



Test Report

Report No. A2240074319101
Report Issued Date Feb. 27, 2024

Page 1 of 25

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

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

Sample Description SAPPHIRE SB ECO SERIES INK
Contact Person Joseph Shairs
Tel No. 978-646-8980
Mail Box joes@inkcups.com
Summary Report PASS
Failure Test Items --
Amount of Sample --
Buyer's Name/Division Adidas Apparel
Age Grade Infant
Material Name/Material Code SAPPHIRE SB ECO SERIES
Color Name/Code BLACK/165; LIGHT ONIX/150A;DARK ONIX/A79H
Supplier Inkcups Corporation
Country of Origin Italy
Country of Destination --
Material Component --
Content of recycled material(%) 0
Sample Classification --



Approved by

Hill Zheng

Date

Feb. 27, 2024

Hill Zheng
Technical Manager

No. S597411662

Centre Testing International Group Co.,Ltd.

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

Test Report

Report No. A2240074319101
Report Issued Date Feb. 27, 2024

Page 2 of 25

Material key code under 509+cement
adidas-Group A-01 test standard
RSL based on The adidas-Group A-01 RSL (2023)
Report Type FT
Mark the Former full test report --
No.
P.O. No. --
Item No. --
Style No. --
Additional information --
Sample Received Date Feb. 19, 2024
Testing Period Feb. 19, 2024 to Feb. 27, 2024

Note:

Full Test (FT)/ First Order (FO)/ Separate Colors (SC*)/ New version update test items (NT*)/ Improvement Test (IT*)/ Random Test (RT)/ Supplier Internal (SI)/ Special Test (ST*)

Test Conducted:

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

Test Report

Report No.
Report Issued Date

A2240074319101
Feb. 27, 2024

Page 3 of 25

<u>Summary of Test Result(s)</u>			
Test Item(s)	Pre-Treatment	Test Request	Test Result/ Conclusion
Extractable heavy metals	DIN EN 16711-2 (2016)	DIN EN ISO 17294-2 (2017)	PASS
Cadmium (Cd)	DIN EN 16711-1:2016	DIN EN ISO 11885 (2009)	PASS
Lead (Pb)	DIN EN 16711-1:2016	DIN EN ISO 11885 (2009)	PASS
Chlorinated phenols	DIN 50009 (2021)		PASS
Ortho-phenylphenol	DIN 50009 (2021)		PASS
Formaldehyde	DIN EN ISO 14184-1, (2011)		PASS
Disperse dyestuffs(allergenic)	DIN 54231 (2022)		PASS
Disperse dyestuffs(carcinogenic)	DIN 54231 (2022)		PASS
Short Chain Chlorinated Paraffins (SCCPs)	5mLTHF ultrasonic30 min at 70°C; shaking for 30 min; then +10mL ACN & ultrasonic 30 min at 70°C; filtrate with PTFE 0.45µm, GCMS(NCI) analysis		PASS
Middle Chain Chlorinated Paraffins (MCCPs)	5mLTHF ultrasonic30 min at 70°C; shaking for 30 min; then +10mL ACN & ultrasonic 30 min at 70°C; filtrate with PTFE 0.45µm, GCMS(NCI) analysis		PASS
Alkylphenols and Alkylphenol Ethoxylates	NP,OP: Extraction with THF NPEO,OPEO: Extraction with THF	NP,OP: GCMS or LCMS NPEO,OPEO: LCMS	PASS
Organotin compounds	ISO/TS 16179 (2012)		PASS
Phthalates	CPSC-CH-C1001-09.4(2018)		PASS
Polycyclic Aromatic Hydrocarbons (PAHs)	AfPS GS 2019:01 PAK		PASS
Volatile Organic Compounds (VOC)	Solvent Extraction, Analysis by GCMS		PASS
N,N-dimethylformamide	Solvent Extraction - DIN EN 16778 (2016)		PASS
Solvents/Residuals	DIN CEN ISO/TS 16189:2013		PASS

Test Report

Report No.

A2240074319101

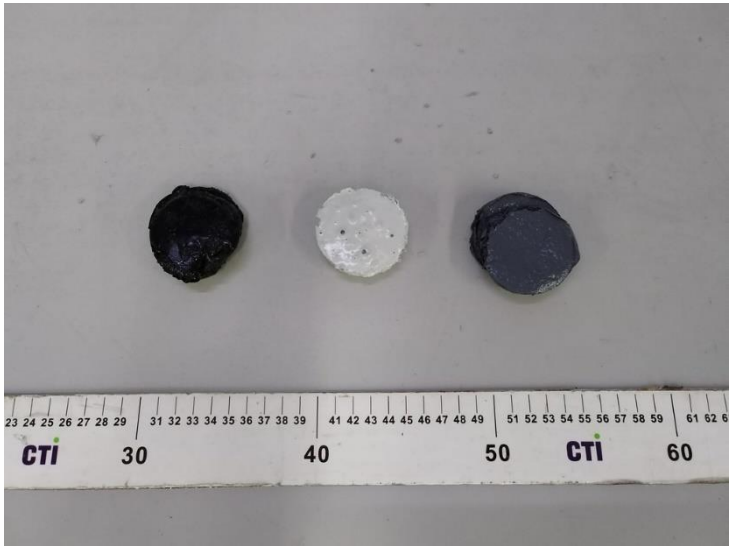
Report Issued Date

Feb. 27, 2024

Page 4 of 25

Summary of Test Result(s)			
Test Item(s)	Pre-Treatment	Test Request	Test Result/ Conclusion
Azo Dyes	DIN EN ISO 14362-1:2017& DIN EN ISO 14362-3:2017		PASS
Quinoline	DIN 54231(2022)	GC/MS or LC/MS	PASS

Photo(s) of the sample(s)



*****For Further Details, Please Refer to the Following Page(s) *****

Test Report

Report No. A2240074319101

Page 5 of 25

Report Issued Date Feb. 27, 2024

Tests Conducted (As Requested by the Client)

1 Extractable heavy metals (DIN EN ISO 17294-2 (2017))

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			001	002		
1	Lead(Pb)	7439-92-1	N.D.	N.D.	0.2	≤0.2
2	Cadmium(Cd)	7440-43-9	N.D.	N.D.	0.05	≤0.1
3	Mercury(Hg)	7439-97-6	N.D.	N.D.	0.02	≤0.02
4	Chromium(Cr)	7440-47-3	N.D.	N.D.	0.02	≤1

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)	MDL (mg/kg)	Client's Limit (mg/kg)
			003		
1	Lead(Pb)	7439-92-1	N.D.	0.2	≤0.2
2	Cadmium(Cd)	7440-43-9	N.D.	0.05	≤0.1
3	Mercury(Hg)	7439-97-6	N.D.	0.02	≤0.02
4	Chromium(Cr)	7440-47-3	N.D.	0.02	≤1

2 Cadmium (Cd) (DIN EN ISO 11885 (2009))

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			001	002		
1	Cadmium(Cd)	7440-43-9	N.D.	N.D.	5	≤40

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)	MDL (mg/kg)	Client's Limit (mg/kg)
			003		
1	Cadmium(Cd)	7440-43-9	N.D.	5	≤40

3 Lead (Pb) (DIN EN ISO 11885 (2009))

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			001	002		
1	Lead(Pb)	7439-92-1	N.D.	N.D.	5	≤40

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)	MDL (mg/kg)	Client's Limit (mg/kg)
			003		
1	Lead(Pb)	7439-92-1	N.D.	5	≤40

Test Report

Report No. A2240074319101 Page 6 of 25
Report Issued Date Feb. 27, 2024

4 Chlorinated phenols (DIN 50009 (2021))

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			001	002		
1	2,3,4-Trichlorophenol	15950-66-0	N.D.	N.D.	0.05	--
2	2,3,5-Trichlorophenol	933-78-8	N.D.	N.D.	0.05	--
3	2,3,6-Trichlorophenol	933-75-5	N.D.	N.D.	0.05	--
4	2,4,5-Trichlorophenol	95-95-4	N.D.	N.D.	0.05	--
5	2,4,6-Trichlorophenol	88-06-2	N.D.	N.D.	0.05	--
6	3,4,5-Trichlorophenol	609-19-8	N.D.	N.D.	0.05	--
7	2,3,4,5-Tetrachlorophenol	4901-51-3	N.D.	N.D.	0.05	--
8	2,3,4,6-Tetrachlorophenol	58-90-2	N.D.	N.D.	0.05	--
9	2,3,5,6-Tetrachlorophenol	935-95-5	N.D.	N.D.	0.05	--
10	Pentachlorophenol	87-86-5	N.D.	N.D.	0.05	--
11	sum of(PCP+TeCP+TriCP)	--	N.D.	N.D.	--	≤0.05

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)	MDL (mg/kg)	Client's Limit (mg/kg)
			003		
1	2,3,4-Trichlorophenol	15950-66-0	N.D.	0.05	--
2	2,3,5-Trichlorophenol	933-78-8	N.D.	0.05	--
3	2,3,6-Trichlorophenol	933-75-5	N.D.	0.05	--
4	2,4,5-Trichlorophenol	95-95-4	N.D.	0.05	--
5	2,4,6-Trichlorophenol	88-06-2	N.D.	0.05	--
6	3,4,5-Trichlorophenol	609-19-8	N.D.	0.05	--
7	2,3,4,5-Tetrachlorophenol	4901-51-3	N.D.	0.05	--
8	2,3,4,6-Tetrachlorophenol	58-90-2	N.D.	0.05	--
9	2,3,5,6-Tetrachlorophenol	935-95-5	N.D.	0.05	--
10	Pentachlorophenol	87-86-5	N.D.	0.05	--
11	sum of(PCP+TeCP+TriCP)	--	N.D.	--	≤0.05

5 Ortho-phenylphenol (DIN 50009 (2021))

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			001	002		
1	Ortho-phenylphenol(OPP)	90-43-7	N.D.	N.D.	0.5	≤1000

Test Report

Report No. A2240074319101 Page 7 of 25
Report Issued Date Feb. 27, 2024

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)	MDL (mg/kg)	Client's Limit (mg/kg)
			003		
1	Ortho-phenylphenol(OPP)	90-43-7	N.D.	0.5	≤1000

6 Formaldehyde (DIN EN ISO 14184-1, (2011))

Tested Item(s)	Test Result (mg/kg)			MDL (mg/kg)	Client's Limit (mg/kg)
	001	002	003		
Formaldehyde	N.D.	N.D.	N.D.	16	≤16

Test Report

Report No. A2240074319101 Page 8 of 25
Report Issued Date Feb. 27, 2024

7 Disperse dyestuffs(allergenous) (DIN 54231 (2022))

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			001	002		
1	Disperse Blue 7	3179-90-6	N.D.	N.D.	15	≤30
2	Disperse Blue 26	3860-63-7	N.D.	N.D.	15	≤30
3	Disperse Blue 35	12222-75-2	N.D.	N.D.	15	≤30
4	Disperse Blue 102	12222-97-8	N.D.	N.D.	15	≤30
5	Disperse Blue 106	12223-01-7	N.D.	N.D.	15	≤30
6	Disperse Blue 124	61951-51-7	N.D.	N.D.	15	≤30
7	Disperse Brown 1	23355-64-8	N.D.	N.D.	15	≤30
8	Disperse Yellow 1	119-15-3	N.D.	N.D.	15	≤30
9	Disperse Yellow 7	6300-37-4	N.D.	N.D.	15	≤30
10	Disperse Yellow 9	6373-73-5	N.D.	N.D.	15	≤30
11	Disperse Yellow 23	6250-23-3	N.D.	N.D.	15	≤30
12	Disperse Yellow 39	12236-29-2	N.D.	N.D.	15	≤30
13	Disperse Yellow 49	54824-37-2	N.D.	N.D.	15	≤30
14	Disperse Yellow 56	54077-16-6	N.D.	N.D.	15	≤30
15	Disperse Orange 1	2581-69-3	N.D.	N.D.	15	≤30
16	Disperse Orange 3	730-40-5	N.D.	N.D.	15	≤30
17	Disperse Orange 11	82-28-0	N.D.	N.D.	15	≤30
18	Disperse Orange 37/76/59	13301-61-6; 12223-33-5; 51811-42-8	N.D.	N.D.	15	≤30
19	Disperse Orange 149	85136-74-9	N.D.	N.D.	15	≤30
20	Disperse Red 1	2872-52-8	N.D.	N.D.	15	≤30
21	Disperse Red 11	2872-48-2	N.D.	N.D.	15	≤30
22	Disperse Red 17	3179-89-3	N.D.	N.D.	15	≤30
23	Disperse Red 151	61968-47-6	N.D.	N.D.	15	≤30
24	acid red 114	6459-94-5	N.D.	N.D.	15	≤30
25	direct blue 15	2429-74-5	N.D.	N.D.	15	≤30
26	Solvent Red 23	85-86-9	N.D.	N.D.	15	≤30

Test Report

Report No. A2240074319101
Report Issued Date Feb. 27, 2024

Page 9 of 25

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)	MDL (mg/kg)	Client's Limit (mg/kg)
			003		
1	Disperse Blue 7	3179-90-6	N.D.	15	≤30
2	Disperse Blue 26	3860-63-7	N.D.	15	≤30
3	Disperse Blue 35	12222-75-2	N.D.	15	≤30
4	Disperse Blue 102	12222-97-8	N.D.	15	≤30
5	Disperse Blue 106	12223-01-7	N.D.	15	≤30
6	Disperse Blue 124	61951-51-7	N.D.	15	≤30
7	Disperse Brown 1	23355-64-8	N.D.	15	≤30
8	Disperse Yellow 1	119-15-3	N.D.	15	≤30
9	Disperse Yellow 7	6300-37-4	N.D.	15	≤30
10	Disperse Yellow 9	6373-73-5	N.D.	15	≤30
11	Disperse Yellow 23	6250-23-3	N.D.	15	≤30
12	Disperse Yellow 39	12236-29-2	N.D.	15	≤30
13	Disperse Yellow 49	54824-37-2	N.D.	15	≤30
14	Disperse Yellow 56	54077-16-6	N.D.	15	≤30
15	Disperse Orange 1	2581-69-3	N.D.	15	≤30
16	Disperse Orange 3	730-40-5	N.D.	15	≤30
17	Disperse Orange 11	82-28-0	N.D.	15	≤30
18	Disperse Orange 37/76/59	13301-61-6; 12223-33-5; 51811-42-8	N.D.	15	≤30
19	Disperse Orange 149	85136-74-9	N.D.	15	≤30
20	Disperse Red 1	2872-52-8	N.D.	15	≤30
21	Disperse Red 11	2872-48-2	N.D.	15	≤30
22	Disperse Red 17	3179-89-3	N.D.	15	≤30
23	Disperse Red 151	61968-47-6	N.D.	15	≤30
24	acid red 114	6459-94-5	N.D.	15	≤30
25	direct blue 15	2429-74-5	N.D.	15	≤30
26	Solvent Red 23	85-86-9	N.D.	15	≤30

Test Report

Report No. A2240074319101 Page 10 of 25
Report Issued Date Feb. 27, 2024

8 Disperse dyestuffs(carcinogenic) (DIN 54231 (2022))

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	≤30
2	Disperse Blue 3	2475-46-9	N.D.	N.D.	15	≤30
3	Disperse Yellow 3	2832-40-8	N.D.	N.D.	15	≤30
4	Acid Red 26	3761-53-3	N.D.	N.D.	15	≤30
5	[4-[[4-anilino-1-naphthyl] [4-(dimethylamino)phenyl]m ethylene]cyclohexa-2,5-dien- 1-ylidene] dimethylammonium chloride(C.I. Basic Blue 26)	2580-56-5	N.D.	N.D.	15	≤30
6	Malachite Green	10309-95-2; 569-64-2;24 37-29-8	N.D.	N.D.	15	≤30
7	Basic Red 9	569-61-9	N.D.	N.D.	15	≤30
8	Basic Violet 1	8004-87-3	N.D.	N.D.	15	≤30
9	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2 ,5-dien-1-ylidene] dimethylammonium chloride(C.I. Basic Violet 3)	548-62-9/14 426-25-6	N.D.	N.D.	15	≤30
10	Basic Violet 14	632-99-5	N.D.	N.D.	15	≤30
11	Disodium 4-amino-3-[[4'-[(2,4-diamino phenyl)azo]4-yl]azo]-5-hydro xy-6- (phenylazo)naphthalene-2,7- disulphonate(C.I. Direct Black 38)	1937-37-7	N.D.	N.D.	15	≤30
12	Direct Blue 6	2602-46-2	N.D.	N.D.	15	≤30
13	Direct Brown 95	16071-86-6	N.D.	N.D.	15	≤30

Test Report

Report No. A2240074319101 Page 11 of 25
Report Issued Date Feb. 27, 2024

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			001	002		
14	Disodium 3,3'-[[1,1'-biphenyl]- 4,4'-diylbis(azo)]bis(4-amino naphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0	N.D.	N.D.	15	≤30
15	phenyl]-4(phenylamino) naphthalene-1-methanol (C.I. Solvent Blue 4)	6786-83-0	N.D.	N.D.	15	≤30
16	Solvent Yellow 2	60-11-7	N.D.	N.D.	15	≤30
17	Solvent Yellow 14	842-07-9	N.D.	N.D.	15	≤30
18	4,4'-bis(dimethylamino)- 4''-(methylamino)trityl alcohol (Solvent Violet 8)	561-41-1	N.D.	N.D.	15	≤30
19	Navy blue	118685-33- 9	N.D.	N.D.	15	≤30
20	Navy blue(C46H30CrN10O20S2•3 Na)	--	N.D.	N.D.	15	≤30

Test Report

Report No. A2240074319101 Page 12 of 25
Report Issued Date Feb. 27, 2024

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)	MDL (mg/kg)	Client's Limit (mg/kg)
			003		
1	Disperse Blue 1	2475-45-8	N.D.	15	≤30
2	Disperse Blue 3	2475-46-9	N.D.	15	≤30
3	Disperse Yellow 3	2832-40-8	N.D.	15	≤30
4	Acid Red 26	3761-53-3	N.D.	15	≤30
5	[4-[[4-anilino-1-naphthyl] [4-(dimethylamino)phenyl]m ethylene]cyclohexa-2,5-dien- 1-ylidene] dimethylammonium chloride(C.I. Basic Blue 26)	2580-56-5	N.D.	15	≤30
6	Malachite Green	10309-95-2; 569-64-2;24 37-29-8	N.D.	15	≤30
7	Basic Red 9	569-61-9	N.D.	15	≤30
8	Basic Violet 1	8004-87-3	N.D.	15	≤30
9	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2 ,5-dien-1-ylidene] dimethylammonium chloride(C.I. Basic Violet 3)	548-62-9/14 426-25-6	N.D.	15	≤30
10	Basic Violet 14	632-99-5	N.D.	15	≤30
11	Disodium 4-amino-3-[[4'-[(2,4-diamino phenyl)azo]4-yl]azo]-5-hydro xy-6- (phenylazo)naphthalene-2,7- disulphonate(C.I. Direct Black 38)	1937-37-7	N.D.	15	≤30
12	Direct Blue 6	2602-46-2	N.D.	15	≤30
13	Direct Brown 95	16071-86-6	N.D.	15	≤30
14	Disodium 3,3'-[[1,1'-biphenyl]- 4,4'-diylbis(azo)]bis(4-amino naphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0	N.D.	15	≤30

Test Report

Report No. A2240074319101
Report Issued Date Feb. 27, 2024

Page 13 of 25

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)	MDL (mg/kg)	Client's Limit (mg/kg)
			003		
15	phenyl]-4(phenylamino) naphthalene-1-methanol (C.I. Solvent Blue 4)	6786-83-0	N.D.	15	≤30
16	Solvent Yellow 2	60-11-7	N.D.	15	≤30
17	Solvent Yellow 14	842-07-9	N.D.	15	≤30
18	4,4'-bis(dimethylamino)- 4''-(methylamino)trityl alcohol (Solvent Violet 8)	561-41-1	N.D.	15	≤30
19	Navy blue	118685-33- 9	N.D.	15	≤30
20	Navy blue(C46H30CrN10O20S2•3 Na)	--	N.D.	15	≤30

9 Short Chain Chlorinated Paraffins (SCCPs) (5mLTHF ultrasonic30 min at 70°C; shaking for 30 min; then +10mL ACN & ultrasonic 30 min at 70°C; filtrate with PTFE 0.45μm, GCMS(NCI) analysis)

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			001	002		
1	Short Chain Chlorinated Paraffins(SCCPs)	85535-84-8	N.D.	N.D.	100	≤1000

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)	MDL (mg/kg)	Client's Limit (mg/kg)
			003		
1	Short Chain Chlorinated Paraffins(SCCPs)	85535-84-8	N.D.	100	≤1000

10 Middle Chain Chlorinated Paraffins (MCCPs) (5mLTHF ultrasonic30 min at 70°C; shaking for 30 min; then +10mL ACN & ultrasonic 30 min at 70°C; filtrate with PTFE 0.45μm, GCMS(NCI) analysis)

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			001	002		
1	Middle Chain Chlorinated Paraffins(MCCPs)	85535-85-9	N.D.	N.D.	100	≤1000

Test Report

Report No. A2240074319101
Report Issued Date Feb. 27, 2024

Page 14 of 25

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)	MDL (mg/kg)	Client's Limit (mg/kg)
			003		
1	Middle Chain Chlorinated Paraffins(MCCPs)	85535-85-9	N.D.	100	≤1000

11 Alkylphenols and Alkylphenol Ethoxylates (NP,OP: GCMS or LCMS NPEO,OPEO: LCMS)

Tested Item(s)	Test Result (mg/kg)			MDL (mg/kg)	Client's Limit (mg/kg)
	001	002	003		
Nonylphenol(NP)	N.D.	N.D.	N.D.	10	≤10
Octylphenol(OP)	N.D.	N.D.	N.D.	10	≤10
Nonylphenol Ethoxylate(NPEOs)	N.D.	N.D.	N.D.	50	--
Octylphenol Ethoxylate(OPEOs)	N.D.	N.D.	N.D.	50	--
sum of(NP+OP+NPEOs+OPEOs)	N.D.	N.D.	N.D.	--	≤100

12 Organotin compounds (ISO/TS 16179 (2012))

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			001	002		
1	Monobutyltin(MBT)	1118-46-3	N.D.	N.D.	0.05	≤1
2	Monooctyltin(MOT)	3091-25-6	N.D.	N.D.	0.05	≤1
3	Dibutyltin(DBT)	683-18-1	N.D.	N.D.	0.05	≤1
4	Diocetyltn(DOT)	3542-36-7	N.D.	N.D.	0.05	≤1
5	Triocetyltn(TOT)	2587-76-0	N.D.	N.D.	0.05	≤1
6	Tributyltin(TBT)	1461-22-9	N.D.	N.D.	0.05	≤0.5
7	Triphenyltin(TPHT)	639-58-7	N.D.	N.D.	0.05	≤0.5

Test Report

Report No. A2240074319101

Report Issued Date Feb. 27, 2024

Page 15 of 25

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)	MDL (mg/kg)	Client's Limit (mg/kg)
			003		
1	Monobutyltin(MBT)	1118-46-3	N.D.	0.05	≤1
2	Monooctyltin(MOT)	3091-25-6	N.D.	0.05	≤1
3	Dibutyltin(DBT)	683-18-1	N.D.	0.05	≤1
4	Dioctyltin(DOT)	3542-36-7	N.D.	0.05	≤1
5	Trioctyltin(TOT)	2587-76-0	N.D.	0.05	≤1
6	Tributyltin(TBT)	1461-22-9	N.D.	0.05	≤0.5
7	Triphenyltin(TPHT)	639-58-7	N.D.	0.05	≤0.5

Test Report

Report No. A2240074319101 Page 16 of 25
Report Issued Date Feb. 27, 2024

13 Phthalates (CPSC-CH-C1001-09.4(2018))

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	--
2	Butyl benzyl phthalate(BBP)	85-68-7	N.D.	N.D.	30	--
3	Di-(2-ethylhexyl) phthalate(DEHP)	117-81-7	N.D.	N.D.	30	--
4	Di-n-octyl phthalate(DNOP)	117-84-0	N.D.	N.D.	30	--
5	Di-isononyl phthalate(DINP)	28553-12-0, 68515-48-0	N.D.	N.D.	50	--
6	Di-iso-decyl phthalate(DIDP)	26761-40-0, 68515-49-1	N.D.	N.D.	50	--
7	Diethyl phthalate(DEP)	84-66-2	N.D.	N.D.	30	--
8	Diisobutyl phthalate(DIBP)	84-69-5	N.D.	N.D.	30	--
9	Dipentyl phthalate(DPP/DPENP)	131-18-0	N.D.	N.D.	30	--
10	Dicyclohexyl phthalate(DCHP)	84-61-7	N.D.	N.D.	30	--
11	Di-n-hexyl phthalate(DNHP/DHEXP)	84-75-3	N.D.	N.D.	30	--
12	Bis(2-methoxyethyl) phthalate(DMEP)	117-82-8	N.D.	N.D.	30	--
13	Diisopentylphthalate(DIPP)	605-50-5	N.D.	N.D.	30	--
14	1,2-Benzenedicarboxylic acid, di-(C7-11)-branched and linear alkyl esters(DHNUP)	68515-42-4	N.D.	N.D.	50	--
15	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich(DIHP)	71888-89-6	N.D.	N.D.	50	--
16	Di-iso-hexyl-phthalates(DIH xP)	71850-09-4	N.D.	N.D.	30	--
17	sum of Phthalates	--	N.D.	N.D.	--	≤500

Test Report

Report No. A2240074319101 Page 17 of 25
Report Issued Date Feb. 27, 2024

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)	MDL (mg/kg)	Client's Limit (mg/kg)
			003		
1	Dibutyl phthalate(DBP)	84-74-2	N.D.	30	--
2	Butyl benzyl phthalate(BBP)	85-68-7	N.D.	30	--
3	Di-(2-ethylhexyl) phthalate(DEHP)	117-81-7	N.D.	30	--
4	Di-n-octyl phthalate(DNOP)	117-84-0	N.D.	30	--
5	Di-isononyl phthalate(DINP)	28553-12-0, 68515-48-0	N.D.	50	--
6	Di-iso-decyl phthalate(DIDP)	26761-40-0, 68515-49-1	N.D.	50	--
7	Diethyl phthalate(DEP)	84-66-2	N.D.	30	--
8	Diisobutyl phthalate(DIBP)	84-69-5	N.D.	30	--
9	Dipentyl phthalate(DPP/DPENP)	131-18-0	N.D.	30	--
10	Dicyclohexyl phthalate(DCHP)	84-61-7	N.D.	30	--
11	Di-n-hexyl phthalate(DNHP/DHEXP)	84-75-3	N.D.	30	--
12	Bis(2-methoxyethyl) phthalate(DMEP)	117-82-8	N.D.	30	--
13	Diisopentylphthalate(DIPP)	605-50-5	N.D.	30	--
14	1,2-Benzenedicarboxylic acid, di-(C7-11)-branched and linear alkyl esters(DHNUP)	68515-42-4	N.D.	50	--
15	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich(DIHP)	71888-89-6	N.D.	50	--
16	Di-iso-hexyl-phthalates(DIH xP)	71850-09-4	N.D.	30	--
17	sum of Phthalates	--	N.D.	--	≤500

Test Report

Report No. A2240074319101 Page 18 of 25
Report Issued Date Feb. 27, 2024

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/A	0.2	--
2	Phenanthrene	85-01-8	N.D.	N/A	0.2	--
3	Anthracene	120-12-7	N.D.	N/A	0.2	--
4	Fluoranthene	206-44-0	N.D.	N/A	0.2	--
5	Pyrene	129-00-0	N.D.	N/A	0.2	--
6	Chrysene	218-01-9	N.D.	N/A	0.2	≤0.5
7	Benzo(a)anthracene	56-55-3	N.D.	N/A	0.2	≤0.5
8	Benzo(b)fluoranthene	205-99-2	N.D.	N/A	0.2	≤0.5
9	Benzo(k)fluoranthene	207-08-9	N.D.	N/A	0.2	≤0.5
10	Benzo(j)fluoranthene	205-82-3	N.D.	N/A	0.2	≤0.5
11	Benzo(a)pyrene	50-32-8	N.D.	N/A	0.2	≤0.5
12	Benzo(e)pyrene	192-97-2	N.D.	N/A	0.2	≤0.5
13	Dibenzo(a,h)anthracene	53-70-3	N.D.	N/A	0.2	≤0.5
14	Benzo(g,h,i)perylene	191-24-2	N.D.	N/A	0.2	--
15	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	N/A	0.2	--
16	Acenaphthene	83-32-9	N.D.	N/A	0.2	--
17	Fluorene	86-73-7	N.D.	N/A	0.2	--
18	Acenaphthylene	208-96-8	N.D.	N/A	0.2	--
19	Sum 18 PAHs	--	N.D.	N/A	--	≤10

Test Report

Report No. A2240074319101 Page 19 of 25
Report Issued Date Feb. 27, 2024

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)	MDL (mg/kg)	Client's Limit (mg/kg)
			003		
1	Naphthalene	91-20-3	N/A	0.2	--
2	Phenanthrene	85-01-8	N/A	0.2	--
3	Anthracene	120-12-7	N/A	0.2	--
4	Fluoranthene	206-44-0	N/A	0.2	--
5	Pyrene	129-00-0	N/A	0.2	--
6	Chrysene	218-01-9	N/A	0.2	≤0.5
7	Benzo(a)anthracene	56-55-3	N/A	0.2	≤0.5
8	Benzo(b)fluoranthene	205-99-2	N/A	0.2	≤0.5
9	Benzo(k)fluoranthene	207-08-9	N/A	0.2	≤0.5
10	Benzo(j)fluoranthene	205-82-3	N/A	0.2	≤0.5
11	Benzo(a)pyrene	50-32-8	N/A	0.2	≤0.5
12	Benzo(e)pyrene	192-97-2	N/A	0.2	≤0.5
13	Dibenzo(a,h)anthracene	53-70-3	N/A	0.2	≤0.5
14	Benzo(g,h,i)perylene	191-24-2	N/A	0.2	--
15	Indeno(1,2,3-cd)pyrene	193-39-5	N/A	0.2	--
16	Acenaphthene	83-32-9	N/A	0.2	--
17	Fluorene	86-73-7	N/A	0.2	--
18	Acenaphthylene	208-96-8	N/A	0.2	--
19	Sum 18 PAHs	--	N/A	--	≤10

Test Report

Report No. A2240074319101 Page 20 of 25
Report Issued Date Feb. 27, 2024

15 Volatile Organic Compounds (VOC) (Solvent Extraction, Analysis by GCMS)

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	N.D.	N.D.	10	≤1000
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	o-Cresol	95-48-7	N.D.	N.D.	10	--
7	m-Cresol	108-39-4	N.D.	N.D.	10	--
8	p-Cresol	106-44-5	N.D.	N.D.	10	--
9	Dichloromethane	75-09-2	N.D.	N.D.	10	≤1000
10	Trichloromethane	67-66-3	N.D.	N.D.	10	≤1000
11	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	N.D.	10	≤1000
12	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	N.D.	10	≤1000
13	Trichloroethylene	79-01-6	N.D.	N.D.	10	≤1000
14	Tetrachloroethylene	127-18-4	N.D.	N.D.	10	≤1000
15	Cyclohexane	110-82-7	N.D.	N.D.	10	≤1000
16	Tetrahydrofuran	109-99-9	N.D.	N.D.	10	≤1000
17	Cyclohexanone	108-94-1	48	41	10	≤1000
18	n-Propylbenzene	103-65-1	N.D.	N.D.	50	≤1000
19	Isopropylbenzene	98-82-8	N.D.	N.D.	50	≤1000
20	n-Butylbenzene	104-51-8	N.D.	N.D.	50	≤1000
21	Tert-butylbenzene	98-06-6	N.D.	N.D.	50	≤1000
22	Isobutylbenzene	538-93-2	N.D.	N.D.	50	≤1000
23	Sec-butylbenzene	135-98-8	N.D.	N.D.	50	≤1000
24	Dimethylbenzene/Xylene(meta-,ortho-,para-)	--	N.D.	N.D.	--	≤1000
25	Methylphenol/Cresol(meta-,ortho-,para-)	--	N.D.	N.D.	--	≤1000

Test Report

Report No. A2240074319101
Report Issued Date Feb. 27, 2024

Page 21 of 25

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)	MDL (mg/kg)	Client's Limit (mg/kg)
			003		
1	Benzene	71-43-2	N.D.	1	≤5
2	Toluene	108-88-3	N.D.	10	≤1000
3	o-Xylene	95-47-6	N.D.	10	--
4	m-Xylene	108-38-3	N.D.	10	--
5	p-Xylene	106-42-3	N.D.	10	--
6	o-Cresol	95-48-7	N.D.	10	--
7	m-Cresol	108-39-4	N.D.	10	--
8	p-Cresol	106-44-5	N.D.	10	--
9	Dichloromethane	75-09-2	N.D.	10	≤1000
10	Trichloromethane	67-66-3	N.D.	10	≤1000
11	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	10	≤1000
12	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	10	≤1000
13	Trichloroethylene	79-01-6	N.D.	10	≤1000
14	Tetrachloroethylene	127-18-4	N.D.	10	≤1000
15	Cyclohexane	110-82-7	N.D.	10	≤1000
16	Tetrahydrofuran	109-99-9	N.D.	10	≤1000
17	Cyclohexanone	108-94-1	42	10	≤1000
18	n-Propylbenzene	103-65-1	N.D.	50	≤1000
19	Isopropylbenzene	98-82-8	N.D.	50	≤1000
20	n-Butylbenzene	104-51-8	N.D.	50	≤1000
21	Tert-butylbenzene	98-06-6	N.D.	50	≤1000
22	Isobutylbenzene	538-93-2	N.D.	50	≤1000
23	Sec-butylbenzene	135-98-8	N.D.	50	≤1000
24	Dimethylbenzene/Xylene(meta-,ortho-,para-)	--	N.D.	--	≤1000
25	Methylphenol/Cresol(meta-,ortho-,para-)	--	N.D.	--	≤1000

16 N,N-dimethylformamide (Solvent Extraction - DIN EN 16778 (2016))

Tested Item(s)	Test Result (mg/kg)			MDL (mg/kg)	Client's Limit (mg/kg)
	001	002	003		
N,N-dimethylformamide	N.D.	N.D.	N.D.	5	≤500

Test Report

Report No. A2240074319101 Page 22 of 25
Report Issued Date Feb. 27, 2024

17 Solvents/Residuals (DIN CEN ISO/TS 16189:2013)

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			001	002		
1	N,N-dimethylacetamide (DMAC)	127-19-5	N.D.	N.D.	50	≤1000
2	N-Methyl pyrrolidone(NMP)	872-50-4	N.D.	N.D.	50	≤1000

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)	MDL (mg/kg)	Client's Limit (mg/kg)
			003		
1	N,N-dimethylacetamide (DMAC)	127-19-5	N.D.	50	≤1000
2	N-Methyl pyrrolidone(NMP)	872-50-4	N.D.	50	≤1000

Test Report

Report No. A2240074319101 Page 23 of 25
Report Issued Date Feb. 27, 2024

18 Azo Dyes (DIN EN ISO 14362-1:2017& DIN 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-diaminoaniso	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'-dimethoxybenzidine	119-90-4	N.D.	N.D.	5	≤20
11	3,3'-dimethylbenzidine	119-93-7	N.D.	N.D.	5	≤20
12	3,3'-dichlorobenzidine	91-94-1	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	2,4-xylidine	95-68-1	N.D.	N.D.	5	≤20
19	o-Toluidine	95-53-4	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-diaminotoluene	95-80-7	N.D.	N.D.	5	≤20
24	2,6-xylidine	87-62-7	N.D.	N.D.	5	≤20
25	4-chloro-o-toluidinium chloride	3165-93-3	N.D.	N.D.	5	≤20
26	2-Naphthylammoniumacetate	553-00-4	N.D.	N.D.	5	≤20
27	2,4-diaminoaniso	39156-41-7	N.D.	N.D.	5	≤20
28	2,4,5-trimethylaniline hydrochloride	21436-97-5	N.D.	N.D.	5	≤20

Test Report

Report No. A2240074319101
Report Issued Date Feb. 27, 2024

Page 24 of 25

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

Test Report

Report No. A2240074319101 Page 25 of 25
Report Issued Date Feb. 27, 2024

19 Quinoline (GC/MS or LC/MS)

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)		MDL (mg/kg)	Client's Limit (mg/kg)
			001	002		
1	Quinoline	91-22-5	N.D.	N.D.	10	≤50

Code	Tested Item(s)	CAS No.	Test Result (mg/kg)	MDL (mg/kg)	Client's Limit (mg/kg)
			003		
1	Quinoline	91-22-5	N.D.	10	≤50

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

Tested Sample/Part Description

No.	CTI Sample ID	Description
1	001	Black dry ink
2	002	Light onix dry ink
3	003	Dark onix dry ink

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 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;

*** End of Report ***