



# Test Report

Report No. A220023687710101

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**Company Name** INKCUPS NOW CORPS  
**show on Report**  
**Address** 310 ANDOVER STREET DANVERS MA 01923, USA

**The following sample(s) and sample information was/were submitted and identified by/on the behalf of the applicant**

Sample Name X-FLEXX UV INK CYAN,MAGENTA YELLOW,BLACK,WHITE,VARNISH  
Sample Color CYAN,MAGENTA YELLOW,BLACK,WHITE,VARNISH  
Sample Quantity 6  
Country of Origin U.S.  
End Uses FLEXIBLE SUBSTRATES CLOTH  
Sample Received Date Jul. 27, 2020  
Testing Period Jul. 27, 2020 to Aug. 4, 2020

**Test Conducted:**

As requested by the applicant, for details refer to next page(s)



*Hill Zheng*

Hill Zheng  
Technical Manager  
Aug. 4, 2020

No. S429196825

CTI Building, Xing Dong Community, Xin'an Sub-district, Bao'an District,  
Shenzhen City, Guangdong Province, P.R. China

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<b>Summary of Test Result(s)</b>		
<b>Test Item(s)</b>	<b>Test Standard</b>	<b>Test Result/Conclusion</b>
Ultraviolet absorbent	DIN EN 62321-6:2016-05	PASS
Alkylphenols and Alkylphenol Ethoxylates	EN ISO 18254-1:2016	PASS
Alkylphenols and Alkylphenol Ethoxylates	1 g sample/20 ml THF,sonication for 60 minutes at 70°C ,analysis according to EN ISO 21084:2019	PASS
Azo Dyes	EN ISO 14362-1:2017 EN ISO 14362-3:2017	PASS
Disperse dyestuffs(allergenuous)	DIN 54231:2005	PASS
Disperse dyestuffs(carcinogenic)	DIN 54231:2005	PASS
Extractable heavy metals	DIN EN 16711-2:2016	PASS
Lead(Pb)	CPSC-CH-E1003-09.1	PASS
Cadmium(Cd)	DIN EN 16711-1:2016	PASS
Mercury(Hg)	DIN EN 16711-1:2016	PASS
Arsenic(As)	DIN EN 16711-1:2016	PASS
Ortho-phenylphenol	1 M KOH extraction, 16 hours at 90 degrees C, derivatization and analysis DIN EN ISO 17070:2015	PASS
Phthalates	CPSC-CH-C1001-09.4	PASS
Polycyclic Aromatic Hydrocarbons (PAHs)	AfPS GS 2019:01 PAK	PASS
Volatile Organic Compounds(VOC)	GC/MS headspace 120 degrees C, 45 minutes	PASS
Flame retardants	EN ISO 17881-1:2016	PASS
Phosphate flame retardants	EN ISO 17881-2:2016	PASS
PFOS and Related Substances	Refer to CEN/TS 15968:2010	PASS
Perfluorooctanoic acid related substances and Its Salts	Refer to CEN/TS 15968:2010	PASS
Formaldehyde	GB 18583-2008	PASS
*****For Further Details, Please Refer to the Following Page(s) *****		

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Tests Conducted (As Requested by the Client)

## 1 Ultraviolet absorbent (DIN EN 62321-6:2016-05)

Tested Item(s)	Test Result (mg/kg)			MDL (mg/kg)	Client's Limit (mg/kg)
	001	002	003		
2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)(UV350)	N.D.	N.D.	N.D.	50	≤1000
2-(2H-Benzotriazol-2-yl)-4,6-ditertpentylphenol(UV328)	N.D.	N.D.	N.D.	50	≤1000
2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol(UV327)	N.D.	N.D.	N.D.	50	≤1000
2-Benzotriazol-2-yl-4,6-di-tert-butylphenol(UV320)	N.D.	N.D.	N.D.	50	≤1000
Drometrizole(UV-P)	N.D.	N.D.	N.D.	50	--

Tested Item(s)	Test Result (mg/kg)			MDL (mg/kg)	Client's Limit (mg/kg)
	004	005	006		
2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)(UV350)	N.D.	N.D.	N.D.	50	≤1000
2-(2H-Benzotriazol-2-yl)-4,6-ditertpentylphenol(UV328)	N.D.	N.D.	N.D.	50	≤1000
2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol(UV327)	N.D.	N.D.	N.D.	50	≤1000
2-Benzotriazol-2-yl-4,6-di-tert-butylphenol(UV320)	N.D.	N.D.	N.D.	50	≤1000
Drometrizole(UV-P)	N.D.	N.D.	N.D.	50	--

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## 2 Alkylphenols and Alkylphenol Ethoxylates (EN ISO 18254-1:2016)

Tested Item(s)	Test Result (mg/kg)				MDL (mg/kg)	Client's Limit (mg/kg)
	001	002	003	004		
Nonylphenol Ethoxylate(NPEOs)	N.D.	N.D.	N.D.	N.D.	50	--
Octylphenol Ethoxylate(OPEOs)	N.D.	N.D.	N.D.	N.D.	50	--
sum of (NPEO+OPEO)	N.D.	N.D.	N.D.	N.D.	--	≤100

Tested Item(s)	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
	005	006		
Nonylphenol Ethoxylate(NPEOs)	N.D.	N.D.	50	--
Octylphenol Ethoxylate(OPEOs)	N.D.	N.D.	50	--
sum of (NPEO+OPEO)	N.D.	N.D.	--	≤100

## 3 Alkylphenols and Alkylphenol Ethoxylates (1 g sample/20 ml THF,sonication for 60 minutes at 70°C,analysis according to EN ISO 21084:2019)

Tested Item(s)	Test Result (mg/kg)				MDL (mg/kg)	Client's Limit (mg/kg)
	001	002	003	004		
Nonylphenol(NP)	N.D.	N.D.	N.D.	N.D.	10	--
Octylphenol(OP)	N.D.	N.D.	N.D.	N.D.	10	--
sum of (NP+OP)	N.D.	N.D.	N.D.	N.D.	10	≤100

Tested Item(s)	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
	005	006		
Nonylphenol(NP)	N.D.	N.D.	10	--
Octylphenol(OP)	N.D.	N.D.	10	--
sum of (NP+OP)	N.D.	N.D.	10	≤100

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**4 Azo Dyes (EN ISO 14362-1:2017/ EN ISO 14362-3:2017)**

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			001	002		
1	4-aminobiphenyl	92-67-1	N.D.	N.D.	5	≤20
2	Benzidine	92-87-5	N.D.	N.D.	5	≤20
3	4-chloro-o-toluidine	95-69-2	N.D.	N.D.	5	≤20
4	2-naphthylamine	91-59-8	N.D.	N.D.	5	≤20
5	o-aminoazotoluene	97-56-3	N.D.	N.D.	5	≤20
6	5-nitro-o-toluidine	99-55-8	N.D.	N.D.	5	≤20
7	4-chloroaniline	106-47-8	N.D.	N.D.	5	≤20
8	2,4-diaminoanisoole	615-05-4	N.D.	N.D.	5	≤20
9	4,4'-Diaminodiphenylmethane	101-77-9	N.D.	N.D.	5	≤20
10	3,3'-dichlorobenzidine	91-94-1	N.D.	N.D.	5	≤20
11	3,3'-dimethoxybenzidine	119-90-4	N.D.	N.D.	5	≤20
12	3,3'-dimethylbenzidine	119-93-7	N.D.	N.D.	5	≤20
13	4,4'-methylenedi-o-toluidine	838-88-0	N.D.	N.D.	5	≤20
14	6-methoxy-m-toluidine	120-71-8	N.D.	N.D.	5	≤20
15	4,4'-methylene-bis-(2-chloro-aniline)	101-14-4	N.D.	N.D.	5	≤20
16	4,4'-oxydianiline	101-80-4	N.D.	N.D.	5	≤20
17	4,4'-thiodianiline	139-65-1	N.D.	N.D.	5	≤20
18	o-Toluidine	95-53-4	N.D.	N.D.	5	≤20
19	2,4-diaminotoluene	95-80-7	N.D.	N.D.	5	≤20
20	2,4,5-trimethylaniline	137-17-7	N.D.	N.D.	5	≤20
21	2-Methoxyaniline (o-Anisidine)	90-04-0	N.D.	N.D.	5	≤20
22	4-aminoazobenzene	60-09-3	N.D.	N.D.	5	≤20
23	2,4-xylidine	95-68-1	N.D.	N.D.	5	≤20
24	2,6-xylidine	87-62-7	N.D.	N.D.	5	≤20
25	2,4-diaminoanisoole sulphate	39156-41-7	N.D.	N.D.	5	≤20
26	2-Naphthylammoniumacetate	553-00-4	N.D.	N.D.	5	≤20
27	4-chloro-o-toluidinium chloride	3165-93-3	N.D.	N.D.	5	≤20
28	2,4,5-trimethylaniline hydrochloride	21436-97-5	N.D.	N.D.	5	≤20

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Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			003	004		
1	4-aminobiphenyl	92-67-1	N.D.	N.D.	5	≤20
2	Benzidine	92-87-5	N.D.	N.D.	5	≤20
3	4-chloro-o-toluidine	95-69-2	N.D.	N.D.	5	≤20
4	2-naphthylamine	91-59-8	N.D.	N.D.	5	≤20
5	o-aminoazotoluene	97-56-3	N.D.	N.D.	5	≤20
6	5-nitro-o-toluidine	99-55-8	N.D.	N.D.	5	≤20
7	4-chloroaniline	106-47-8	N.D.	N.D.	5	≤20
8	2,4-diaminoanisole	615-05-4	N.D.	N.D.	5	≤20
9	4,4'- Diaminodiphenylmethane	101-77-9	N.D.	N.D.	5	≤20
10	3,3'-dichlorobenzidine	91-94-1	N.D.	N.D.	5	≤20
11	3,3'-dimethoxybenzidine	119-90-4	N.D.	N.D.	5	≤20
12	3,3'-dimethylbenzidine	119-93-7	N.D.	N.D.	5	≤20
13	4,4'-methylenedi-o-toluidine	838-88-0	N.D.	N.D.	5	≤20
14	6-methoxy-m-toluidine	120-71-8	N.D.	N.D.	5	≤20
15	4,4'-methylene-bis-(2-chloro- aniline)	101-14-4	N.D.	N.D.	5	≤20
16	4,4'-oxydianiline	101-80-4	N.D.	N.D.	5	≤20
17	4,4'-thiodianiline	139-65-1	N.D.	N.D.	5	≤20
18	o-Toluidine	95-53-4	N.D.	N.D.	5	≤20
19	2,4-diaminotoluene	95-80-7	N.D.	N.D.	5	≤20
20	2,4,5-trimethylaniline	137-17-7	N.D.	N.D.	5	≤20
21	2-Methoxyaniline (o-Anisidine)	90-04-0	N.D.	N.D.	5	≤20
22	4-aminoazobenzene	60-09-3	N.D.	N.D.	5	≤20
23	2,4-xylidine	95-68-1	N.D.	N.D.	5	≤20
24	2,6-xylidine	87-62-7	N.D.	N.D.	5	≤20
25	2,4-diaminoanisole sulphate	39156-41-7	N.D.	N.D.	5	≤20
26	2-Naphthylammoniumacetate	553-00-4	N.D.	N.D.	5	≤20
27	4-chloro-o-toluidinium chloride	3165-93-3	N.D.	N.D.	5	≤20
28	2,4,5-trimethylaniline hydrochloride	21436-97-5	N.D.	N.D.	5	≤20

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Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			005	006		
1	4-aminobiphenyl	92-67-1	N/A	N/A	5	≤20
2	Benzidine	92-87-5	N/A	N/A	5	≤20
3	4-chloro-o-toluidine	95-69-2	N/A	N/A	5	≤20
4	2-naphthylamine	91-59-8	N/A	N/A	5	≤20
5	o-aminoazotoluene	97-56-3	N/A	N/A	5	≤20
6	5-nitro-o-toluidine	99-55-8	N/A	N/A	5	≤20
7	4-chloroaniline	106-47-8	N/A	N/A	5	≤20
8	2,4-diaminoanisole	615-05-4	N/A	N/A	5	≤20
9	4,4'- Diaminodiphenylmethane	101-77-9	N/A	N/A	5	≤20
10	3,3'-dichlorobenzidine	91-94-1	N/A	N/A	5	≤20
11	3,3'-dimethoxybenzidine	119-90-4	N/A	N/A	5	≤20
12	3,3'-dimethylbenzidine	119-93-7	N/A	N/A	5	≤20
13	4,4'-methylenedi-o-toluidine	838-88-0	N/A	N/A	5	≤20
14	6-methoxy-m-toluidine	120-71-8	N/A	N/A	5	≤20
15	4,4'-methylene-bis-(2-chloro- aniline)	101-14-4	N/A	N/A	5	≤20
16	4,4'-oxydianiline	101-80-4	N/A	N/A	5	≤20
17	4,4'-thiodianiline	139-65-1	N/A	N/A	5	≤20
18	o-Toluidine	95-53-4	N/A	N/A	5	≤20
19	2,4-diaminotoluene	95-80-7	N/A	N/A	5	≤20
20	2,4,5-trimethylaniline	137-17-7	N/A	N/A	5	≤20
21	2-Methoxyaniline (o-Anisidine)	90-04-0	N/A	N/A	5	≤20
22	4-aminoazobenzene	60-09-3	N/A	N/A	5	≤20
23	2,4-xylidine	95-68-1	N/A	N/A	5	≤20
24	2,6-xylidine	87-62-7	N/A	N/A	5	≤20
25	2,4-diaminoanisole sulphate	39156-41-7	N/A	N/A	5	≤20
26	2-Naphthylammoniumacetate	553-00-4	N/A	N/A	5	≤20
27	4-chloro-o-toluidinium chloride	3165-93-3	N/A	N/A	5	≤20
28	2,4,5-trimethylaniline hydrochloride	21436-97-5	N/A	N/A	5	≤20

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**5 Disperse dyestuffs(allergenic) (DIN 54231:2005)**

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			001	002		
1	Disperse Blue 1	2475-45-8	N.D.	N.D.	15	≤50
2	Disperse Blue 3	2475-46-9	N.D.	N.D.	15	≤50
3	Disperse Blue 7	3179-90-6	N.D.	N.D.	15	≤50
4	Disperse Blue 26	3860-63-7	N.D.	N.D.	15	≤50
5	Disperse Blue 102	12222-97-8	N.D.	N.D.	15	≤50
6	Disperse Blue 106	12223-01-7	N.D.	N.D.	15	≤50
7	Disperse Blue 124	61951-51-7	N.D.	N.D.	15	≤50
8	Disperse Red 1	2872-52-8	N.D.	N.D.	15	≤50
9	Disperse Red 11	2872-48-2	N.D.	N.D.	15	≤50
10	Disperse Red 17	3179-89-3	N.D.	N.D.	15	≤50
11	Disperse Yellow 1	119-15-3	N.D.	N.D.	15	≤50
12	Disperse Yellow 3	2832-40-8	N.D.	N.D.	15	≤50
13	Disperse Yellow 9	6373-73-5	N.D.	N.D.	15	≤50
14	Disperse Yellow 39	12236-29-2	N.D.	N.D.	15	≤50
15	Disperse Yellow 49	54824-37-2	N.D.	N.D.	15	≤50
16	Disperse Orange 1	2581-69-3	N.D.	N.D.	15	≤50
17	Disperse Orange 3	730-40-5	N.D.	N.D.	15	≤50
18	Disperse Orange 37/76/59	13301-61-6	N.D.	N.D.	15	≤50
19	Disperse Brown 1	23355-64-8	N.D.	N.D.	15	≤50
20	Disperse Orange 149	85136-74-9	N.D.	N.D.	15	≤50
21	Disperse Yellow 23	6250-23-3	N.D.	N.D.	15	≤50
22	Disperse Yellow 7	6300-37-4	N.D.	N.D.	15	≤50
23	Disperse Yellow 56	54077-16-6	N.D.	N.D.	15	≤50
24	Disperse Red 151	70210-08-1	N.D.	N.D.	15	≤50
25	Malachite Green	2437-29-8,5 69-64-2,1 0309-95-2	N.D.	N.D.	15	≤50
26	[4-[[4-anilino-1-naphthyl] [4-(dimethylamino)phenyl]methylen]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride(C.I. Basic Blue 26)	2580-56-5	N.D.	N.D.	15	≤50
27	Solvent Yellow 2	60-11-7	N.D.	N.D.	15	≤50
28	phenyl]-4(phenylamino) naphthalene-1-methanol (C.I. Solvent Blue 4)	6786-83-0	N.D.	N.D.	15	≤50
29	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol	561-41-1	N.D.	N.D.	15	≤50
30	C.I. Disperse Blue 35A	56524-77-7	N.D.	N.D.	15	≤50
31	C.I. Disperse Blue 35B	56524-76-6	N.D.	N.D.	15	≤50



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Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			003	004		
1	Disperse Blue 1	2475-45-8	N.D.	N.D.	15	≤50
2	Disperse Blue 3	2475-46-9	N.D.	N.D.	15	≤50
3	Disperse Blue 7	3179-90-6	N.D.	N.D.	15	≤50
4	Disperse Blue 26	3860-63-7	N.D.	N.D.	15	≤50
5	Disperse Blue 102	12222-97-8	N.D.	N.D.	15	≤50
6	Disperse Blue 106	12223-01-7	N.D.	N.D.	15	≤50
7	Disperse Blue 124	61951-51-7	N.D.	N.D.	15	≤50
8	Disperse Red 1	2872-52-8	N.D.	N.D.	15	≤50
9	Disperse Red 11	2872-48-2	N.D.	N.D.	15	≤50
10	Disperse Red 17	3179-89-3	N.D.	N.D.	15	≤50
11	Disperse Yellow 1	119-15-3	N.D.	N.D.	15	≤50
12	Disperse Yellow 3	2832-40-8	N.D.	N.D.	15	≤50
13	Disperse Yellow 9	6373-73-5	N.D.	N.D.	15	≤50
14	Disperse Yellow 39	12236-29-2	N.D.	N.D.	15	≤50
15	Disperse Yellow 49	54824-37-2	N.D.	N.D.	15	≤50
16	Disperse Orange 1	2581-69-3	N.D.	N.D.	15	≤50
17	Disperse Orange 3	730-40-5	N.D.	N.D.	15	≤50
18	Disperse Orange 37/76/59	13301-61-6	N.D.	N.D.	15	≤50
19	Disperse Brown 1	23355-64-8	N.D.	N.D.	15	≤50
20	Disperse Orange 149	85136-74-9	N.D.	N.D.	15	≤50
21	Disperse Yellow 23	6250-23-3	N.D.	N.D.	15	≤50
22	Disperse Yellow 7	6300-37-4	N.D.	N.D.	15	≤50
23	Disperse Yellow 56	54077-16-6	N.D.	N.D.	15	≤50
24	Disperse Red 151	70210-08-1	N.D.	N.D.	15	≤50
25	Malachite Green	2437-29-8,5 69-64-2,1 0309-95-2	N.D.	N.D.	15	≤50
26	[4-[[4-anilino-1-naphthyl] [4-(dimethylamino)phenyl]met hylene]cyclohexa-2,5-dien-1-yl idene] dimethylammonium chloride(C.I. Basic Blue 26)	2580-56-5	N.D.	N.D.	15	≤50
27	Solvent Yellow 2	60-11-7	N.D.	N.D.	15	≤50
28	phenyl]-4(phenylamino) naphthalene-1-methanol (C.I. Solvent Blue 4)	6786-83-0	N.D.	N.D.	15	≤50
29	4,4'-bis(dimethylamino)- 4''-(methylamino)trityl alcohol	561-41-1	N.D.	N.D.	15	≤50
30	C.I. Disperse Blue 35A	56524-77-7	N.D.	N.D.	15	≤50
31	C.I. Disperse Blue 35B	56524-76-6	N.D.	N.D.	15	≤50

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Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			005	006		
1	Disperse Blue 1	2475-45-8	N.D.	N.D.	15	≤50
2	Disperse Blue 3	2475-46-9	N.D.	N.D.	15	≤50
3	Disperse Blue 7	3179-90-6	N.D.	N.D.	15	≤50
4	Disperse Blue 26	3860-63-7	N.D.	N.D.	15	≤50
5	Disperse Blue 102	12222-97-8	N.D.	N.D.	15	≤50
6	Disperse Blue 106	12223-01-7	N.D.	N.D.	15	≤50
7	Disperse Blue 124	61951-51-7	N.D.	N.D.	15	≤50
8	Disperse Red 1	2872-52-8	N.D.	N.D.	15	≤50
9	Disperse Red 11	2872-48-2	N.D.	N.D.	15	≤50
10	Disperse Red 17	3179-89-3	N.D.	N.D.	15	≤50
11	Disperse Yellow 1	119-15-3	N.D.	N.D.	15	≤50
12	Disperse Yellow 3	2832-40-8	N.D.	N.D.	15	≤50
13	Disperse Yellow 9	6373-73-5	N.D.	N.D.	15	≤50
14	Disperse Yellow 39	12236-29-2	N.D.	N.D.	15	≤50
15	Disperse Yellow 49	54824-37-2	N.D.	N.D.	15	≤50
16	Disperse Orange 1	2581-69-3	N.D.	N.D.	15	≤50
17	Disperse Orange 3	730-40-5	N.D.	N.D.	15	≤50
18	Disperse Orange 37/76/59	13301-61-6	N.D.	N.D.	15	≤50
19	Disperse Brown 1	23355-64-8	N.D.	N.D.	15	≤50
20	Disperse Orange 149	85136-74-9	N.D.	N.D.	15	≤50
21	Disperse Yellow 23	6250-23-3	N.D.	N.D.	15	≤50
22	Disperse Yellow 7	6300-37-4	N.D.	N.D.	15	≤50
23	Disperse Yellow 56	54077-16-6	N.D.	N.D.	15	≤50
24	Disperse Red 151	70210-08-1	N.D.	N.D.	15	≤50
25	Malachite Green	2437-29-8,5 69-64-2,1 0309-95-2	N.D.	N.D.	15	≤50
26	[4-[[4-anilino-1-naphthyl] [4-(dimethylamino)phenyl]met hylene]cyclohexa-2,5-dien-1-yl idene] dimethylammonium chloride(C.I. Basic Blue 26)	2580-56-5	N.D.	N.D.	15	≤50
27	Solvent Yellow 2	60-11-7	N.D.	N.D.	15	≤50
28	phenyl]-4(phenylamino) naphthalene-1-methanol (C.I. Solvent Blue 4)	6786-83-0	N.D.	N.D.	15	≤50
29	4,4'-bis(dimethylamino)- 4''-(methylamino)trityl alcohol	561-41-1	N.D.	N.D.	15	≤50
30	C.I. Disperse Blue 35A	56524-77-7	N.D.	N.D.	15	≤50
31	C.I. Disperse Blue 35B	56524-76-6	N.D.	N.D.	15	≤50

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## 6 Disperse dyestuffs(carcinogenic) (DIN 54231:2005)

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			001	002		
1	Acid Red 26	3761-53-3	N.D.	N.D.	15	≤50
2	Basic Red 9	569-61-9	N.D.	N.D.	15	≤50
3	Basic Violet 14	632-99-5	N.D.	N.D.	15	≤50
4	Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo]4-yl]azo]-5-hydroxy -6- (phenylazo)naphthalene-2,7-disulphonate(C.I. Direct Black 38)	1937-37-7	N.D.	N.D.	15	≤50
5	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0	N.D.	N.D.	15	≤50
6	Direct Blue 6	2602-46-2	N.D.	N.D.	15	≤50
7	Disperse Orange 11	82-28-0	N.D.	N.D.	15	≤50
8	Direct Brown 95	16071-86-6	N.D.	N.D.	15	≤50
9	[4-[4,4'-bis(dimethylamino)benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride(C.I. Basic Violet 3)	548-62-9	N.D.	N.D.	15	≤50

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Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			003	004		
1	Acid Red 26	3761-53-3	N.D.	N.D.	15	≤50
2	Basic Red 9	569-61-9	N.D.	N.D.	15	≤50
3	Basic Violet 14	632-99-5	N.D.	N.D.	15	≤50
4	Disodium 4-amino-3-[[4'-(2,4-diaminophenyl)azo]4-yl]azo]-5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate(C.I. Direct Black 38)	1937-37-7	N.D.	N.D.	15	≤50
5	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0	N.D.	N.D.	15	≤50
6	Direct Blue 6	2602-46-2	N.D.	N.D.	15	≤50
7	Disperse Orange 11	82-28-0	N.D.	N.D.	15	≤50
8	Direct Brown 95	16071-86-6	N.D.	N.D.	15	≤50
9	[4-[4,4'-bis(dimethylamino)benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride(C.I. Basic Violet 3)	548-62-9	N.D.	N.D.	15	≤50

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Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			005	006		
1	Acid Red 26	3761-53-3	N.D.	N.D.	15	≤50
2	Basic Red 9	569-61-9	N.D.	N.D.	15	≤50
3	Basic Violet 14	632-99-5	N.D.	N.D.	15	≤50
4	Disodium 4-amino-3-[[4'-(2,4-diaminophenyl)azo]4-yl]azo]-5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate(C.I. Direct Black 38)	1937-37-7	N.D.	N.D.	15	≤50
5	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0	N.D.	N.D.	15	≤50
6	Direct Blue 6	2602-46-2	N.D.	N.D.	15	≤50
7	Disperse Orange 11	82-28-0	N.D.	N.D.	15	≤50
8	Direct Brown 95	16071-86-6	N.D.	N.D.	15	≤50
9	[4-[4,4'-bis(dimethylamino)benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride(C.I. Basic Violet 3)	548-62-9	N.D.	N.D.	15	≤50

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## 7 Extractable heavy metals (DIN EN 16711-2:2016)

Tested Item(s)	Test Result (mg/kg)			MDL (mg/kg)	Client's Limit (mg/kg)
	001	002	003		
Lead(Pb)	N.D.	N.D.	N.D.	0.2	≤1
Cadmium(Cd)	N.D.	N.D.	N.D.	0.05	≤0.1
Mercury(Hg)	N.D.	N.D.	N.D.	0.02	≤0.02
Antimony(Sb)	N.D.	N.D.	N.D.	0.2	≤30
Copper(Cu)	N.D.	N.D.	N.D.	1.0	≤50
Barium(Ba)	N.D.	N.D.	N.D.	0.2	≤1000
Selenium(Se)	N.D.	N.D.	N.D.	1.0	≤500
Cobalt(Co)	N.D.	N.D.	N.D.	0.1	≤4
Nickel(Ni)	0.30	0.35	N.D.	0.05	≤1
Arsenic(As)	N.D.	N.D.	N.D.	0.1	≤0.2

Tested Item(s)	Test Result (mg/kg)			MDL (mg/kg)	Client's Limit (mg/kg)
	004	005	006		
Lead(Pb)	N.D.	N.D.	N.D.	0.2	≤1
Cadmium(Cd)	N.D.	N.D.	N.D.	0.05	≤0.1
Mercury(Hg)	N.D.	N.D.	N.D.	0.02	≤0.02
Antimony(Sb)	N.D.	N.D.	N.D.	0.2	≤30
Copper(Cu)	N.D.	N.D.	N.D.	1.0	≤50
Barium(Ba)	N.D.	N.D.	N.D.	0.2	≤1000
Selenium(Se)	N.D.	N.D.	N.D.	1.0	≤500
Cobalt(Co)	N.D.	N.D.	N.D.	0.1	≤4
Nickel(Ni)	N.D.	N.D.	N.D.	0.05	≤1
Arsenic(As)	N.D.	N.D.	N.D.	0.1	≤0.2

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## 8 Lead(Pb) (CPSC-CH-E1003-09.1)

Tested Item(s)	Test Result (mg/kg)			MDL (mg/kg)	Client's Limit (mg/kg)
	001	002	003		
Lead(Pb)	N.D.	N.D.	N.D.	5	≤90

Tested Item(s)	Test Result (mg/kg)			MDL (mg/kg)	Client's Limit (mg/kg)
	004	005	006		
Lead(Pb)	N.D.	N.D.	N.D.	5	≤90

## 9 Cadmium(Cd) (DIN EN 16711-1:2016)

Tested Item(s)	Test Result (mg/kg)				MDL (mg/kg)	Client's Limit (mg/kg)
	001	002	003	004		
Cadmium(Cd)	N.D.	N.D.	N.D.	N.D.	5	≤40

Tested Item(s)	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
	005	006		
Cadmium(Cd)	N.D.	N.D.	5	≤40

## 10 Mercury(Hg) (DIN EN 16711-1:2016)

Tested Item(s)	Test Result (mg/kg)				MDL (mg/kg)	Client's Limit (mg/kg)
	001	002	003	004		
Mercury(Hg)	N.D.	N.D.	N.D.	N.D.	0.1	≤0.5

Tested Item(s)	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
	005	006		
Mercury(Hg)	N.D.	N.D.	0.1	≤0.5

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## 11 Arsenic(As) (DIN EN 16711-1:2016)

Tested Item(s)	Test Result (mg/kg)				MDL (mg/kg)	Client's Limit (mg/kg)
	001	002	003	004		
Arsenic(As)	N.D.	N.D.	N.D.	N.D.	10	≤100

Tested Item(s)	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
	005	006		
Arsenic(As)	N.D.	N.D.	10	≤100

## 12 Ortho-phenylphenol (1 M KOH extraction, 16 hours at 90 degrees C, derivatization and analysis DIN EN ISO 17070:2015)

Tested Item(s)	Test Result (mg/kg)				MDL (mg/kg)	Client's Limit (mg/kg)
	001	002	003	004		
Ortho-phenylphenol	N.D.	N.D.	N.D.	N.D.	0.5	≤1000

Tested Item(s)	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
	005	006		
Ortho-phenylphenol	N.D.	N.D.	0.5	≤1000



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## 13 Phthalates (CPSC-CH-C1001-09.4)

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			001	002		
1	Dibutyl phthalate(DBP)	84-74-2	N.D.	N.D.	30	≤500
2	Butyl benzyl phthalate(BBP)	85-68-7	N.D.	N.D.	30	≤500
3	Di-(2-ethylhexyl) phthalate(DEHP)	117-81-7	N.D.	N.D.	30	≤500
4	Di-n-octyl phthalate(DNOP)	117-84-0	N.D.	N.D.	30	≤500
5	Di-isononyl phthalate(DINP)	28553-12-0,6 8515-48-0	N.D.	N.D.	50	≤500
6	Di-iso-decyl phthalate(DIDP)	26761-40-0,6 8515-49-1	N.D.	N.D.	50	≤500
7	Dimethyl phthalate(DMP)	131-11-3	N.D.	N.D.	30	≤500
8	Diethyl phthalate(DEP)	84-66-2	N.D.	N.D.	30	≤500
9	Dipropyl phthalate(DPrP)	131-16-8	N.D.	N.D.	30	≤500
10	Diisobutyl phthalate(DIBP)	84-69-5	N.D.	N.D.	30	≤500
11	Dipentyl phthalate(DPP)	131-18-0	N.D.	N.D.	30	≤500
12	Dicyclohexyl phthalate(DCHP)	84-61-7	N.D.	N.D.	30	≤500
13	Diisooctyl phthalate(DIOP)	27554-26-3	N.D.	N.D.	50	≤500
14	Di-n-hexyl phthalate(DNHP)	84-75-3	N.D.	N.D.	30	≤500
15	Bis(2-methoxyethyl) phthalate(DMEP)	117-82-8	N.D.	N.D.	30	≤500
16	Diisopentylphthalate(DIPP)	605-50-5	N.D.	N.D.	30	≤500
17	N-Pentyl-isopentyl phthalate(NIPP)	776297-69-9	N.D.	N.D.	30	≤500
18	1,2-Benzenedicarboxylic acid, di-(C7-11)-branched and linear alkyl esters(DHNUP)	68515-42-4	N.D.	N.D.	50	≤500
19	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich(DIHP)	71888-89-6	N.D.	N.D.	50	≤500
20	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear(BADP)	84777-06-0	N.D.	N.D.	30	≤500
21	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear(NHIHP)	68515-50-4	N.D.	N.D.	50	≤500
22	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	68515-51-5; 68648-93-1	N.D.	N.D.	50	≤500

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23	sum of Phthalates	--	N.D.	N.D.	--	≤1000
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Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			003	004		
1	Dibutyl phthalate(DBP)	84-74-2	N.D.	N.D.	30	≤500
2	Butyl benzyl phthalate(BBP)	85-68-7	N.D.	N.D.	30	≤500
3	Di-(2-ethylhexyl) phthalate(DEHP)	117-81-7	N.D.	N.D.	30	≤500
4	Di-n-octyl phthalate(DNOP)	117-84-0	N.D.	N.D.	30	≤500
5	Di-isononyl phthalate(DINP)	28553-12-0, 68515-48-0	N.D.	N.D.	50	≤500
6	Di-iso-decyl phthalate(DIDP)	26761-40-0, 68515-49-1	N.D.	N.D.	50	≤500
7	Dimethyl phthalate(DMP)	131-11-3	N.D.	N.D.	30	≤500
8	Diethyl phthalate(DEP)	84-66-2	N.D.	N.D.	30	≤500
9	Dipropyl phthalate(DPrP)	131-16-8	N.D.	N.D.	30	≤500
10	Diisobutyl phthalate(DIBP)	84-69-5	N.D.	N.D.	30	≤500
11	Dipentyl phthalate(DPP)	131-18-0	N.D.	N.D.	30	≤500
12	Dicyclohexyl phthalate(DCHP)	84-61-7	N.D.	N.D.	30	≤500
13	Diisooctyl phthalate(DIOP)	27554-26-3	N.D.	N.D.	50	≤500
14	Di-n-hexyl phthalate(DNHP)	84-75-3	N.D.	N.D.	30	≤500
15	Bis(2-methoxyethyl) phthalate(DMEP)	117-82-8	N.D.	N.D.	30	≤500
16	Diisopentylphthalate(DIPP)	605-50-5	N.D.	N.D.	30	≤500
17	N-Pentyl-isopentyl phthalate(NIPP)	776297-69-9	N.D.	N.D.	30	≤500
18	1,2-Benzenedicarboxylic acid, di-(C7-11)-branched and linear alkyl esters(DHNUP)	68515-42-4	N.D.	N.D.	50	≤500
19	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich(DIHP)	71888-89-6	N.D.	N.D.	50	≤500
20	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear(BADP)	84777-06-0	N.D.	N.D.	30	≤500
21	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear(NHIHP)	68515-50-4	N.D.	N.D.	50	≤500
22	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	68515-51-5; 68648-93-1	N.D.	N.D.	50	≤500
23	sum of Phthalates	--	N.D.	N.D.	--	≤1000

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Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			005	006		
1	Dibutyl phthalate(DBP)	84-74-2	N.D.	N.D.	30	≤500
2	Butyl benzyl phthalate(BBP)	85-68-7	N.D.	N.D.	30	≤500
3	Di-(2-ethylhexyl) phthalate(DEHP)	117-81-7	N.D.	N.D.	30	≤500
4	Di-n-octyl phthalate(DNOP)	117-84-0	N.D.	N.D.	30	≤500
5	Di-isononyl phthalate(DINP)	28553-12-0, 68515-48-0	N.D.	N.D.	50	≤500
6	Di-iso-decyl phthalate(DIDP)	26761-40-0, 68515-49-1	N.D.	N.D.	50	≤500
7	Dimethyl phthalate(DMP)	131-11-3	N.D.	N.D.	30	≤500
8	Diethyl phthalate(DEP)	84-66-2	N.D.	N.D.	30	≤500
9	Dipropyl phthalate(DPrP)	131-16-8	N.D.	N.D.	30	≤500
10	Diisobutyl phthalate(DIBP)	84-69-5	N.D.	N.D.	30	≤500
11	Dipentyl phthalate(DPP)	131-18-0	N.D.	N.D.	30	≤500
12	Dicyclohexyl phthalate(DCHP)	84-61-7	N.D.	N.D.	30	≤500
13	Diisooctyl phthalate(DIOP)	27554-26-3	N.D.	N.D.	50	≤500
14	Di-n-hexyl phthalate(DNHP)	84-75-3	N.D.	N.D.	30	≤500
15	Bis(2-methoxyethyl) phthalate(DMEP)	117-82-8	N.D.	N.D.	30	≤500
16	Diisopentylphthalate(DIPP)	605-50-5	N.D.	N.D.	30	≤500
17	N-Pentyl-isopentyl phthalate(NIPP)	776297-69-9	N.D.	N.D.	30	≤500
18	1,2-Benzenedicarboxylic acid, di-(C7-11)-branched and linear alkyl esters(DHNP)	68515-42-4	N.D.	N.D.	50	≤500
19	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich(DIHP)	71888-89-6	N.D.	N.D.	50	≤500
20	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear(BADP)	84777-06-0	N.D.	N.D.	30	≤500
21	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear(NHIHP)	68515-50-4	N.D.	N.D.	50	≤500
22	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	68515-51-5; 68648-93-1	N.D.	N.D.	50	≤500
23	sum of Phthalates	--	N.D.	N.D.	--	≤1000

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## 14 Polycyclic Aromatic Hydrocarbons (PAHs) (AfPS GS 2019:01 PAK)

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			001	002		
1	Naphthalene	91-20-3	N.D.	N.D.	0.2	--
2	Phenanthrene	85-01-8	N.D.	N.D.	0.2	--
3	Anthracene	120-12-7	N.D.	N.D.	0.2	--
4	Fluoranthene	206-44-0	N.D.	N.D.	0.2	--
5	Pyrene	129-00-0	N.D.	N.D.	0.2	--
6	Chrysene	218-01-9	N.D.	N.D.	0.2	≤1
7	Benzo(a)anthracene	56-55-3; 1718-53-2	N.D.	N.D.	0.2	≤1
8	Benzo(b)fluoranthene	205-99-2	N.D.	N.D.	0.2	≤1
9	Benzo(k)fluoranthene	207-08-9	N.D.	N.D.	0.2	≤1
10	Benzo(j)fluoranthene	205-82-3	N.D.	N.D.	0.2	≤1
11	Benzo(a)pyrene	50-32-8	N.D.	N.D.	0.2	≤1
12	Benzo(e)pyrene	192-97-2	N.D.	N.D.	0.2	≤1
13	Dibenzo(a,h)anthracene	53-70-3	N.D.	N.D.	0.2	≤1
14	Benzo(g,h,i)perylene	191-24-2	N.D.	N.D.	0.2	--
15	Indenol(1,2,3-cd)pyrene	193-39-5	N.D.	N.D.	0.2	--
16	Acenaphthene	83-32-9	N.D.	N.D.	0.2	--
17	Fluorene	86-73-7	N.D.	N.D.	0.2	--
18	Acenaphthylene	208-96-8	N.D.	N.D.	0.2	--
19	Sum 18 PAHs	--	N.D.	N.D.	--	≤10

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Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			003	004		
1	Naphthalene	91-20-3	N.D.	N.D.	0.2	--
2	Phenanthrene	85-01-8	N.D.	N.D.	0.2	--
3	Anthracene	120-12-7	N.D.	N.D.	0.2	--
4	Fluoranthene	206-44-0	N.D.	N.D.	0.2	--
5	Pyrene	129-00-0	N.D.	N.D.	0.2	--
6	Chrysene	218-01-9	N.D.	N.D.	0.2	≤1
7	Benzo(a)anthracene	56-55-3; 1718-53-2	N.D.	N.D.	0.2	≤1
8	Benzo(b)fluoranthene	205-99-2	N.D.	N.D.	0.2	≤1
9	Benzo(k)fluoranthene	207-08-9	N.D.	N.D.	0.2	≤1
10	Benzo(j)fluoranthene	205-82-3	N.D.	N.D.	0.2	≤1
11	Benzo(a)pyrene	50-32-8	N.D.	N.D.	0.2	≤1
12	Benzo(e)pyrene	192-97-2	N.D.	N.D.	0.2	≤1
13	Dibenzo(a,h)anthracene	53-70-3	N.D.	N.D.	0.2	≤1
14	Benzo(g,h,i)perylene	191-24-2	N.D.	N.D.	0.2	--
15	Indenol(1,2,3-cd)pyrene	193-39-5	N.D.	N.D.	0.2	--
16	Acenaphthene	83-32-9	N.D.	N.D.	0.2	--
17	Fluorene	86-73-7	N.D.	N.D.	0.2	--
18	Acenaphthylene	208-96-8	N.D.	N.D.	0.2	--
19	Sum 18 PAHs	--	N.D.	N.D.	--	≤10

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Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			005	006		
1	Naphthalene	91-20-3	N.D.	N.D.	0.2	--
2	Phenanthrene	85-01-8	N.D.	N.D.	0.2	--
3	Anthracene	120-12-7	N.D.	N.D.	0.2	--
4	Fluoranthene	206-44-0	N.D.	N.D.	0.2	--
5	Pyrene	129-00-0	N.D.	N.D.	0.2	--
6	Chrysene	218-01-9	N.D.	N.D.	0.2	≤1
7	Benzo(a)anthracene	56-55-3; 1718-53-2	N.D.	N.D.	0.2	≤1
8	Benzo(b)fluoranthene	205-99-2	N.D.	N.D.	0.2	≤1
9	Benzo(k)fluoranthene	207-08-9	N.D.	N.D.	0.2	≤1
10	Benzo(j)fluoranthene	205-82-3	N.D.	N.D.	0.2	≤1
11	Benzo(a)pyrene	50-32-8	N.D.	N.D.	0.2	≤1
12	Benzo(e)pyrene	192-97-2	N.D.	N.D.	0.2	≤1
13	Dibenzo(a,h)anthracene	53-70-3	N.D.	N.D.	0.2	≤1
14	Benzo(g,h,i)perylene	191-24-2	N.D.	N.D.	0.2	--
15	Indenol(1,2,3-cd)pyrene	193-39-5	N.D.	N.D.	0.2	--
16	Acenaphthene	83-32-9	N.D.	N.D.	0.2	--
17	Fluorene	86-73-7	N.D.	N.D.	0.2	--
18	Acenaphthylene	208-96-8	N.D.	N.D.	0.2	--
19	Sum 18 PAHs	--	N.D.	N.D.	--	≤10

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## 15 Volatile Organic Compounds(VOC) ( GC/MS headspace 120 degrees C, 45 minutes)

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			001	002		
1	Benzene	71-43-2	N.D.	N.D.	1	≤5
2	Toluene	108-88-3	19	16	10	--
3	o-Xylene	95-47-6	N.D.	N.D.	10	--
4	m-Xylene	108-38-3	N.D.	N.D.	10	--
5	p-Xylene	106-42-3	N.D.	N.D.	10	--
6	Trichloromethane	67-66-3	N.D.	N.D.	10	--
7	Carbon Tetrachloride	56-23-5	N.D.	N.D.	10	--
8	1,1,1-Trichloroethane	71-55-6	N.D.	N.D.	10	--
9	1,1,2-Trichloroethane	79-00-5	N.D.	N.D.	10	--
10	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	N.D.	10	--
11	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	N.D.	10	--
12	1,1-Dichloroethylene	75-35-4	N.D.	N.D.	10	--
13	Trichloroethylene	79-01-6	N.D.	N.D.	10	--
14	Tetrachloroethylene	127-18-4	N.D.	N.D.	10	--
15	Pentachloroethane	76-01-7	N.D.	N.D.	10	--
16	Ethylbenzene	100-41-4	N.D.	N.D.	10	--
17	1,2-Dichloroethane	107-06-2	N.D.	N.D.	10	--
18	CyClohexanone	108-94-1	26	N.D.	20	--
19	Carbon Disulfide	75-15-0	N.D.	N.D.	20	--
20	Sum of Volatile Organic compounds (VOCs excluding benzene)	--	45	16	--	≤1000

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Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			003	004		
1	Benzene	71-43-2	N.D.	N.D.	1	≤5
2	Toluene	108-88-3	N.D.	24	10	--
3	o-Xylene	95-47-6	N.D.	N.D.	10	--
4	m-Xylene	108-38-3	N.D.	N.D.	10	--
5	p-Xylene	106-42-3	N.D.	N.D.	10	--
6	Trichloromethane	67-66-3	N.D.	N.D.	10	--
7	Carbon Tetrachloride	56-23-5	N.D.	N.D.	10	--
8	1,1,1-Trichloroethane	71-55-6	N.D.	N.D.	10	--
9	1,1,2-Trichloroethane	79-00-5	N.D.	N.D.	10	--
10	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	N.D.	10	--
11	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	N.D.	10	--
12	1,1-Dichloroethylene	75-35-4	N.D.	N.D.	10	--
13	Trichloroethylene	79-01-6	N.D.	N.D.	10	--
14	Tetrachloroethylene	127-18-4	N.D.	N.D.	10	--
15	Pentachloroethane	76-01-7	N.D.	N.D.	10	--
16	Ethylbenzene	100-41-4	N.D.	N.D.	10	--
17	1,2-Dichloroethane	107-06-2	N.D.	N.D.	10	--
18	Cyclohexanone	108-94-1	N.D.	N.D.	20	--
19	Carbon Disulfide	75-15-0	N.D.	N.D.	20	--
20	Sum of Volatile Organic compounds (VOCs excluding benzene)	--	N.D.	24	--	≤1000



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Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			005	006		
1	Benzene	71-43-2	N.D.	N.D.	1	≤5
2	Toluene	108-88-3	N.D.	N.D.	10	--
3	o-Xylene	95-47-6	N.D.	N.D.	10	--
4	m-Xylene	108-38-3	N.D.	N.D.	10	--
5	p-Xylene	106-42-3	N.D.	N.D.	10	--
6	Trichloromethane	67-66-3	N.D.	N.D.	10	--
7	Carbon Tetrachloride	56-23-5	N.D.	N.D.	10	--
8	1,1,1-Trichloroethane	71-55-6	N.D.	N.D.	10	--
9	1,1,2-Trichloroethane	79-00-5	N.D.	N.D.	10	--
10	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	N.D.	10	--
11	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	N.D.	10	--
12	1,1-Dichloroethylene	75-35-4	N.D.	N.D.	10	--
13	Trichloroethylene	79-01-6	N.D.	N.D.	10	--
14	Tetrachloroethylene	127-18-4	N.D.	N.D.	10	--
15	Pentachloroethane	76-01-7	N.D.	N.D.	10	--
16	Ethylbenzene	100-41-4	N.D.	N.D.	10	--
17	1,2-Dichloroethane	107-06-2	N.D.	N.D.	10	--
18	Cyclohexanone	108-94-1	N.D.	N.D.	20	--
19	Carbon Disulfide	75-15-0	N.D.	N.D.	20	--
20	Sum of Volatile Organic compounds (VOCs excluding benzene)	--	N.D.	N.D.	--	≤1000

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## 16 Flame retardants (EN ISO 17881-1:2016)

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			001	002		
1	Decabromo-1,2-diphenylethane(DBDPE)	84852-53-9	N.D.	N.D.	10	≤10
2	Monobromobiphenyl	2052-07-5	N.D.	N.D.	5	≤10
3	Dibromobiphenyl	57422-14-2	N.D.	N.D.	5	≤10
4	Tribromobiphenyl	59080-34-1	N.D.	N.D.	5	≤10
5	Tetrabromobiphenyl	60044-24-8	N.D.	N.D.	5	≤10
6	Pentabromobiphenyl	14910-04-4	N.D.	N.D.	5	≤10
7	Hexabromobiphenyl	59080-40-9	N.D.	N.D.	5	≤10
8	Heptabromobiphenyl	35194-78-6	N.D.	N.D.	5	≤10
9	Octabromobiphenyl	27858-07-7	N.D.	N.D.	5	≤10
10	Nonabromobiphenyl	21543-52-2	N.D.	N.D.	5	≤10
11	Decabromobiphenyl	13654-09-6	N.D.	N.D.	5	≤10
12	Monobromodiphenyl ether	6876-00-2	N.D.	N.D.	5	≤10
13	Dibromodiphenyl ether	83694-71-7	N.D.	N.D.	5	≤10
14	Tribromodiphenyl ether	41318-75-6	N.D.	N.D.	5	≤10
15	Tetrabromodiphenyl ether	189084-61-5	N.D.	N.D.	5	≤10
16	Pentabromodiphenyl ether	182346-21-0	N.D.	N.D.	5	≤10
17	Hexabromodiphenyl ether	182677-30-1	N.D.	N.D.	5	≤10
18	Heptabromodiphenyl ether	189084-68-2	N.D.	N.D.	5	≤10
19	Octabromodiphenyl ether	446255-56-7	N.D.	N.D.	5	≤10
20	Nonabromodiphenyl ether	63387-28-0	N.D.	N.D.	5	≤10
21	Decabromodiphenyl ether	1163-19-5	N.D.	N.D.	5	≤10
22	Hexabromocyclododecane(HBCDD)	25637-99-4; 3194-55-6; (134237-50-6); (134237-51-7); (134237-52-8)	N.D.	N.D.	5	≤10
23	Tetrabromobisphenol A(TBBP-A)	79-94-7	N.D.	N.D.	5	≤10

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Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			003	004		
1	Decabromo-1,2-diphenylethane(DBDPE)	84852-53-9	N.D.	N.D.	10	≤10
2	Monobromobiphenyl	2052-07-5	N.D.	N.D.	5	≤10
3	Dibromobiphenyl	57422-14-2	N.D.	N.D.	5	≤10
4	Tribromobiphenyl	59080-34-1	N.D.	N.D.	5	≤10
5	Tetrabromobiphenyl	60044-24-8	N.D.	N.D.	5	≤10
6	Pentabromobiphenyl	14910-04-4	N.D.	N.D.	5	≤10
7	Hexabromobiphenyl	59080-40-9	N.D.	N.D.	5	≤10
8	Heptabromobiphenyl	35194-78-6	N.D.	N.D.	5	≤10
9	Octabromobiphenyl	27858-07-7	N.D.	N.D.	5	≤10
10	Nonabromobiphenyl	21543-52-2	N.D.	N.D.	5	≤10
11	Decabromobiphenyl	13654-09-6	N.D.	N.D.	5	≤10
12	Monobromodiphenyl ether	6876-00-2	N.D.	N.D.	5	≤10
13	Dibromodiphenyl ether	83694-71-7	N.D.	N.D.	5	≤10
14	Tribromodiphenyl ether	41318-75-6	N.D.	N.D.	5	≤10
15	Tetrabromodiphenyl ether	189084-61-5	N.D.	N.D.	5	≤10
16	Pentabromodiphenyl ether	182346-21-0	N.D.	N.D.	5	≤10
17	Hexabromodiphenyl ether	182677-30-1	N.D.	N.D.	5	≤10
18	Heptabromodiphenyl ether	189084-68-2	N.D.	N.D.	5	≤10
19	Octabromodiphenyl ether	446255-56-7	N.D.	N.D.	5	≤10
20	Nonabromodiphenyl ether	63387-28-0	N.D.	N.D.	5	≤10
21	Decabromodiphenyl ether	1163-19-5	N.D.	N.D.	5	≤10
22	Hexabromocyclododecane(HBCDD)	25637-99-4; 3194-55-6; (134237-50-6); (134237-51-7); (134237-52-8)	N.D.	N.D.	5	≤10
23	Tetrabromobisphenol A(TBBP-A)	79-94-7	N.D.	N.D.	5	≤10

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Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			005	006		
1	Decabromo-1,2-diphenylethane(DBDPE)	84852-53-9	N.D.	N.D.	10	≤10
2	Monobromobiphenyl	2052-07-5	N.D.	N.D.	5	≤10
3	Dibromobiphenyl	57422-14-2	N.D.	N.D.	5	≤10
4	Tribromobiphenyl	59080-34-1	N.D.	N.D.	5	≤10
5	Tetrabromobiphenyl	60044-24-8	N.D.	N.D.	5	≤10
6	Pentabromobiphenyl	14910-04-4	N.D.	N.D.	5	≤10
7	Hexabromobiphenyl	59080-40-9	N.D.	N.D.	5	≤10
8	Heptabromobiphenyl	35194-78-6	N.D.	N.D.	5	≤10
9	Octabromobiphenyl	27858-07-7	N.D.	N.D.	5	≤10
10	Nonabromobiphenyl	21543-52-2	N.D.	N.D.	5	≤10
11	Decabromobiphenyl	13654-09-6	N.D.	N.D.	5	≤10
12	Monobromodiphenyl ether	6876-00-2	N.D.	N.D.	5	≤10
13	Dibromodiphenyl ether	83694-71-7	N.D.	N.D.	5	≤10
14	Tribromodiphenyl ether	41318-75-6	N.D.	N.D.	5	≤10
15	Tetrabromodiphenyl ether	189084-61-5	N.D.	N.D.	5	≤10
16	Pentabromodiphenyl ether	182346-21-0	N.D.	N.D.	5	≤10
17	Hexabromodiphenyl ether	182677-30-1	N.D.	N.D.	5	≤10
18	Heptabromodiphenyl ether	189084-68-2	N.D.	N.D.	5	≤10
19	Octabromodiphenyl ether	446255-56-7	N.D.	N.D.	5	≤10
20	Nonabromodiphenyl ether	63387-28-0	N.D.	N.D.	5	≤10
21	Decabromodiphenyl ether	1163-19-5	N.D.	N.D.	5	≤10
22	Hexabromocyclododecane(HBCDD)	25637-99-4; 3194-55-6; (134237-50-6); (134237-51-7); (134237-52-8)	N.D.	N.D.	5	≤10
23	Tetrabromobisphenol A(TBBP-A)	79-94-7	N.D.	N.D.	5	≤10

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## 17 Phosphate flame retardants (EN ISO 17881-2:2016)

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			001	002		
1	Bis(2,3-dibromopropyl) phosphate(BIS-BP)	5412-25-9	N.D.	N.D.	5	≤10
2	Tris(1,3-dichloroisopropyl) phosphate(TDCPP)	13674-87-8	N.D.	N.D.	5	≤10
3	Tris(2,3-dibromopropyl) phosphate(TDBPP)	126-72-7	N.D.	N.D.	5	≤10
4	Tris(1-aziridinyl)phosphine oxide(TEPAO)	545-55-1	N.D.	N.D.	5	≤10
5	Trixylenyl phosphate(TXP)	25155-23-1	N.D.	N.D.	5	≤10
6	2,2-Bis(bromomethyl) propane-1,3-diol(DBNPG)	3296-90-0	N.D.	N.D.	10	≤10
7	Tris(2-chloroethyl) phosphate(TCEP)	115-96-8	N.D.	N.D.	5	≤10

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Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			003	004		
1	Bis(2,3-dibromopropyl) phosphate(BIS-BP)	5412-25-9	N.D.	N.D.	5	≤10
2	Tris(1,3-dichloroisopropyl) phosphate(TDCPP)	13674-87-8	N.D.	N.D.	5	≤10
3	Tris(2,3-dibromopropyl) phosphate(TDBPP)	126-72-7	N.D.	N.D.	5	≤10
4	Tris(1-aziridinyl)phosphine oxide(TEPAO)	545-55-1	N.D.	N.D.	5	≤10
5	Trixylenyl phosphate(TXP)	25155-23-1	N.D.	N.D.	5	≤10
6	2,2-Bis(bromomethyl) propane-1,3-diol(DBNPG)	3296-90-0	N.D.	N.D.	10	≤10
7	Tris(2-chloroethyl) phosphate(TCEP)	115-96-8	N.D.	N.D.	5	≤10

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			005	006		
1	Bis(2,3-dibromopropyl) phosphate(BIS-BP)	5412-25-9	N.D.	N.D.	5	≤10
2	Tris(1,3-dichloroisopropyl) phosphate(TDCPP)	13674-87-8	N.D.	N.D.	5	≤10
3	Tris(2,3-dibromopropyl) phosphate(TDBPP)	126-72-7	N.D.	N.D.	5	≤10
4	Tris(1-aziridinyl)phosphine oxide(TEPAO)	545-55-1	N.D.	N.D.	5	≤10
5	Trixylenyl phosphate(TXP)	25155-23-1	N.D.	N.D.	5	≤10
6	2,2-Bis(bromomethyl) propane-1,3-diol(DBNPG)	3296-90-0	N.D.	N.D.	10	≤10
7	Tris(2-chloroethyl) phosphate(TCEP)	115-96-8	N.D.	N.D.	5	≤10

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## 18 PFOS and Related Substances (Refer to CEN/TS 15968:2010)

Tested Item(s)	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
	001	002		
Perfluorootanoic sulfonate(PFOS)	N.D.	N.D.	0.050	≤1000

Tested Item(s)	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
	003	004		
Perfluorootanoic sulfonate(PFOS)	N.D.	N.D.	0.050	≤1000

Tested Item(s)	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
	005	006		
Perfluorootanoic sulfonate(PFOS)	N.D.	N.D.	0.050	≤1000

## 19 Perfluorooctanoic acid related substances and Its Salts (Refer to CEN/TS 15968:2010)

Tested Item(s)	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
	001	002		
Perfluorooctanoic Acid(PFOA)	N.D.	N.D.	0.01	≤10
Sodium perfluorooctanoate(PFOA-Na)	N.D.	N.D.	0.01	
Potassium perfluorooctanoate(PFOA-K)	N.D.	N.D.	0.01	
Perfluorooctanoyl fluoride(PFOA-F)	N.D.	N.D.	0.01	
Ammonium pentadecafluorooctanoate(APFO)	N.D.	N.D.	0.01	
Methyl perfluorooctanoate(Me-PFOA)	N.D.	N.D.	0.01	

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Tested Item(s)	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
	003	004		
Perfluorooctanoic Acid(PFOA)	N.D.	N.D.	0.01	≤10
Sodium perfluorooctanoate(PFOA-Na)	N.D.	N.D.	0.01	
Potassium perfluorooctanoate(PFOA-K)	N.D.	N.D.	0.01	
Perfluorooctanoyl fluoride(PFOA-F)	N.D.	N.D.	0.01	
Ammonium pentadecafluorooctanoate(APFO)	N.D.	N.D.	0.01	
Methyl perfluorooctanoate(Me-PFOA)	N.D.	N.D.	0.01	

Tested Item(s)	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
	005	006		
Perfluorooctanoic Acid(PFOA)	N.D.	N.D.	0.01	≤10
Sodium perfluorooctanoate(PFOA-Na)	N.D.	N.D.	0.01	
Potassium perfluorooctanoate(PFOA-K)	N.D.	N.D.	0.01	
Perfluorooctanoyl fluoride(PFOA-F)	N.D.	N.D.	0.01	
Ammonium pentadecafluorooctanoate(APFO)	N.D.	N.D.	0.01	
Methyl perfluorooctanoate(Me-PFOA)	N.D.	N.D.	0.01	



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## 20 Formaldehyde (GB 18583-2008)

Tested Item(s)	Test Result (mg/kg)				MDL (mg/kg)	Client's Limit (mg/kg)
	001	002	003	004		
Formaldehyde	N.D.	N.D.	N.D.	N.D.	50	≤75

Tested Item(s)	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
	005	006		
Formaldehyde	N.D.	N.D.	50	≤75

Remark: "--"Means Not Applicable  
 -MDL = Method Detection Limit  
 -N.D. = Not Detected (<MDL)  
 -mg/kg = ppm = parts per million

### Tested Sample/Part Description

- 001 Cyan ink
- 002 Magenta ink
- 003 Yellow ink
- 004 Black ink
- 005 White ink
- 006 Varnish ink

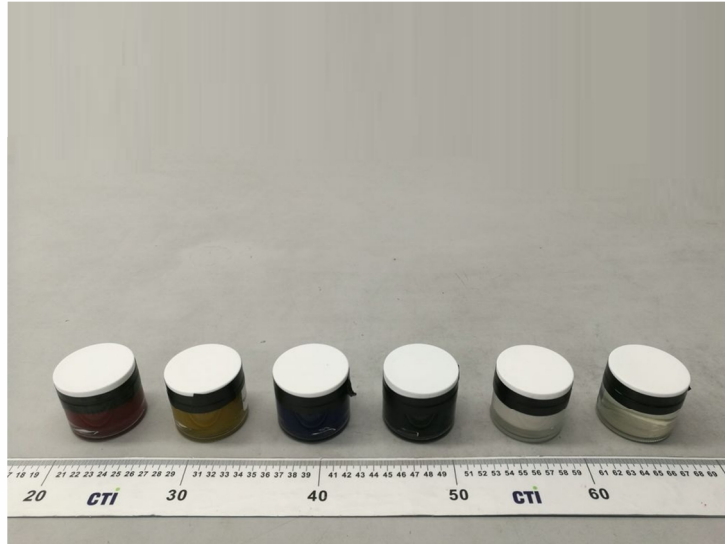
Note: The testing data and result(s) in this report is(are) just for scientific research, education, internal quality control and product development etc.

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## Photo(s) of the sample(s)



### Statement:

1. This report is considered invalidated without approval signature, special stamp;
2. Company name and address shown on report, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified;
3. The test result(s) shown in this report refer(s) only to the sample(s) tested;
4. Without written approval of CTI, this report can't be reproduced except in full;
5. Except for the requirement of the client, the test results and the conformity assessment in this report do not take the uncertainty into account.

\*\*\* End of Report \*\*\*