



Test Report

Applicant : INKCUPS CORPORATION
310 ANDOVER ST
DANVERS MA 01923
USA

Issue Date : Mar 25, 2025

Attn : KENNY MA

SAMPLE DESCRIPTION AS DECLARED

Division	Apparel
Sample Description	ICN SB ECO SERIES INK - COOL GRAY 6
	Test Request: #588214 Program: Sustainability Specific Properties: All Ages Notes: Additives are mixed into sample Additive 1 - 1000HNX HARDENER Additive 2 - EB SOLVENT
Product Type	Carry Over
Testing Stage	Production
Product Requirement	-
Specimen Type	Material
Fabric / Trims Supplier	-
Material No.	ICN SB ECO SERIES INK - COOL GRAY 6
Colors Code / Prints	Grey
Buyer	Puma AG
Article No.	-
Style No.	-
Coloration Method	-
Season No.	-
Business Unit	-
Fibre Content	-
Country Of Origin	-
Country of Destination	-
Sample Type	-
Material Type	-
Sample Status	-
Age Group	-
Date Received/ Date Test Started	Mar 11, 2025

Conclusions

Test Item	
Azo-amines and Arylamine Salts Content	P
Formaldehyde Content	P
All PFAS As Measured by Total Organic Fluorine	P
Organotin Compounds Content	P
Ortho-phenylphenol (OPP) Content	P
Volatile Organic Compounds (VOCs) Content	P
Monomers -Styrene Content	P
Solvents/Residuals Content - DMFa	P
Solvents/Residuals Content-DMAc & NMP	P
Solvents / Residuals Content - Formamide	P
Dyes, Forbidden and Disperse	P
Blue Colorant Content	P
Alkylphenols (APs) & Alkylphenol Ethoxylates (APEOs) Content	P
Per- and Polyfluoroalkyl Substances (PFAS) Content	P
Phthalates Content	P
Total Heavy Metal Content	P
Extractable Heavy Metals Content	P

Note:

Tests presented in this report are conducted as requested by Applicant.

P = Pass F = Fail # = No Comment C = Conform Label

N/A = Not Applicable - = Did Not Perform * = See Remark

Approved By:

Intertek Testing Services Hong Kong Limited



Amy Wong

Assistant General Manager

Reviewer: Manny Ching

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Kowloon, Hong Kong

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1 Azo-amines and Arylamine Salts Content

EN ISO 14362-1:2017 for Textile Material; EN ISO 17234-1:2020 for Leather Material; EN ISO 14362-3:2017 & EN ISO 17234-2:2011 for p-Aminoazobenzene. By Gas Chromatography-Mass Spectrometry (GC-MS) and High Performance Liquid Chromatography Analysis (HPLC).

Method T: Direct buffer extraction as per EN ISO 14362-1: 2017 Section 10.2

Test Item / Substance	CAS No.	Result				Units	D.L.	Limits
		1	-	-	-			
4-Aminodiphenyl	92-67-1	ND	-	-	-	mg/kg	5	20
Benzidine	92-87-5	ND	-	-	-	mg/kg	5	20
4-Chloro-o-toluidine	95-69-2	ND	-	-	-	mg/kg	5	20
2-Naphthylamine	91-59-8	ND	-	-	-	mg/kg	5	20
o-Aminoazotoluene	97-56-3	ND	-	-	-	mg/kg	5	20
2-Amino-4-nitrotoluene	99-55-8	ND	-	-	-	mg/kg	5	20
4-Chloroaniline	106-47-8	ND	-	-	-	mg/kg	5	20
2,4-Diaminoanisole	615-05-4	ND	-	-	-	mg/kg	5	20
4,4'-Diaminodiphenylmethane	101-77-9	ND	-	-	-	mg/kg	5	20
3,3'-Dichlorobenzidine	91-94-1	ND	-	-	-	mg/kg	5	20
3,3'-Dimethoxybenzidine	119-90-4	ND	-	-	-	mg/kg	5	20
3,3'-Dimethylbenzidine	119-93-7	ND	-	-	-	mg/kg	5	20
4,4'-Methylenedi-o-toluidine	838-88-0	ND	-	-	-	mg/kg	5	20
p-Cresidine	120-71-8	ND	-	-	-	mg/kg	5	20
4,4'-Methylene-bis-(2-chloro-aniline)	101-14-4	ND	-	-	-	mg/kg	5	20
4,4'-Oxydianiline	101-80-4	ND	-	-	-	mg/kg	5	20
4,4'-Thiodianiline	139-65-1	ND	-	-	-	mg/kg	5	20
o-Toluidine	95-53-4	ND	-	-	-	mg/kg	5	20
2,4-Toluyldiamine	95-80-7	ND	-	-	-	mg/kg	5	20
2,4,5-Trimethylaniline	137-17-7	ND	-	-	-	mg/kg	5	20
o-Anisidine	90-04-0	ND	-	-	-	mg/kg	5	20
4-Aminoazobenzene	60-09-3	ND	-	-	-	mg/kg	5	20
2,4-Xylidine	95-68-1	ND	-	-	-	mg/kg	5	20
2,6-Xylidine	87-62-7	ND	-	-	-	mg/kg	5	20
4-Chloro-o-toluidinium chloride	3165-93-3	ND	-	-	-	mg/kg	5	20
2-Naphthylammoniumacetate	553-00-4	ND	-	-	-	mg/kg	5	20
2,4-Diaminoanisole sulphate	39156-41-7	ND	-	-	-	mg/kg	5	20
2,4,5-Trimethylaniline hydrochloride	21436-97-5	ND	-	-	-	mg/kg	5	20

Remarks:

D.L. = Detection Limit

ND = Not Detected

ppm = parts per million = mg/kg

The Determination of Components (4-Chloro-o-toluidinium chloride/2-Naphthylammoniumacetate/2,4-Diaminoanisole sulphate/2,4,5-Trimethylaniline hydrochloride) are Based on Arylamine Analysis.

Method T: Direct buffer extraction as per EN ISO 14362-1: 2017 Section 10.2

2 Formaldehyde Content

For Leather: With Reference To ISO 17226-1:2021, Formaldehyde Content Was Determined By High Performance Liquid Chromatographic Analysis (HPLC). For Other Materials: With Reference To JIS L 1041-2011 A (Japan Law 112) Or ISO 14184-1:2011, Formaldehyde Content Was Determined By UV-Visible Spectrophotometer.

ISO 14184-1:2011 For Other Materials

Test Item / Substance	CAS No.	Result					Units	D.L.	Limits
		1	-	-	-	-			
Formaldehyde (HCHO)	50-00-0	ND	-	-	-	-	mg/kg	16	75

Remarks:

D.L. = Detection Limit

3 All PFAS As Measured by Total Organic Fluorine

With Reference To ASTM D7359-23, By Combustion Ion Chromatography

Test Item / Substance		Result					Units	D.L.	Limits
		1	-	-	-	-			
Total Organic Fluorine	ND	-	-	-	-	-	mg/kg	20	50

Remarks:

D.L. = Detection Limit

ND = Not Detected

The organic fluorine was determined from the total fluorine content and based on the assumption of worst case.

4 Organotin Compounds Content

With Reference To CEN ISO/TS 16179:2012 or EN ISO 22744-1:2020 And By Gas Chromatographic Mass-Spectrometric (GC-MS) Analysis.

Test Item / Substance	CAS No.	Result					Units	D.L.	Limits
		1	-	-	-	-			

Tri-n-butyltin (TBT)	1461-22-9	ND	-	-	-	-	mg/kg	0.025	0.5
Triphenyltin (TPhT)	639-58-7	ND	-	-	-	-	mg/kg	0.05	0.5
Di-n-butyltin (DBT)	683-18-1	ND	-	-	-	-	mg/kg	0.05	1.0
Di-n-octyltin (DOT)	3542-36-7	ND	-	-	-	-	mg/kg	0.05	1.0
n-Butyltin (MBT)	1118-46-3	ND	-	-	-	-	mg/kg	0.05	1.0
n-Octyltin (MOT)	3091-25-6	ND	-	-	-	-	mg/kg	0.05	1.0
Tricyclohexyltin (TcyT)	3091-32-5	ND	-	-	-	-	mg/kg	0.05	1.0
Trimethyltin (TMT)	1066-45-1	ND	-	-	-	-	mg/kg	0.05	1.0
Trioctyltin (TOT)	-	ND	-	-	-	-	mg/kg	0.025	1.0
Tri-n-propyltin (TPT)	2279-76-7	ND	-	-	-	-	mg/kg	0.05	1.0
Dimethyltin (DMT)	753-73-1	ND	-	-	-	-	mg/kg	0.05	1.0
Diphenyltin (DPhT)	1135-99-5	ND	-	-	-	-	mg/kg	0.05	1.0
Dipropyltin (DPT)	867-36-7	ND	-	-	-	-	mg/kg	0.05	1.0
Monomethyltin (MMT)	993-16-8	ND	-	-	-	-	mg/kg	0.05	1.0
Monphenyltin (MPhT)	1124-19-2	ND	-	-	-	-	mg/kg	0.05	1.0
Tetra-n-butyltin (TeBT)	1461-25-2	ND	-	-	-	-	mg/kg	0.05	1.0
Tetraethyltin (TeET)	597-64-8	ND	-	-	-	-	mg/kg	0.05	1.0
Tetraoctyltin (TeOT)	3590-84-9	ND	-	-	-	-	mg/kg	0.05	1.0

Remarks:

D.L. = Detection Limit

ND = Not Detected

ppm = parts per million = mg/kg

5 Ortho-phenylphenol (OPP) Content

With reference to EN 17134-2:2023, Followed by Gas Chromatography-Mass Spectrometer (GC-MS) Analysis.

Test Item / Substance	CAS No.	Result					Units	D.L.	Limits
		1	-	-	-	-			
Orthophenylphenol (OPP)	90-43-7	ND	-	-	-	-	mg/kg	100	1000

Remarks:

D.L. = Detection Limit

ND = Not Detected

ppm = parts per million = mg/kg

6 Volatile Organic Compounds (VOCs) Content

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Heated At 120°C In Vial By Equilibration For 45 Minutes and Followed By Headspace Gas Chromatographic-Mass Spectrometric (HS GC-MS) Analysis.

Test Item / Substance	CAS No.	Result					Units	D.L.	Limits
		1	-	-	-	-			
Tetrachloromethane	56-23-5	ND	-	-	-	-	mg/kg	20	-
Chloroform	67-66-3	ND	-	-	-	-	mg/kg	20	-
1,2-Dichloroethane	107-06-2	ND	-	-	-	-	mg/kg	20	-
1,1-Dichloroethene	75-35-4	ND	-	-	-	-	mg/kg	20	-
Pentachloroethane	76-01-7	ND	-	-	-	-	mg/kg	20	-
1,1,1,2-Tetrachloroethane	630-20-6	ND	-	-	-	-	mg/kg	20	-
1,1,2,2-Tetrachloroethane	79-34-5	ND	-	-	-	-	mg/kg	20	-
Tetrachloroethylene(PER)	127-18-4	ND	-	-	-	-	mg/kg	20	-
Toluene	108-88-3	ND	-	-	-	-	mg/kg	20	-
1,1,1-Trichloroethane	71-55-6	ND	-	-	-	-	mg/kg	20	-
1,1,2-Trichloroethane	79-00-5	ND	-	-	-	-	mg/kg	20	-
Trichloroethylene	79-01-6	ND	-	-	-	-	mg/kg	20	-
Xylene	1330-20-7	ND	-	-	-	-	mg/kg	20	-
Carbon Disulphide	75-15-0	ND	-	-	-	-	mg/kg	20	-
Cyclohexanone	108-94-1	ND	-	-	-	-	mg/kg	20	-
Ethylbenzene	100-41-4	ND	-	-	-	-	mg/kg	20	-
Total of above VOCs	-	ND	-	-	-	-	mg/kg	20	1000
Benzene	71-43-2	ND	-	-	-	-	mg/kg	5	5

Remarks:

D.L. = Detection Limit

ND = Not Detected

ppm = parts per million = mg/kg

7 Monomers -Styrene Content

Sample Was Extracted in Methanol, Sonication At 60 °C For 60 Minutes, Followed by Gas Chromatography Mass Spectrometry (GC-MS) Analysis.

Test Item / Substance	CAS No.	Result					Units	D.L.	Limits
		1	-	-	-	-			
Styrene	100-42-5	ND	-	-	-	-	mg/kg	10	500

Remarks:

D.L. = Detection Limit

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ND = Not Detected

8 Solvents/Residuals Content - DMFa

With Reference to EN 17131:2019 for Textile and ISO 16189:2021 for All Other Materials, Solvent Extraction And Followed By Gas Chromatography Mass Spectrometry Analysis (GC-MS).

Test Item / Substance	CAS No.	Result				Units	D.L.	Limits
		1	-	-	-			
N,N-dimethylformamide; dimethyl formamide (DMF)	68-12-2	ND	-	-	-	mg/kg	50	500

Remarks:

D.L. = Detection Limit

9 Solvents/Residuals Content-DMAc & NMP

With Reference To EN 17131:2019 for Textile and ISO 16189:2021 for All Other Materials, Solvent Extraction And Followed By Gas Chromatography Mass Spectrometry Analysis (GC-MS).

Test Item / Substance	CAS No.	Result				Units	D.L.	Limits
		1	-	-	-			
N,N-dimethylacetamide (DMAc)	127-19-5	ND	-	-	-	mg/kg	50	1000
N-methyl-2-pyrrolidone; 1-methyl-2-pyrrolidone (NMP)	872-50-4	ND	-	-	-	mg/kg	50	1000

Remarks:

D.L. = Detection Limit

ND = Not Detected

ppm = parts per million = mg/kg

10 Solvents / Residuals Content - Formamide

With Reference to EN 17131:2019 for Textile and ISO 16189:2021 for All Other Materials, Solvent Extraction And Followed By Gas Chromatography Mass Spectrometry Analysis (GC-MS).

Test Item / Substance	CAS No.	Result				Units	D.L.	Limits
		1	-	-	-			
Formamide	75-12-7	ND	-	-	-	mg/kg	50	1000

Remarks:

D.L. = Detection Limit

11 Dyes, Forbidden and Disperse

With Reference To DIN 54231:2022, by Liquid Chromatography /Tandem Mass Spectrometer (LC-MS-MS)analysis

Test Item / Substance	CAS No.	Result					Units	D.L.	Limits
		1	-	-	-	-			
Disperse blue 1	2475-45-8	ND	-	-	-	-	mg/kg	15	30
Disperse blue 3	2475-46-9	ND	-	-	-	-	mg/kg	15	30
Disperse blue 7	3179-90-6	ND	-	-	-	-	mg/kg	15	30
Disperse blue 26	3860-63-7	ND	-	-	-	-	mg/kg	15	30
Disperse blue 35	12222-75-2	ND	-	-	-	-	mg/kg	15	30
Disperse blue 102	12222-97-8 69766-79-6	ND	-	-	-	-	mg/kg	15	30
Disperse blue 106	12223-01-7 68516-81-4	ND	-	-	-	-	mg/kg	15	30
Disperse blue 124	61951-51-7	ND	-	-	-	-	mg/kg	15	30
Disperse brown 1	23355-64-8	ND	-	-	-	-	mg/kg	15	30
Disperse orange 1	2581-69-3	ND	-	-	-	-	mg/kg	15	30
Disperse orange 3	730-40-5	ND	-	-	-	-	mg/kg	15	30
Disperse orange 11	82-28-0	ND	-	-	-	-	mg/kg	15	30
Disperse orange 37/76/59	12223-33-5 13301-61-6 51811-42-8	ND	-	-	-	-	mg/kg	15	30
Disperse orange 149	85136-74-9	ND	-	-	-	-	mg/kg	15	30
Disperse red 1	2872-52-8	ND	-	-	-	-	mg/kg	15	30
Disperse red 11	2872-48-2	ND	-	-	-	-	mg/kg	15	30
Disperse red 17	3179-89-3	ND	-	-	-	-	mg/kg	15	30
Disperse red 151	61968-47-6 70210-08-1	ND	-	-	-	-	mg/kg	15	30
Disperse yellow 1	119-15-3	ND	-	-	-	-	mg/kg	15	30
Disperse yellow 3	2832-40-8	ND	-	-	-	-	mg/kg	15	30
Disperse yellow 7	6300-37-4	ND	-	-	-	-	mg/kg	15	30
Disperse yellow 9	6373-73-5	ND	-	-	-	-	mg/kg	15	30
Disperse yellow 23	6250-23-3	ND	-	-	-	-	mg/kg	15	30
Disperse yellow 39	12236-29-2	ND	-	-	-	-	mg/kg	15	30
Disperse yellow 49	54824-37-2 6858-49-7	ND	-	-	-	-	mg/kg	15	30
Disperse yellow 56	54077-16-6	ND	-	-	-	-	mg/kg	15	30
Acid red 26	3761-53-3	ND	-	-	-	-	mg/kg	15	30
Basic red 9	569-61-9	ND	-	-	-	-	mg/kg	15	30

Basic green 4	569-64-2 2437-29-8 10309-95-2	ND	-	-	-	-	mg/kg	15	30
Basic violet 3	548-62-9	ND	-	-	-	-	mg/kg	15	30
Basic violet 14	632-99-5	ND	-	-	-	-	mg/kg	15	30
Basic blue 26/ Solvent blue 4	2580-56-5 6786-83-0	ND	-	-	-	-	mg/kg	15	30
Direct black 38	1937-37-7	ND	-	-	-	-	mg/kg	15	30
Direct blue 6	2602-46-2	ND	-	-	-	-	mg/kg	15	30
Direct red 28	573-58-0	ND	-	-	-	-	mg/kg	15	30
Direct brown 95	16071-86-6	ND	-	-	-	-	mg/kg	15	30
Solvent yellow 2	60-11-7	ND	-	-	-	-	mg/kg	15	30
Basic violet 1/ 4,4'-Bis (dimethylamino)-4"- (methylamino)trityl alcohol	8004-87-3 561-41-1	ND	-	-	-	-	mg/kg	15	30

Remarks:

D.L. = Detection Limit

ND = Not detected

ppm = parts per million = mg/kg

12 Blue Colorant Content

With Reference to DIN 54231:2022, Solvent Extraction Method Was Used And Navy Blue Content Was Determined By Liquid Chromatography- Tandem Mass Spectrometer (LC-MS-MS).

Test Item / Substance	Result					Units	D.L.	Limits
	1	-	-	-	-			
Navy blue	ND	-	-	-	-	mg/kg	15	30

Remarks:

D.L. = Detection Limit

Blue Colorant

CAS Number	Ind ex Nu mb er	EC Numb er	Substances
Component 1: CAS-No: 118685-33-9 C39H23ClCrN7O12S.2Na Component2: CAS-No: Not allocated C46H30CrN10O20S2.3N	61 1- 07 0- 00- 2	405- 665-4	A mixture of disodium-(6-(4-anisidino)-3-sulphonato-2-(3,5-dinitro-2-oxidophenylazo)-1-naphtholato) (1-(5-chloro-2-oxidophenylazo)-2-naphtholato)chromate(1-); trisodium bis-(6-4-anisidino)-3-sulphonato-2-(3,5-dinitro-2-oxidopheny-lazo)-1-naphtholato)chromate(1-)

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ND = Not detected

ppm = parts per million = mg/kg

13 Alkylphenols (APs) & Alkylphenol Ethoxylates (APEOs) Content

For APs in Textile and Leather with reference to ISO 21084:2019, For APs in Other Material by Extraction with 1 g sample/20 mL THF, sonication for 60 minutes at 70°C, For APEOs: With Reference To EN ISO 18254-1:2016 For All Materials Except Leather, EN ISO 18218-1:2023 For Leather, Followed By Liquid Chromatography Mass Spectrometry (LC-MS) Or Liquid Chromatography /Tandem Mass Spectrometer (LC-MS-MS) Analysis.

Down (China market only): With Reference to GB/T 14272-2021 and GB/T 23322-2018, Followed By High Performance Liquid Chromatography -Mass Spectrometer (LC-MS) Analysis.

Test Item / Substance	Result				Units	D.L.	Limits
	1	-	-	-			
Nonylphenol (NP)	ND	-	-	-	mg/kg	3	-
Octylphenol (OP)	ND	-	-	-	mg/kg	3	-
Alkylphenols (AP) (Sum of NP & OP)	ND	-	-	-	mg/kg	3	10
Nonylphenol Ethoxylates (NPEO)	ND	-	-	-	mg/kg	10	-
Octylphenol Ethoxylates (OPEO)	ND	-	-	-	mg/kg	10	-
Sum of alkylphenols (AP) and alkylphenol ethoxylates (APEO)	ND	-	-	-	mg/kg	10	100

Remarks:

D.L. = Detection Limit

ND = Not Detected

ppm = parts per million = mg/kg

14 Per- and Polyfluoroalkyl Substances (PFAS) Content

With Reference to EN ISO 23702-1:2023 or EN 17681-1:2022 & 17681-2:2022, By Solvent Extraction and Followed By Liquid Chromatographic-Tandem Mass Spectrometric (LC-MS-MS) Analysis and Gas Chromatographic-Mass Spectrometric (GC-MS).

Test Item / Substance	CAS No.	Result				Units	D.L.	Limits
		1	-	-	-			
Perfluorooctane Sulfonates (PFOS) and its salts	-	ND	-	-	-	mg/kg	0.01	0.025
N-ethyl-heptadecafluorooctane sulphonamide (N-Et-FOSA)	4151-50-2	ND	-	-	-	mg/kg	0.01	-
N-methyl-heptadecafluorooctane sulphonamide (N-Me-FOSA)	31506-32-8	ND	-	-	-	mg/kg	0.01	-
N-ethyl-heptadecafluorooctane sulphonamidoethanol (N-Et-FOSE alcohol)	1691-99-2	ND	-	-	-	mg/kg	0.01	-

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N-methyl-heptadecafluorooctane sulphonamidoethanol (N-Me-FOSE alcohol)	24448-09-7	ND	-	-	-	mg/kg	0.01	-
Perfluorooctane sulphonamide (PFOSA)	754-91-6	ND	-	-	-	mg/kg	0.01	-
PFOS-related Substances (Total)	-	ND	-	-	-	mg/kg	0.01	1.0
Perfluorooctane Acid (PFOA) And Its Salts	-	ND	-	-	-	mg/kg	0.01	0.025
1H,1H,2H,2H-Perfluorodecanesulphonic acid (8:2 FTS)	39108-34-4	ND	-	-	-	mg/kg	0.1	-
Methyl pentadecafluorooctanoate (Me-PFOA)	376-27-2	ND	-	-	-	mg/kg	0.1	-
Ethyl perfluorooctanoate (Et-PFOA)	3108-24-5	ND	-	-	-	mg/kg	0.1	-
1H,1H,2H,2H-Perfluorodecan-1-ol (8:2 FTOH)	678-39-7	ND	-	-	-	mg/kg	0.1	-
1H,1H,2H,2H-Perfluorodecyl acrylate (8:2 FTA)	27905-45-9	ND	-	-	-	mg/kg	0.1	-
1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA)	1996-88-9	ND	-	-	-	mg/kg	0.1	-
2H,2H-Perfluorodecancarboxylate (H2PFDA)	27854-31-5	ND	-	-	-	mg/kg	0.1	-
PFOA-related substances (Total)	-	ND	-	-	-	mg/kg	0.1	1.0
Perfluorohexanesulfonic acid (PFHxS) and its salts	-	ND	-	-	-	mg/kg	0.01	0.025
1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-N-methyl- (N-Me-FHxSA)	68259-15-4	ND	-	-	-	mg/kg	0.1	-
Perfluorohexane sulfonamide (PFHxSA)	41997-13-1	ND	-	-	-	mg/kg	0.1	-
PFHxS-related Substances (Total)	-	ND	-	-	-	mg/kg	0.1	1.0
Perfluorononanoic acid (PFNA)	375-95-1	ND	-	-	-	mg/kg	0.01	-
Perfluorodecanoic acid (PFDA)	335-76-2	ND	-	-	-	mg/kg	0.01	-
Perfluoroundecanoic acid (PFUdA)	2058-94-8	ND	-	-	-	mg/kg	0.01	-
Perfluorododecanoic acid (PFDoA)	307-55-1	ND	-	-	-	mg/kg	0.01	-
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	ND	-	-	-	mg/kg	0.01	-
Perfluorotradecanoic acid (PFTeDA)	376-06-7	ND	-	-	-	mg/kg	0.01	-
Perfluoro-3-7-dimethyloctanecarboxylate (PF-3,7-DMOA)	172155-07-6	ND	-	-	-	mg/kg	0.01	-

C9-C14 Perfluorocarboxylic Acids (PFCAs) and their Salts (Total)	-	ND	-	-	-	mg/kg	0.01	0.025
1H,1H,2H,2H-Perfluorododecyl acrylate (10:2 FTA)	17741-60-5	ND	-	-	-	mg/kg	0.1	-
1H,1H,2H,2H-Perfluorododecyl methacrylate (10:2 FTMA)	162953-69-7 2144-54-9	ND	-	-	-	mg/kg	0.1	-
1H,1H,2H,2H-Perfluorododecan-1-ol (10:2 FTOH)	865-86-1	ND	-	-	-	mg/kg	0.1	-
2H,2H,3H,3H-Perfluoroundecanoic acid (4HPFUnA)	34598-33-9	ND	-	-	-	mg/kg	0.1	-
1H,1H,2H,2H-perfluorotetradecan-1-ol (12:2 FTOH)	39239-77-5	ND	-	-	-	mg/kg	0.1	-
1H,1H,2H,2H-Perfluorododecanesulphonic acid (10:2 FTS)	120226-60-0	ND	-	-	-	mg/kg	0.1	-
1H,1H,2H,2H-Perfluorododecyl iodide (10:2 FTI)	2043-54-1	ND	-	-	-	mg/kg	0.1	-
1H,1H,2H,2H-Perfluorotetradecyl iodide (12:2 FTI)	30046-31-2	ND	-	-	-	mg/kg	0.1	-
C9-C14 PFCA- related substances (Total)	-	ND	-	-	-	mg/kg	0.1	0.26
Perfluorohexanoic acid (PFHxA)	307-24-4	ND	-	-	-	mg/kg	0.01	0.025
1H,1H,2H,2H-Perfluorooctanesulphonic acid (1H,1H,2H,2H-PFOS)	27619-97-2	ND	-	-	-	mg/kg	0.1	-
1H,1H,2H,2H-Perfluorooctan-1-ol (6:2 FTOH)	647-42-7	ND	-	-	-	mg/kg	0.1	-
PFHxA-related Substances (Total)	-	ND	-	-	-	mg/kg	0.1	1

Remarks:

D.L. = Detection Limit

PFC (PFAS) Name	CAS No.
Perfluorooctane Sulfonates (PFOS) and Its salts	
Perfluorooctanesulfonic acid (PFOS)	1763-23-1
Perfluorooctanesulfonic acid, potassium salt (PFOS-K)	2795-39-3
Perfluorooctanesulfonic acid, lithium salt (PFOS-Li)	29457-72-5
Perfluorooctanesulfonic acid, ammonium salt (PFOS-NH ₄)	29081-56-9
Perfluorooctane sulfonate diethanolamine salt (PFOS-NH(OH) ₂)	70225-14-8
Perfluorooctanesulfonic acid, tetraethylammonium salt (PFOS-N(C ₂ H ₅) ₄)	56773-42-3
Didecylmethyl ammonium perfluorooctane sulfonate (PFOS-N(C ₁₀ H ₂₁) ₂ (CH ₃) ₂)	251099-16-8
Perfluorooctylsulfonate fluoride (POSF)	307-35-7
Perfluorooctane Acid (PFOA) and Its Salts	
Perfluorooctanoic acid (PFOA)	335-67-1

Sodium perfluorooctanoate (PFOA-Na)	335-95-5
Potassium perfluorooctanoate (PFOA-K)	2395-00-8
Silver perfluorooctanoate (PFOA-Ag)	335-93-3
Perfluorooctanoyl fluoride (PFOA-F)	335-66-0
Ammonium pentadecafluorooctanoate (APFO)	3825-26-1
Perfluorohexanesulfonic acid (PFHxS) and Its Salts	
Perfluorohexane Sulfonic acid (PFHxS)	355-46-4
Perfluorohexane Sulfonic acid, potassium salt (PFHxS-K)	3871-99-6
Perfluorohexane Sulfonic acid, lithium salt (PFHxS-Li)	55120-77-9
Perfluorohexane Sulfonic acid, ammonium salt (PFHxS-NH ₄)	68259-08-5
Perfluorohexane Sulfonic acid, sodium salt (PFHxS-Na)	82382-12-5

ND = Not Detected

ppm = parts per million = mg/kg

15 Phthalates Content

Sample Preparation For All Materials: With Reference To CPSC-CH-C1001-09.4; Measurement: Determined By Gas Chromatographic-Mass Spectrometric (GC-MS) And With Reference To EN ISO 14389:2022 For Textile.

Test Item / Substance	CAS No.	Result				Units	D.L.	Limits
		1	-	-	-			
Di-isononyl phthalate (DINP)	28553-12-0 68515-48-0	ND	-	-	-	mg/kg	50	500
Di-n-octyl phthalate (DNOP)	117-84-0	ND	-	-	-	mg/kg	50	500
Di-(2-ethylhexyl) phthalate (DEHP)	117-81-7	ND	-	-	-	mg/kg	50	500
Di-isodecyl phthalate (DIDP)	26761-40-0 68515-49-1	ND	-	-	-	mg/kg	50	500
Butyl benzyl phthalate (BBP)	85-68-7	ND	-	-	-	mg/kg	50	500
Di-butyl phthalate (DBP)	84-74-2	ND	-	-	-	mg/kg	50	500
Di-iso-butyl phthalate (DIBP)	84-69-5	ND	-	-	-	mg/kg	50	500
Di-n-hexyl phthalate (DnHP)	84-75-3	ND	-	-	-	mg/kg	50	500
Diethyl phthalate (DEP)	84-66-2	ND	-	-	-	mg/kg	50	500
Dimethyl phthalate (DMP)	131-11-3	ND	-	-	-	mg/kg	50	500
Di-pentyl phthalate (DPP)	131-18-0	ND	-	-	-	mg/kg	50	500
Di-cyclohexyl phthalate (DCHP)	84-61-7	ND	-	-	-	mg/kg	50	500
Di-iso-heptyl phthalate (DIHP)	71888-89-6	ND	-	-	-	mg/kg	50	500
Di-methoxyethyl phthalate (DMEP)	117-82-8	ND	-	-	-	mg/kg	50	500
Di-isopentyl phthalate (DIPP)	605-50-5	ND	-	-	-	mg/kg	50	500
Di-propyl phthalate (DPrP)	131-16-8	ND	-	-	-	mg/kg	50	500
Di-isooctyl phthalate (DIOP)	27554-26-3	ND	-	-	-	mg/kg	50	500

1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	ND	-	-	-	mg/kg	50	500
Di-isohexyl phthalate (DIHEXP)	71850-09-4	ND	-	-	-	mg/kg	50	500
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	68515-42-4	ND	-	-	-	mg/kg	50	500
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	ND	-	-	-	mg/kg	50	500
1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate (EC No. 201-559-5)	68515-51-5 68648-93-1	ND	-	-	-	mg/kg	50	500
n-Pentyl iso-pentylphthalate (PIPP)	776297-69-9	ND	-	-	-	mg/kg	50	500
Bis(2-ethylhexyl)-2,3,4,5-tetrabromophthalate (TBPH)	26040-51-7	ND	-	-	-	mg/kg	50	500
Sum of the above 24 Phthalates	-	ND	-	-	-	mg/kg	50	1000

Remarks:

D.L. = Detection Limit

ppm = parts per million = mg/kg

16 Total Heavy Metal Content

Total Lead (Pb): CPSC-CH-E1002-08.3 for Non-metal, CPSC-CH-E1001-08.3 for Metal, CPSC-CH-E1003-09.1 for Lead In Paint and Surface Coating; Total Cadmium (Cd) and Arsenic (As): DIN EN 16711-1:2016 for All Material except Leather, DIN EN ISO 17072-2:2019 for Leather, Determined By Inductively Coupled Plasma-Optical Emission Spectrometer (ICP-OES) or Atomic Absorption Spectrophotometric (AAS).

Test Item / Substance	Result					Units	D.L.	Limits
	1	-	-	-	-			
Lead (Pb)	ND	-	-	-	-	mg/kg	10	90
Cadmium (Cd)	ND	-	-	-	-	mg/kg	5	40
Arsenic (As)	ND	-	-	-	-	mg/kg	5	100

Remarks:

D.L. = Detection Limit

ND = Not Detected

ppm = parts per million = mg/kg

17 Extractable Heavy Metals Content

For Materials Except Leather: With Reference To DIN EN 16711-2: 2016 or EN ISO 17075-1:2017 (For Cr VI confirmation), Using

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Kowloon, Hong Kong

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Extraction With Acid Perspiration Solution, Determined By Inductively Coupled Argon Plasma Mass Spectrometric (ICP-MS) or UV-Visible Spectrophotometer Analysis.

Test Item / Substance	Result					Units	D.L.	Limits
	1	-	-	-	-			
Antimony (Sb)	ND	-	-	-	-	mg/kg	1	30.0
Arsenic (As)	ND	-	-	-	-	mg/kg	0.1	0.2
Lead (Pb)	ND	-	-	-	-	mg/kg	0.1	1.0
Cadmium (Cd)	ND	-	-	-	-	mg/kg	0.03	0.1
Chromium (Cr)	ND	-	-	-	-	mg/kg	0.5	2.0
Chromium (VI) (Cr VI)	ND	-	-	-	-	mg/kg	0.5	1.0
Cobalt (Co)	ND	-	-	-	-	mg/kg	0.3	4.0
Copper (Cu)	ND	-	-	-	-	mg/kg	1	50
Nickel (Ni)	ND	-	-	-	-	mg/kg	0.1	1.0
Mercury (Hg)	ND	-	-	-	-	mg/kg	0.01	0.02
Selenium (Se)	ND	-	-	-	-	mg/kg	10	500
Barium (Ba)	ND	-	-	-	-	mg/kg	50	1000

Remarks:

D.L. = Detection Limit

ND = Not detected

ppm = parts per million = mg/kg

Component List

No.	Component
(1)	grey coating (solid paint)

End of Report

When a statement of conformity to a specification or standard is provided on test report, the decision rule shall be applied. For details, please refer to the latest version of Intertek's "Decision Rule Information" and is available on Intertek's website. <https://intertekhk.qrd.by/decision-rules-info>. If decision rule already inhered in the requested specification or standard, Intertek's "Decision Rule Information" is not applicable.

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