4-nonylphenyl, branched and linear) phosphite (TNPP)

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

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					013+014+015+016+017 +018+019+020+021+022	023+024+025+026+031+ 032+033+034+035
Tris(4-nonylphenyl, branched and linear) phosphite (TNPP)	-	% w/w	0.01	0.1	ND	ND

-End of Test Report-

