



Test Report: (9323)052-0162

Report Date: March 6, 2023

Factory Company Name: Foshan Lisheng Textile Company Ltd

Factory Address: Dalang Nanbian, Shaying Baidong, Xiqiao Technical Industrial Part, Nanhai, Foshan City, Guangdong Province, China

Sampling Method & Description:	I001) Untreated wastewater	Composite	Black liquid
	I002) Effluent	-	Not tested
	I003) Sludge	-	Not tested
	I004) Leachate	-	Not tested

Discharge Type: **Indirect Discharge without Pretreatment**

On-site ETP / Pretreatment: No Homogenization Tank & Holding Time: Yes, more than 12 hours

Discharge Destination: Foshanshi Nanhaiqu Xinlong Wushui Chulichang

Permit Validation Date: Dec 23, 2020 to Dec 22, 2025

Conventional, Anions & Heavy Metals Overall Category: Not applicable ZDHC MRSL Parameters: Detected

Sludge Parameters: Not applicable

Sample Pick Up Date: February 22, 2023 Sampler Certification Number: C74D106817272

Test Period: February 22, 2023 to March 03, 2023

Parameter(s) exceeded maximum holding time: Not exceed

Remark

The results of this report shall not be used for any regulatory compliance purposes.

Type of Process:	Textile	Average total industrial wastewater generated:	Equal or more than 15m³/day
Sludge Disposal Pathway:	Not applicable		
Type of Sludge:	Not applicable		

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Report reviewed by:

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Senior Manager

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Report Date: March 6, 2023

Result Summary - ZDHC MRS� Wastewater Parameters

Test Items	Untreated wastewater	Effluent
1A) AP and APEOs	ND	NR
1B) Anti-Microbials & Biocides	ND	
1C) Chlorinated Parafins	ND	
1D) Chlorobenzenes and Chlorotoluenes	ND	
1E) Chlorophenols	ND	
1F) DMFa	ND	
1G) Dyes - Carcinogenic or Equivalent Concern	ND	
1H) Dyes - Disperse (Sensitising)	ND	
1I) Dyes - Navy Blue Colourant	ND	
1J) Flame Retardants	ND	
1K) Glycols / Glycol Ethers	ND	
1L) Halogenated Solvents	ND	
1M) Organotin Compounds	ND	
1N) Other / Miscellaneous Chemicals	D	
1O) PFCs	ND	
1P) Phthalates	ND	
1Q) PAHs	ND	
1R) Restricted Aromatic Amines	ND	
1S) UV Absorbers	ND	
1T) VOC	ND	



Test Report: (9323)052-0162

Report Date: March 6, 2023

Result Summary - ZDHC Heavy Metals, Conventional and Anions Wastewater Parameters

Test Items	Untreated wastewater	Effluent
Antimony	NR	NR
Chromium (VI)	Refer to result	
Barium	NR	
Selenium	NR	
Tin	NR	
Arsenic	Refer to result	
Total Chromium	NR	
Cobalt	NR	
Cadmium	Refer to result	
Copper	NR	
Lead	Refer to result	
Nickel	NR	
Silver	NR	
Zinc	NR	
Mercury	Refer to result	
pH	NR	
Temperature difference	NR	
E.coli	NR	
Colour	NR	
Persistent Foam	NR	
Wastewater Flowrate	NR	
Ammonium-Nitrogen	NR	
AOX	NR	
BOD ₅	NR	
COD	NR	
DO	NR	
Oil & Grease	NR	
Total Phenols / Phenol Index	NR	
Total Chlorine	NR	
TDS	NR	
Total Nitrogen	NR	
Total Phosphorus	NR	
TSS	NR	
Chloride	NR	
Cyanide, total	NR	
Sulfate	NR	
Sulfide	NR	
Sulfite	NR	



Test Report: (9323)052-0162

Report Date: March 6, 2023

Result Summary - ZDHC Sludge Parameters

Test Items	Sludge	Leachate
Antimony	NR	NR
Arsenic		NR
Barium		NR
Cadmium		NR
Coblat		NR
Copper		NR
Lead		NR
Nickel		NR
Selenium		NR
Silver		NR
Total Chromium		NR
Zinc		NR
Chromium (VI)		NR
Mercury		NR
Cyanide		NR
pH		
% Solids		
Paint Filter Test		
Fecal Coliform		
AP and APEOs		
PAHs		
Chlorotoluenes		

Note / Key:

- Meet = Meet Foundational Limit / Meet Discharge Permit
- Not Meet** = Exceed Foundational Limit / Exceed Discharge Permit
- NR = Not requested / Not required
- NA = Not applicable
- D** = Detected
- ND = Not detected
- Refer to result = Legal parameter(s) and/or parameter(s) requested by factory, please refer to test result



Test Report: (9323)052-0162

Report Date: March 6, 2023

Test Result - ZDHC MRSL Parameters

Test Parameters	Results of Test Items				Requirements [Textile]		
	I001 (µg/L)	I002 (µg/L)	I003 (mg/kg)	I004 (mg/L)	Wastewater (µg/L)	Sludge (mg/kg)	Leachate [#] (mg/L)
1A) AP and APEOs: including all isomers							
NPEO	ND	NR	NR	NR	5	0.4 ^e	Please refer to leachate limits in the ZDHC Wastewater Guidelines
NP, mixed isomers	ND						
OPEO	ND						
OP, mixed isomers	ND						
1B) Anti-Microbials & Biocides							
o-Phenylphenol (+salts)	ND	NR	NR	NR	100	-	-
Triclosan	ND						
Permethrin	ND				500		
1C) Chlorinated Parafins							
MCCPs (C14-C17)	ND	NR	NR	NR	500	-	-
SCCPs (C10-C13)	ND				25		
1D) Chlorobenzenes and Chlorotoluenes							
1,2-dichlorobenzene	ND	NR	NR	NR	0.2	-	-
Other isomers of mono-, di-, tri-, tetra-, penta- and hexa- chlorobenzene	ND						
Other isomers of mono-, di-, tri-, tetra- and penta- chlorotoluene	ND						
1E) Chlorophenols							
2-chlorophenol	ND	NR	NR	NR	0.5	-	-
3-chlorophenol	ND						
4-chlorophenol	ND						
2,3-dichlorophenol	ND						
2,4-dichlorophenol	ND						
2,5-dichlorophenol	ND						
2,6-dichlorophenol	ND						
3,4-dichlorophenol	ND						
3,5-dichlorophenol	ND						
2,3,4-trichlorophenol	ND						
2,3,5-trichlorophenol	ND						
2,3,6-trichlorophenol	ND						
2,4,5-trichlorophenol	ND						
2,4,6-trichlorophenol	ND						
3,4,5-trichlorophenol	ND						
2,3,5,6-tetrachlorophenol	ND						
2,3,4,6-tetrachlorophenol	ND						
2,3,4,5-tetrachlorophenol	ND						
Pentachlorophenol (PCP)	ND						
1F) N,N-di-methylformamide (DMFa)							
Dimethyl formamide; N,N-dimethylformamide (DMFa) ^a	ND	NR	NR	NR	1000	-	-

a = Report only for mock leather

e = Sludge parameter limit refers Table 4C and 4D in the ZDHC Wastewater Guidelines.



Test Report: (9323)052-0162

Report Date: March 6, 2023

Test Result - ZDHC MRSL Parameters (continued)

Test Parameters	Results of Test Items				Requirements [Textile]		
	I001 (µg/L)	I002 (µg/L)	I003 (mg/kg)	I004 (mg/L)	Wastewater (µg/L)	Sludge (mg/kg)	Leachate [#] (mg/L)
1G) Dyes - Carcinogenic or Equivalent Concern							
Basic violet 3 with >0.1% of Michler's Ketone	ND						
C.I. Acid Red 26	ND						
C.I. Acid Violet 49	ND						
C.I. Basic Blue 26 (with Michler's Ketone >0/1%)	ND						
C.I. Basic Green 4 (Malachite Green Chloride)	ND						
C.I. Basic Green 4 (Malachite Green Oxalate)	ND						
C.I. Basic Green 4 (Malachite Green)	ND						
C.I. Basic Red 9	ND	NR	NR	NR	500	-	-
C.I. Basic Violet 14	ND						
C.I. Direct Black 38	ND						
C.I. Direct Blue 6	ND						
C.I. Direct Red 28	ND						
C.I. Disperse Blue 1	ND						
C.I. Disperse Blue 3	ND						
Disperse Orange 11	ND						
1H) Dyes - Disperse (Allergenic)							
Disperse Blue 102	ND						
Disperse Blue 106	ND						
Disperse Blue 124	ND						
Disperse Blue 26	ND						
Disperse Blue 35 (CAS 12222-75-2)	ND						
Disperse Blue 35 (CAS 56524-77-7)	ND						
Disperse Blue 7	ND						
Disperse Brown 1	ND						
Disperse Orange 1	ND						
Disperse Orange 3	ND	NR	NR	NR	50	-	-
Disperse Orange 37/59/76	ND						
Disperse Red 1	ND						
Disperse Red 11	ND						
Disperse Red 17	ND						
Disperse Yellow 1	ND						
Disperse Yellow 3	ND						
Disperse Yellow 39	ND						
Disperse Yellow 49	ND						
Disperse Yellow 9	ND						
1I) Dyes - Navy Blue Colourant							
Component 1: C39H23Cl-CrN7O12S 2Na	ND						
Component 2: C46H-30CrN10O20S2 3Na	ND	NR	NR	NR	500	-	-



Test Report: (9323)052-0162

Report Date: March 6, 2023

Test Result - ZDHC MRSL Parameters (continued)

Test Parameters	Results of Test Items				Requirements [Textile]		
	I001 (µg/L)	I002 (µg/L)	I003 (mg/kg)	I004 (mg/L)	Wastewater (µg/L)	Sludge (mg/kg)	Leachate [#] (mg/L)
1J) Flame Retardants							
2,2-bis(bromomethyl)-1,3-propanediol (BBMP)	ND						
Dis(2,3-dibromopropyl) phosphate (BIS)	ND						
Decabromophenyl ether (DecaBDE)	ND						
Hexabromocyclodecane (HBCDD)	ND						
Octabromodiphenyl ether (OctaBDE)	ND						
Pentabromodiphenyl ether (PentaBDE)	ND						
Polybromobiphenyls (PBB)	ND						
Tetrabromobisphenol A (TBBPA)	ND						
Tris-(2-chloro-1-methylethyl) phosphate (TCPP)	ND						
Tris(1-aziridinyl)phosphone oxide (TEPA)	ND						
Tris(1,3-dichloro-isopropyl) phosphate (TDCP)	ND						
Tris(2-chloroethyl) phosphate (TCEP)	ND						
Tris(2,3-dibromopropyl) phosphate (TRIS)	ND				25		
Decabromobiphenyl (DecaBB)	ND						
Dibromobiphenyls (DiBB)	ND	NR	NR	NR		-	-
Octabromobiphenyls (OctaBB)	ND						
Dibromopropylether	ND						
Heptabromodiphenyl ether (HeptaBDE)	ND						
Hexabromodiphenyl ether (HexaBDE)	ND						
Monobromobiphenyls (MonoBB)	ND						
Monobromodiphenylethers (MonoBDEs)	ND						
Nonabromobiphenyls (NonaBB)	ND						
Nonabromodiphenyl ether (NonaBDE)	ND						
Tetrabromodiphenyl ether (TetraBDE)	ND						
Tribromophenylethers (TriBDEs)	ND						
Boric acid ^b	ND						
Diboron trioxide ^b	ND						
Disodium octaborate ^b	ND				100		
Disodium tetraborate anhydrous ^b	ND						
Tetraboron disodium heptaoxide, hydrate ^b	ND						
1K) Glycols / Glycol Ethers							
2-ethoxyethanol	ND						
2-ethoxyethyl acetate	ND						
2-methoxyethanol	ND						
2-methoxyethylacetate	ND	NR	NR	NR	50	-	-
2-methoxypropylacetate	ND						
Bis(2-methoxyethyl)-ether	ND						
Ethylene glycol dimethyl ether	ND						
Triethylene glycol dimethyl ether	ND						
1L) Halogenated Solvents							
1,2-dichloroethane	ND						
Methylene chloride	ND	NR	NR	NR	1	-	-
Tetrachloroethylene	ND						
Trichloroethylene	ND						

b = Limit refers to elemental boron, not the salt.



Test Report: (9323)052-0162

Report Date: March 6, 2023

Test Result - ZDHC MRSL Parameters (continued)

Test Parameters	Results of Test Items				Requirements [Textile]		
	I001 (µg/L)	I002 (µg/L)	I003 (mg/kg)	I004 (mg/L)	Wastewater (µg/L)	Sludge (mg/kg)	Leachate [#] (mg/L)
1M) Organotin Compounds							
Dipropyltin compounds (DPT)	ND	NR	NR	NR	0.01	-	-
Mono, di-, and tri-butyltin derivatives	ND						
Mono, di-, and tri-methyltin derivatives	ND						
Mono, di-, and tri-octyltin derivatives	ND						
Mono, di-, and tri-phenyltin derivatives	ND						
Tetraethyltin compounds (TeBT)	ND						
Tripropyltin compounds (TPT)	ND						
Tetraoctyltin compounds (TeOT)	ND						
Tricyclohexyltin (TCyHT)	ND						
Tetraethyltin compounds (TeET)	ND						
1N) Other / Miscellaneous Chemicals							
AEEA [2-(2-aminoethylamino)ethanol]	ND	NR	NR	NR	500	-	-
Bisphenol A	ND				10		
Thiourea	255000				50		
Quinoline	ND				100		
Borate, zinc salt ^c	ND						
Silica (used in sand blasting) ^d	NR				Not a ZDHC wastewater parameter		
1O) Perfluorinated and Polyfluorinated Chemicals (PFCs)							
Perfluorooctane sulfonate (PFOS) and related substances, Perfluorooctanoic acid (PFOA)	ND	NR	NR	NR	0.01	-	-
Perfluorooctanoic acid (PFOA) related substances	ND				1		
1P) Phthalates - including all other esters of ortho-phthalic acid							
1,2-benzenedicarboxylic acid, di-C6-8 branched and linear alkyl esters, C7-rich (DIHP)	ND	NR	NR	NR	10	-	-
1,2-benzenedicarboxylic acid, di-C7-11 branched and linear alkyl esters (DHNUP)	ND						
Bis(2-methoxyethyl)phthalate (DMEP)	ND						
Butyl benzyl phthalate (BBP)	ND						
Di-cyclohexyl phthalate (DCHP)	ND						
Di-iso-decyl phthalate (DIDP)	ND						
Di-iso-octyl phthalate (DIOP)	ND						
Di-iso-butyl phthalate (DIBP)	ND						
Di-iso-nonyl phthalate (DINP)	ND						
Di-n-hexyl phthalate (DnHP)	ND						
Di-n-octyl phthalate (DNOP)	ND						
Di-n-pentylphthalates	ND						
Di-n-propyl phthalate (DPRP)	ND						
Di(ethylhexyl) phthalate (DEHP)	ND						
Dibutyl phthalate (DBP)	ND						
Diethyl phthalate (DEP)	ND						
Diisopentylphthalates	ND						
Dinonyl phthalate (DNP)	ND						

c = Limit refers to elemental boron and/or zinc, not the salt.

d = Not a ZDHC wastewater parameter, and not required to test this parameter as this is related to sand blasting



Test Report: (9323)052-0162

Report Date: March 6, 2023

Test Result - ZDHC MRSL Parameters (continued)

Test Parameters	Results of Test Items				Requirements [Textile]		
	I001	I002	I003	I004	Wastewater	Sludge	Leachate [#]
	(µg/L)	(µg/L)	(mg/kg)	(mg/L)	(µg/L)	(mg/kg)	(mg/L)
1Q) Polycyclic Aromatic Hydrocarbons (PAHs)							
Acenaphthene	ND	NR	NR	NR	1	0.2 ^e	Please refer to leachate limits in the ZDHC Wastewater Guidelines
Acenaphthylene	ND						
Anthracene	ND						
Benzo[a]anthracene	ND						
Benzo[a]pyrene (BaP)	ND						
Benzo[b]fluoranthene	ND						
Benzo[e]pyrene	ND						
Benzo[ghi]perylene	ND						
Benzo[j]fluoranthene	ND						
Benzo[k]fluoranthene	ND						
Chrysene	ND						
Dibenz[a,h]anthracene	ND						
Fluoranthene	ND						
Fluorene	ND						
Indeno[1,2,3-cd]pyrene	ND						
Naphthalene	ND						
Phenanthrene	ND						
Pyrene	ND						
1R) Restricted Aromatic Amines (Cleavable from Azo-colourants)							
2-naphthylamine	ND	NR	NR	NR	0.1	-	-
2-naphthylammoniumacetate	ND						
2,4-xylidine	ND						
2,4,5-trimethylaniline	ND						
2,4,5-trimethylaniline hydrochloride	ND						
2,6-xylidine	ND						
3,3'-dichlorobenzidine	ND						
3,3-dimethoxybenzidine	ND						
3,3-dimethylbenzidine	ND						
4-aminoazobenzene	ND						
4-aminodiphenyl	ND						
4-chloro-o-toluidine	ND						
4-chloro-o-toluidinium chloride	ND						
4-chloroaniline	ND						
4-methoxy-m-phenylene diammonium sulphate; 2,4-diaminoanisole sulphate	ND						
4-methoxy-m-phenylenediamine	ND						
4-methyl-m-phenylenediamine	ND						
4,4-methylene-bis-(2-chloro-aniline)	ND						
4,4-methylenedi-o-toluidine	ND						
4,4-methylenedianiline	ND						
4,4-oxydianiline	ND						
4,4-thiodianiline	ND						
5-nitro-o-toluidine	ND						
6-methoxy-m-toluidine	ND						
Benzidine	ND						
o-aminoazotoluene	ND						
o-anisidine	ND						
o-toluidine	ND						

e = Sludge parameter limit refers Table 4C and 4D in the ZDHC Wastewater Guidelines.



Test Report: (9323)052-0162

Report Date: March 6, 2023

Test Result - ZDHC MRSL Parameters (continued)

Test Parameters	Results of Test Items				Requirements [Textile]		
	I001 (µg/L)	I002 (µg/L)	I003 (mg/kg)	I004 (mg/L)	Wastewater (µg/L)	Sludge (mg/kg)	Leachate [#] (mg/L)
1S) UV Absorbers							
2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl) phenol (UV-350)	ND						
2-(2H-benzotriazol-2-yl)-4,6- ditertpentylphenol (UV-328)	ND	NR	NR	NR	100	-	-
2-benzotriazol-2-yl-4,6-di-tert- butylphenol (UV-320)	ND						
2,4-Di-tert-butyl-6-(5- chlorobenzotriazole-2-yl) phenol (UV-327)	ND						
1T) Volatile Organic Compounds (VOC)							
Benzene	ND	NR	NR	NR	1	-	-
m-cresol	ND						
o-cresol	ND						
p-cresol	ND						
Xylene	ND						
Toluene ^a	ND						

a = Report only for mock leather



Test Report: (9323)052-0162

Report Date: March 6, 2023

Test Result - ZDHC Heavy Metals Parameters

Test Parameters	Unit			Results of Test Items				Requirements [Textile]		
	Wastewater	Sludge	Leachate	I001	I002	I003	I004	Wastewater	Sludge	
								Discharge Criteria	Sludge Threshold Values	Leachate Limit#
ZDHC Heavy Metals										
Antimony	mg/L	mg/kg	mg/L	NR	NR	NR	NR	-	12	Please refer to leachate limits in the ZDHC Wastewater Guidelines
Chromium (VI)	mg/L	mg/kg	mg/L	ND				Not applicable	50	
Barium	mg/L	mg/kg	mg/L	NR				-	700	
Selenium	mg/L	mg/kg	mg/L	NR				-	10	
Tin	mg/L	-	-	NR				-	-	
Arsenic	mg/L	mg/kg	mg/L	ND				Not applicable	10	
Total Chromium	mg/L	mg/kg	mg/L	NR				-	100	
Cobalt	mg/L	mg/kg	mg/L	NR				-	1600	
Cadmium	mg/L	mg/kg	mg/L	ND				Not applicable	3	
Copper	mg/L	mg/kg	mg/L	NR				-	200	
Lead	mg/L	mg/kg	mg/L	ND				Not applicable	10	
Nickel	mg/L	mg/kg	mg/L	NR				-	70	
Silver	mg/L	mg/kg	mg/L	NR				-	100	
Zinc	mg/L	mg/kg	mg/L	NR				-	1000	
Mercury	mg/L	mg/kg	mg/L	ND				Not applicable	1	

#Limit refers to Table 4B to 4D in the ZDHC Wastewater Guidelines.



BUREAU VERITAS refer to leachate limits mentioned in the ZDHC Wastewater Guidelines.

Report Date: March 6, 2023

Test Result - ZDHC Conventional and Anions Parameters

Test Parameters	Unit			Results of Test Items				Requirements [Textile]		
	Wastewater	Sludge	Leachate	I001	I002	I003	I004	Wastewater	Sludge	
								Discharge Criteria	Sludge Threshold Values	Leachate Limit [#]
ZDHC Conventional										
pH ^e	pH									
Temparture difference	Δ °C									
E.coli	MPN/100-ml									
Colour (436 nm)	m ⁻¹									
Colour (525 nm)	m ⁻¹									
Colour (620 nm)	m ⁻¹									
Persistent Foam	-									
Wastewater Flowrate	m ³ /day									
Ammonium-Nitrogen	mg/L									
AOX	mg/L									
BOD ₅	mg/L	-								
COD	mg/L									
DO	mg/L			NR	NR	NR	NR	-	-	-
Oil & Grease	mg/L									
Total Phenols / Phenol Index	mg/L									
Total Chlorine	mg/L									
TDS	mg/L									
Total Nitrogen	mg/L									
Total Phosphorus	mg/L									
TSS	mg/L									
% Solids ^e	-	%								
Paint Filter Test ^e	-	-								
Fecal Coliform ^e	-	-								
ZDHC Anions										
Chloride	mg/L	-	-							
Cyanide, total ^e	mg/L	mg/kg	-							
Sulfate	mg/L			NR	NR	NR	NR	-	-	-
Sulfide	mg/L	-	-							
Sulfite	mg/L									

e = Sludge parameter limit refers Table 4C and 4D in the ZDHC Wastewater Guidelines.

#Limit refers to Table 4B to 4D in the ZDHC Wastewater Guidelines.



Test Report: (9323)052-0162

Report Date: March 6, 2023

Appendix A - Discharge limit according to regulation / contract limit with CETP**(二) 排放许可限值**

表 8 废水污染物排放

序号	排放口编号	排放口名称	污染物种类	许可排放浓度限值	许可年排放量限值 (t/a)				
					第一年	第二年	第三年	第四年	第五年
主要排放口									
1	DW002	污水排放口	苯胺类	1.0mg/L	/	/	/	/	/

9

序号	排放口编号	排放口名称	污染物种类	许可排放浓度限值	许可年排放量限值 (t/a)				
					第一年	第二年	第三年	第四年	第五年
2	DW002	污水排放口	pH 值	6-9	/	/	/	/	/
3	DW002	污水排放口	二氧化氯	0.5mg/L	/	/	/	/	/
4	DW002	污水排放口	总磷 (以 P 计)	1.5mg/L	/	/	/	/	/
5	DW002	污水排放口	色度	80	/	/	/	/	/
6	DW002	污水排放口	悬浮物	100mg/L	/	/	/	/	/
7	DW002	污水排放口	氨氮 (NH ₃ -N)	20mg/L	/	/	/	/	/
8	DW002	污水排放口	硫化物	0.5mg/L	/	/	/	/	/
9	DW002	污水排放口	五日生化需氧量	150mg/L	/	/	/	/	/
10	DW002	污水排放口	总氮 (以 N 计)	30mg/L	/	/	/	/	/
11	DW002	污水排放口	化学需氧量	500mg/L	/	/	/	/	/
主要排放口合计		CODcr		/	/	/	/	/	/
		氨氮		/	/	/	/	/	/
一般排放口									
一般排放口合计		CODcr		/	/	/	/	/	/

10



Test Report: (9323)052-0162

Report Date: March 6, 2023

Appendix B - Sample Photos

I001) Sampling point
N 22o 57' 24", E 112o 55' 44"



I001) Sampling location surrounding
N 22o 57' 24", E 112o 55' 44"



I001) Labelled sample bottles



I001) Sample for phthalate test



I001) Sample packaging



I002) Sampling point
<Geolocation>

Not tested

I002) Sampling location surrounding
<Geolocation>

Not tested

I002) Labelled sample bottles

Not tested

I002) pH measurement

Not tested

I002) Sample packaging

Not tested



Test Report: (9323)052-0162

Report Date: March 6, 2023

Appendix B - Sample Photos (continued)

I003) Sampling point <Geolocation>	I003) Sampling location surrounding <Geolocation>	I003) Labelled sample bottles
Not tested	Not tested	Not tested

I003) Sample packaging

Not tested



Test Report: (9323)052-0162
 Report Date: March 6, 2023

Appendix C - On-site Field Data Record Sheet

	FIELD DATA RECORD ON ZERO DISCHARGE SAMPLE (COMPOSITE / INDIVIDUAL SAMPLING)	CPSD-AN-00613-DATA 04 Issue Date: _____ Version No.: 17 Business Line: Analytical
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General Data

Laboratory Sample Number: _____

Client Name: 佛山帝之信纺织有限公司

Field Contact Person: _____

Project (Facility Name and Address): 佛山帝之信纺织有限公司

Sampling Location / Descriptor: 污水处理 废水处理

Sample Identification: Zero discharge with sampling plan

Sample Type: Composite Sample / Grab sample (Please delete as appropriate)

Name of Sampler: Kevin Ng

Discharge mode: Direct discharge to environment (Specify destination: River, Sea, Stream...) OR indirect discharge to sewage treatment plant

Date of collection: 21/03/23

Factory Type: Textile / Printing / Washing / Finishing / Others (please specify): To: 佛山市南海区九江镇沙头角工业区

Field Data for Wastewater

Arrival Time: _____ Departure Time: _____

Field Parameters: pH: _____ Temp: _____ °C Color: Black Flow rate: (vol/time) _____

Control No. of field equipment: _____

Factory with effluent treatment plant: Yes No

Sample matrix: Incoming water (if required) Wastewater before treatment Wastewater after treatment - water at discharge point

Sampler container number: 2001

Recording time	Sampler container number							
	1	2	3	4	5	6	7	8
Time	10:45	11:20	12:00	12:30	13:00	13:30	14:00	14:30
pH	12.15	12.00	12.10	12.10	12.19	12.20	12.17	12.17
Temp (°C)	33.5	30.7	33.5	29.6	30.1	30.9	30.8	30.8
Color (visual estimation)	Black	Black	Black	Black	Black	Black	Black	Black
Flow rate (volume/time)								
Volume collected, mL	3000	3000	3000	3000	3000	3000	3000	3000
Total volume collected	9.5L							

Remark: Total volume collected must be greater than total of sample size required

Analysis Required and Preservation Method

Tests (ZDHC MRSI Parameters)	Test required (Y)	Total of sample size	Type of container	Preservation method
Contained test or individual test (Remark 4) 1. Phthalates 2. Chlorobenzenes, Chlorotoluene & PAH 3. SCCPs 4. APS	✓	1000 mL, 1000 mL or 1000 mL each	生料: N 2005/204 B 2005/0611	Without adding acid Store sample at 2-8°C
	✓			
	✓			
	✓			
5. APEAC	✓	100 mL	Amber Glass, washed with nitric acid.	Without adding acid Store sample at 2-8°C
6. Chlorophenols & Cresols	✓	100 mL		
7. Flame retardant	✓	500 mL		
8. Dyes	✓	10 mL		
9. Glycol	✓	50 mL		
10. *Pesticides		1000 mL		
11. *Nitrosamine		10 mL		
12. Banned Azodyes	✓	2000 mL		
13. *Free primary aromatic amine		500 mL		
14. Organotin Compounds	✓	500 mL		
15. UV-absorbers	✓	100 mL		
16. PAHs	✓	10 mL		
17. Phthalates	✓	50 mL		
18. VOC & Halogenated Solvents (Remark 6)	✓	10 mL		
19. PFCs (Remark 6)	✓	2 mL	PE, washed with pesticide grade Acetone	Without adding acid Store sample at 2-8°C



Test Report: (9323)052-0162

Report Date: March 6, 2023

Appendix C - On-site Field Data Record Sheet (continued)

	FIELD DATA RECORD ON ZERO DISCHARGE SAMPLE (COMPOSITE / INDIVIDUAL SAMPLING)	CPSD-AN-00613-DATA 04
		Issue Date:
		Version No.: 17
		Business Line: Analytical

Tests (Conventional Parameters)	Test required (Y)	Total of sample size	Type of container	Preservation method
Combined test or Individual test (Remark 4) 20. Total suspended solids (TSS) 21. Total dissolved solids (TDS)		2000 mL total or 2000 mL each	Amber Glass, washed with nitric acid.	Without adding acid Store sample at 2-8°C
22. 5-day Biochemical Oxygen Demand (BOD5)		1000 mL		
23. Colour		100 mL		
24. Heavy Metals except Cr(VI) & Total-P (Remark 6)	✓	9 mL	PE, washed with nitric acid	Acidity to pH 2 with HNO ₃ and store at 2-8°C
25. Cyanide		500 mL	Amber Glass, washed with pesticide grade acetone	Adjust pH 12 with 50% NaOH, add 0.06 mL of 10% Na ₂ S ₂ O ₅ , and store sample at 2-8°C
26. Cr(VI)	✓	95 mL		Filter by 0.45µm filter in FALC, fill to full container without air gap, adjust pH to 10.0-11 by adding ammonium buffer. Store sample at 2-8°C
27. Chemical oxygen demand (COD)		150 mL		
28. Phenols		500 mL	Amber Glass, washed with nitric acid	Acidity to pH 2 with H ₂ SO ₄ Store sample at 2-8°C
29. Oil and Grease & Total Hydrocarbon		1000 mL		
30. Formaldehyde		25 mL		Fill to full container without air gap; acidity to pH 2 with H ₂ SO ₄ and store sample at 2-8°C
31. Sulfide (Remark 5)		50 mL	PE, washed with pesticide grade Acetone;	Fill to full container without air gap; add 2 drops of 5M zinc acetate, adjust pH to 8 with 6M NaOH Store sample at 2-8°C
32. E.coli (Remark 6)		125 mL	PE, clean, sterile, non-reactive	Add 0.1 mL of 10% NaOClO ₂ , keep in dark Store sample at 2-8°C
33. Persistent foam		N.A.	Foam higher than 45 cm (visual estimation): Yes / No	
34. Sulfite		100 mL	Amber Glass, washed with pesticide grade acetone	Add 1mL of 2.5% DDTA Store sample at 2-8°C
35. Total-N		100 mL		Acidity to pH 2 with H ₂ SO ₄ Store sample at 2-8°C
36. Ammonium-N		500 mL		
37. Adsorbable organically bound halogens (AOX)		100 mL		Acidity to pH 2 with HNO ₃ and store at 2-8°C
38. Acute aquatic toxicity: Luminescence, Fish Egg, Daphnia, Algae;		1000 mL	Amber Glass/washed with nitric acid;	
39. Sulfate		100 mL		Without adding acid Store sample at 2-8°C
40. Chloride		100 mL		
41. Copper		100 mL		
42. Arsenic		100 mL		
43. Cadmium		100 mL		
44. Others:				

Remarks:

- Individual sampling can be performed upon request.
- The minimum sampling time for 2019 ZDHC guideline is 6 hours with no more than one hour between discrete samples. Sampling time could be adjusted upon request.
- Some of the parameters are not included in the ZDHC guideline, they are tested upon request.
- Free primary aromatic amine, pesticides, nitrosamine and formaldehyde are not in the scope of ZDHC Guideline, they are tested upon request.
- Refer to CPSD-AN-Q00019-STP01, locations with those CPSD test capability inside TCO matrix can perform the combined test.
- Refer to CPSD-AN-Q00570-MTHD for additional pretreatment of sulfide if only dissolved sulfide is required to be tested.
- Refer to CPSD-AN-Q0015-MTHD for preparation of field blank for specific parameters.

Recorded by: [Signature]
 Comment/Issue/Remark: [Signature]

Date: 22/2/23

Acknowledgement by factory

I hereby confirmed that Bureau Veritas has completed the stated sampling activity at captioned date, time and location. All sample(s) is/are collected in designated container(s) and without any observation in leakage. Sample(s) collected by Bureau Veritas is/are stored in portable freezer / fridge that is maintained in 1-6°C

Signature of Factory Representative: [Signature]
 Full Name: _____

Date: 22-2-23



Test Report: (9323)052-0162

Report Date: March 6, 2023

Appendix C - On-site Field Data Record Sheet (continued)

Not tested



Test Report: (9323)052-0162

Report Date: March 6, 2023

Appendix C - On-site Field Data Record Sheet (continued)

Not tested



Test Report: (9323)052-0162

Report Date: March 6, 2023

Appendix C - On-site Field Data Record Sheet (continued)

Not tested



Test Report: (9323)052-0162

Report Date: March 6, 2023

Appendix D - Test methods, reporting limits and CAS numbers

Test Parameters	Unit		CAS No.	LOQ		Test methods
	Wastewater	Sludge		Wastewater	Sludge	
1A) AP and APEOs: including all isomers						
Nonylphenol ethoxylates (NPEO)	µg/L	mg/kg	9016-45-9, 26027-38-3, 37205-87-1, 68412-54-4, 127087-87-0	5	0.4	NP/OP: ISO 18857-2 (modified dichloromethane extraction) or ASTM D7065 (GC-MS or LC-MS(-MS)), OPEO/NPEO (n>2): ASTM D7742 ISO 18857-2
Nonylphenol (NP), mixed isomers			104-40-5, 11066-49-2, 25154-52-3, 84852-15-3			
Octylphenol ethoxylates (OPEO)			9002-93-1, 9036-19-5, 68987-90-6			
Octylphenol (OP), mixed isomers			140-66-9, 1806-26-4, 27193-28-8			
1B) Anti-Microbials & Biocides						
o-Phenylphenol (+salts)	µg/L	-	90-43-7	100	-	USEPA 8270E Solvent extraction, derivatisation with KOH, acetic anhydride followed by GC-MS BS EN 12673-1999 USEPA 8270E Solvent extraction followed by GC-MS or ISO 14154:2005 and determination by LCMS/LCMSMS
Triclosan			3380-34-5			
Permethrin			Multiple	500		
1C) Chlorinated Paraffins						
Medium-chain chlorinated paraffins (MCCPs) (C14-C17)	µg/L	-	85535-85-9	500	-	EPA 3510 and analyzed by ISO18219-2:2021 Method for MCCP with GC-MS(NCI) or LC-MS/MS EPA 3510 and analyzed by ISO18219-1:2021, ISO 12010:2019 Methods for SCCP with GC-MS(NCI) or LC-MS/MS
Short-chain chlorinated paraffins (SCCPs) (C10-C13)			85535-84-8	25		
1D) Chlorobenzenes and Chlorotoluenes						
1,2-dichlorobenzene	µg/L	-	95-50-1	0.2	-	USEPA 8260D, 8270E, Purge and Trap, Head Space, Dichloromethane extraction followed by GC-MS
Other isomers of mono-, di, tri-, tetra-, penta-, and hexa-chlorobenzene			Multiple			
Other isomers of mono-, di-, tri-, tetra-, and penta- chlorotoluene			mg/kg			
1E) Chlorophenols						
2-chlorophenol	µg/L	-	95-57-8	0.5	-	USEPA 8270E Solvent extraction, derivatisation with KOH, acetic anhydride followed by GC-MS, BS EN 12673-1999 the procedure of solvent extraction and derivatization are included
3-chlorophenol			108-43-0			
4-chlorophenol			106-48-9			
2,3-dichlorophenol			576-24-9			
2,4-dichlorophenol			120-83-2			
2,5-dichlorophenol			583-78-8			
2,6-dichlorophenol			87-65-0			
3,4-dichlorophenol			95-77-2			
3,5-dichlorophenol			591-35-5			
2,3,4-trichlorophenol			15950-66-0			
2,3,5-trichlorophenol			933-78-8			
2,3,6-trichlorophenol			933-75-5			
2,4,5-trichlorophenol			95-95-4			
2,4,6-trichlorophenol			88-06-2			
3,4,5-trichlorophenol			609-19-8			
2,3,5,6-tetrachlorophenol			935-95-5			
2,3,4,6-tetrachlorophenol			58-90-2			
2,3,4,5-tetrachlorophenol	4901-51-3					
Pentachlorophenol (PCP)	87-86-5					
1F) Dimethyl Formamide (DMFa)						
Dimethyl formamide; N,N-dimethylformamide (DMFa) ^a	µg/L	-	68-12-2	1000	-	EPA 8015, EPA 8270E

a = Report only for mock leather



Test Report: (9323)052-0162

Report Date: March 6, 2023

Appendix D - Test methods, reporting limits and CAS numbers (continued)

Test Parameters	Unit		CAS No.	LOQ		Test methods
	Wastewater	Sludge		Wastewater	Sludge	
1G) Dyes - Carcinogenic or Equivalent Concern						
Basic Violet 3 with >0.1% of Michler's Ketone	µg/L	-	548-62-9	500	-	Liquid extraction, LC-MS
C.I. Acid Red 26			3761-53-3			
C.I. Acid Violet 49			1694-09-3			
C.I. Basic Blue 26 (with Michler's Ketone > 0.1%)			2580-56-5			
C.I. Basic Green 4 (Malachite Green Chloride)			569-64-2			
C.I. Basic Green 4 (Malachite Green Oxalate)			2437-29-8			
C.I. Basic Green 4 (Malachite Green)			10309-95-2			
C.I. Basic Red 9			569-61-9			
C.I. Basic Violet 14			632-99-5			
C.I. Direct Black 38			1937-37-7			
C.I. Direct Blue 6			2602-46-2			
C.I. Direct Red 28			573-58-0			
C.I. Disperse Blue 1			2475-45-8			
C.I. Disperse Blue 3			2475-46-9			
Disperse Orange 11			82-28-0			
1H) Dyes - Disperse (Allergenic)						
Disperse Blue 102	µg/L	-	12222-97-8	50	-	Liquid extraction, LC-MS
Disperse Blue 106			12223-01-7			
Disperse Blue 124			61951-51-7			
Disperse Blue 26			3860-63-7			
Disperse Blue 35			12222-75-2			
Disperse Blue 7			56524-77-7			
Disperse Brown 1			3179-90-6			
Disperse Orange 1			23355-64-8			
Disperse Orange 3			2581-69-3			
Disperse Orange 37/59/76			730-40-5			
Disperse Red 1			13301-61-6			
Disperse Red 11			2872-52-8			
Disperse Red 17			2872-48-2			
Disperse Yellow 1			3179-89-3			
Disperse Yellow 3			119-15-3			
Disperse Yellow 39			2832-40-8			
Disperse Yellow 49			12236-29-2			
Disperse Yellow 9			54824-37-2			
			6373-73-5			
1I) Dyes - Navy Blue Colourant						
Component 1: C39H23Cl-CrN7O12S 2Na	µg/L	-	118685-33-9	500	-	Liquid extraction, LC-MS
Component 2: C46H-30CrN10O20S2 3Na			Not Allocated			



Test Report: (9323)052-0162

Report Date: March 6, 2023

Appendix D - Test methods, reporting limits and CAS numbers (continued)

Test Parameters	Unit		CAS No.	LOQ		Test methods
	Wastewater	Sludge		Wastewater	Sludge	
1J) Flame Retardants						
2,2-bis(bromomethyl)- 1,3-propanediol (BBMP)	µg/L	-	3296-90-0	25	-	USEPA 8270E, ISO 22032, USEPA 527 and USEPA 8321B Dichloromethane extraction GC-MS or LC-MS(-MS)
Bis(2,3-dibromopropyl) phosphate (BIS)			5412-25-9			
Decabromodiphenyl ether (DecaBDE)			1163-19-5			
Hexabromocyclodecane (HBCDD)			3194-55-6			
Octabromodiphenyl ether (OctaBDE)			32536-52-0			
Pentabromodiphenyl ether (PentaBDE)			32534-81-9			
Polybromobiphenyls (PBB)			59536-65-1			
Tetrabromobisphenol A (TBBPA)			79-94-7			
Tris-(2-chloro-1-methylethyl)phosphate (TCPP)			13674-84-5			
Tris(1-aziridinyl)phosphine oxide (TEPA)			545-55-1			
Tris(1,3-dichloro-isopropyl)phosphate (TDCP)			13674-87-8			
Tris(2-chloroethyl)phosphate (TCEP)			115-96-8			
Tris(2,3-dibromopropyl)-phosphate (TRIS)			126-72-7			
Decabromobiphenyl (DecaBB)			13654-09-6			
Dibromobiphenyls (DiBB)			Multiple			
Octabromobiphenyls (OctaBB)			Multiple			
Dibromopropylether			21850-44-2			
Heptabromodiphenyl ether (HeptaBDE)			68928-80-3			
Hexabromodiphenyl ether (HexaBDE)			36483-60-0			
Monobromobiphenyls (MonoBB)			Multiple			
Monobromodiphenylethers (MonoBDEs)			Multiple			
Nonabromobiphenyls (NonaBB)			Multiple			
Nonabromodiphenyl ether (NonaBDE)			63936-56-1			
Tetrabromodiphenyl ether (TetraBDE)	40088-47-9					
Tribromodiphenylethers (TriBDEs)	Multiple					
Boric acid ^b			10043-35-3, 11113-50-1	100	-	Determined as total boron via ICP
Diboron trioxide ^b			1303-86-2			
Disodium octaborate ^b			12008-41-2			
Disodium tetraborate anhydrous ^b			1303-96-4, 1330-43-4			
Tetraboron disodium heptaoxide, hydrate ^b			12267-73-1			

b = Limit refer to elemental boron, not the salt.



Test Report: (9323)052-0162

Report Date: March 6, 2023

Appendix D - Test methods, reporting limits and CAS numbers (continued)

Test Parameters	Unit		CAS No.	LOQ		Test methods
	Wastewater	Sludge		Wastewater	Sludge	
1K) Glycols / Glycol Ethers						
2-ethoxyethanol	µg/L	-	110-80-5	50	-	USEPA 8270E Liquid extraction, LC-MS GC-MS
2-ethoxyethyl acetate			111-15-9			
2-methoxyethanol			109-86-4			
2-methoxyethylacetate			110-49-6			
2-methoxypropylacetate			70657-70-4			
Bis(2-methoxyethyl)-ether			111-96-6			
Ethylene glycol dimethyl ether			110-71-4			
Triethylene glycol dimethyl ether			112-49-2			
1L) Halogenated Solvents						
1,2-dichloroethane	µg/L	-	107-06-2	1	-	USEPA 8260D Headspace GC-MS or Purge and trap GC-MS
Methylene chloride			75-09-2			
Tetrachloroethylene			127-18-4			
Trichloroethylene			79-01-6			
1M) Organotin Compounds						
Dipropyltin compounds (DPT)	µg/L	-	Multiple	0.01	-	ISO 17353 Derivatisation with NaB (C2H5)4 GC-MS
Mono-, di- and tri-butyltin derivatives						
Mono-, di- and tri-methyltin derivatives						
Mono-, di- and tri-octyltin derivatives						
Mono-, di- and tri-phenyltin derivatives						
Tetrabutyltin compounds (TeBT)						
Tripropyltin Compounds (TPT)						
Tetraoctyltin compounds (TeOT)						
Tricyclohexyltin (TCyHT)						
Tetraethyltin Compounds (TeET)						
1N) Other/Miscellaneous Chemicals						
AEEA	µg/L	-	111-41-1	500	-	Liquid extraction, LC-MSMS
[2-(2-aminoethylamino)ethanol]			80-05-7	10		
Bisphenol A			62-56-6	50		Liquid extraction, LC-MS
Thiourea			91-22-5	50		
Quinoline			12767-90-7	100		
Borate, zinc salt ^c			14464-46-1	NA		
Silica (Used in sand blasting) ^d					Not a ZDHC Wastewater parameter	
1O) Perfluorinated and Polyfluorinated Chemicals (PFCs)						
Perfluorooctane sulfonate (PFOS) and related substances, Perfluorooctanoic acid (PFOA)	µg/L	-	Multiple	0.01	-	PFCs: EPA 537:2020 FTOH: BS EN 12673-1999, EPA 8270 PFCs: LC-MSMS FTOH: GC-MS Derivatisation with acetic anhydride followed by GC-MS
Perfluorooctanoic acid (PFOA) related substances				1		

c = Limit refers to elemental boron and/or zinc, not the salt.

d = Not required to test this parameter as this is related to sand blasting



Test Report: (9323)052-0162

Report Date: March 6, 2023

Appendix D - Test methods, reporting limits and CAS numbers (continued)

Test Parameters	Unit		CAS No.	LOQ		Test methods
	Wastewater	Sludge		Wastewater	Sludge	
1P) Phthalates - including all other esters of ortho-phthalic acid						
1,2-benzenedicarboxylic acid, di-C6-8 branched and linear alkyl esters, C7-rich (DIHP)	µg/L	-	71888-89-6, 84777-06-0	10	-	USEPA 8270E, ISO 18856 Dichloromethane extraction GC-MS
1,2-benzenedicarboxylic acid, di-C7-11 branched and linear alkyl esters (DHNUP)			68515-42-4, 68515-50-4			
Bis(2-methoxyethyl)phthalate (DMEP)			117-82-8			
Butyl benzyl phthalate (BBP)			85-68-7			
Di-cyclohexyl phthalate (DCHP)			84-61-7			
Di-iso-decyl phthalate (DIDP)			26761-40-0			
Di-iso-octyl phthalate (DIOP)			27554-26-3			
Di-iso-butyl phthalate (DIBP)			84-69-5			
Di-iso-nonyl phthalate (DINP)			28553-12-0			
Di-n-hexyl phthalate (DnHP)			84-75-3			
Di-n-octyl phthalate (DNOP)			117-84-0			
Di-n-pentylphthalates			131-18-0			
Di-n-propyl phthalate (DPRP)			131-16-8			
Di(ethylhexyl) phthalate (DEHP)			117-81-7			
Dibutyl phthalate (DBP)			84-74-2			
Diethyl phthalate (DEP)			84-66-2			
Diisopentylphthalates			605-50-5			
Dinonyl phthalate (DNP)	84-76-4					
1Q) Polycyclic Aromatic Hydrocarbons (PAHs)						
Acenaphthene	µg/L	mg/kg	83-32-9	1	0.2	USEPA 8270E DIN 38407-39 Solvent extraction GC-MS
Acenaphthylene			208-96-8			
Anthracene			120-12-7			
Benzo[a]anthracene			56-55-3			
Benzo[a]pyrene (BaP)			50-32-8			
Benzo[b]fluoranthene			205-99-2			
Benzo[e]pyrene			192-97-2			
Benzo[ghi]perylene			191-24-2			
Benzo[j]fluoranthene			205-82-3			
Benzo[k]fluoranthene			207-08-9			
Chrysene			218-01-9			
Dibenz[a,h]anthracene			53-70-3			
Fluoranthene			206-44-0			
Fluorene			86-73-7			
Indeno[1,2,3-cd]pyrene			193-39-5			
Naphthalene			91-20-3			
Phenanthrene			85-01-8			
Pyrene	129-00-0					



Test Report: (9323)052-0162

Report Date: March 6, 2023

Appendix D - Test methods, reporting limits and CAS numbers (continued)

Test Parameters	Unit		CAS No.	LOQ		Test methods
	Wastewater	Sludge		Wastewater	Sludge	
1R) Restricted Aromatic Amines (Cleavable from Azo-colourants)						
2-naphthylamine	µg/L	-	91-59-8	0.1	-	Reduction step with sodium dithionite, solvent extraction EPA 8270
2-naphthylammoniumacetate			553-00-4			
2,4-xylidine			95-68-1			
2,4,5-trimethylaniline			137-17-7			
2,4,5-trimethylaniline			21436-97-5			
2,6-xylidine			87-62-7			
3,3'-dichlorobenzidine			91-94-1			
3,3-dimethoxybenzidine			119-90-4			
4-aminoazobenzene			60-09-3			
4-aminodiphenyl			92-67-1			
4-chloro-o-toluidine			95-69-2			
4-chloro-o-toluidinium chloride			3165-93-3			
4-chloroaniline			106-47-8			
4-methoxy-m-phenylene diammonium sulphate; 2,4-diaminoanisoole sulphate			39156-41-7			Reduction step with sodium dithionite, solvent extraction EPA 8270E and ISO 14362-1 GC/MS and LC/MS/MS
4-methoxy-m-phenylenediamine			615-05-4			
4-methyl-m-phenylenediamine			95-80-7			
4,4-methylene-bis-(2-chloro-aniline)			101-14-4			
4,4-methylenedi-o-toluidine			838-88-0			
4,4-methylenedianiline			101-77-9			
4,4-oxydianiline			101-80-4			
4,4-thiodianiline			139-65-1			
5-nitro-o-toluidine			99-55-8			
6-methoxy-m-toluidine			120-71-8			
Benzidine	92-87-5					
o-aminoazotoluene	97-56-3					
o-anisidine	90-04-0					
o-toluidine	95-53-4					
1S) UV Absorbers						
2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl) phenol (UV-350)	µg/L	-	36437-37-3	100	-	USEPA 8270 ISO 22032, USEPA 527 and USEPA 8321B. Dichloromethane extraction GC-MS or LC-MS(-MS)
2-(2H-benzotriazol-2-yl)-4,6-diterpentyphenol (UV-328)			25973-55-1			
2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)			3846-71-7			
2,4-Di-tert-butyl-6-(5-chlorobenzotriazole-2-yl) phenol (UV-327)			3864-99-1			
1T) Volatile Organic Compounds (VOC)						
Benzene	µg/L	-	71-43-2	1	-	ISO 11423-1 Headspace or Purge and trap GC-MS USEPA 8260D Add ISO 20595 Static headspace for determination of VOC in wastewater
m-cresol			108-39-4			ISO 11423-1 Headspace or Purge and trap GC-MS EPA 8270 BS EN 12673-1999
o-cresol			95-48-7			
p-cresol			106-44-5			ISO 11423-1 Headspace or Purge and trap GC-MS USEPA 8260D
Xylene			1330-20-7			
Toluene ^a			108-88-3			HJ 1067 or EPA 8260D or ISO 11423-1

a = Report only for mock leather



Test Report: (9323)052-0162

Report Date: March 6, 2023

Appendix D - Test methods, reporting limits and CAS numbers (continued)

Test Parameters	Unit		CAS No.	LOQ			Test methods
	Wastewater & Leachate	Sludge		Wastewater	Sludge	Leachate	
Heavy Metals							
Antimony	mg/L	mg/kg	7440-36-0	0.01	5	0.01	With reference to EPA 3015A, 6020A, 200.8, 6020B, 3051A and ISO 17294-2 and analyzed by ICP-MS With reference to EPA 1311 and HJT 300 for leachate
Chromium (VI)			18540-29-9	0.001	20	0.001	
Barium			7440-39-3	1	200	1	
Selenium			7782-49-2	1	5	1	
Tin			7440-31-5	1	-	1	
Arsenic			7440-38-2	0.005	5	0.005	
Total Chromium			7440-47-3	0.05	50	0.05	
Cobalt			7440-48-4	0.01	400	0.01	
Cadmium			7440-43-9	0.01	1	0.01	
Copper			7440-50-8	0.25	50	0.25	
Lead			7439-92-1	0.01	5	0.01	
Nickel			7440-02-0	0.05	20	0.05	
Silver			7440-22-4	0.005	50	0.005	
Zinc			7440-66-6	0.5	400	0.5	
Mercury			7439-97-6	0.001	1	0.001	
Conventional							
pH	pH	pH		6 - 9			With reference to ISO 10523, EPA 150.2, APHA 4500-H+
Temperature difference	°C			-			USEPA 170.1 or GB/T 13195
E.coli	MPN/100-ml			126			-
Colour	m ⁻¹			2;1;1			ISO 7887 (Method A and B)
Persistent Foam	-			-			-
Wastewater Flowrate	m ³ /day			-			-
Ammonium-Nitrogen	mg/L			0.5			ISO 11732, ISO 7150, USEPA 350.1, APHA 4500 NH ³ -N, HJ 535 or HJ 536
AOX	mg/L			0.1			ISO 9562, EN ISO 9563, USEPA 1650, HJ.T 83-2001
Biochemical Oxygen Demand 5-days concentration (BOD ₅)	mg/L			8			ISO 5815-1 & -2, EN1899-1, USEPA 405.1, APHA 5210B or HJ 505
Chemical Oxygen Demand (COD)	mg/L			40			ISO 6060, USEPA 410.4, APHA 5220D or GB/T 11914
Dissolved Oxygen (DO)	mg/L			-	-	-	ISO 5814, EPA 360.1 or HJ 506
Oil & Grease	mg/L			0.5			ISO 9377-2, USEPA 1664 or HJ 637
Total Phenols / Phenol Index	mg/L			0.001			ISO 14402, APHA 5530B, C, D or HJ 503
Total Chlorine	mg/L			0.1			ISO 7393-2, EPA 330.5 or HJ 586
Total Dissolved Solids (TDS)	mg/L			5			APHA 2540C, GB/T 5750.4
Total Nitrogen	mg/L			5			ISO 5663, ISO 29411, USEPA 351.2, APHA 4500P-J, APHA 4500N-C/ HJ 636 or GB 11891
Total Phosphorus	mg/L			0.1			ISO 11885, ISO 6878, USEPA 365.4, APHA 4500P-J or GB/T 11893
Total Suspended Solids (TSS)	mg/L			5			ISO 11923, USEPA 160.2, APHA 2540D or GB/T 11901
% Solids	-	%			-		USEPA 160.3
Paint Filter Test	-	-			-		EPA SW-846 or EPA 9095B
Fecal Coliform	-	bacteria/100ml			-		EPA 1681

Test Report: (9323)052-0162Report Date: March 6, 2023**Appendix D - Test methods, reporting limits and CAS numbers (continued)**

Test Parameters	Unit		CAS No.	LOQ			Test methods
	Wastewater & Leachate	Sludge		Wastewater	Sludge	Leachate	
Anions							
Chloride	mg/L	-	-	-	-	-	ISO 10304-1, ISO 15923-1, USEPA 300, HJ 84-2016, IS 3025 (part 32)
Cyanide, total		mg/kg		0.05	20	-	ISO 6703-1 & 2, ISO 14403-1 & 2, USEPA 335.2, APAH 4500-CN or HJ 484
Sulfate		-		-	-	-	ISO 10304-1, ISO 15923-1, USEPA 300, HJ 84-2016, IS 3025 (part 24)
Sulfide		-		0.01	-	-	ISO 10530, SM 4500-S2-D, E, G or I, GB/T 16489 or IS 3025 (part 29)
Sulfite		-		0.2	-	-	ISO 10304-3, SM 4500-SO32-C or HJ 84-2016

END OF REPORT