

Number: GZHT02750592

Date: Jul 14, 2023

NANAN NANFA WOOLEN KNITWEAR COMPANY LIMITED
NO. 292, XIA XU STREET, JINTAO TOWN, NANAN, QUANZHOU CITY,
FUJIAN, CHINA
Indirect discharge
With pretreatment
≥ 15m³/day
[Jun 15, 2023] [10:50]
[Jun 15, 2023] [11:02]
[Jun 16, 2023]
From Jun 16, 2023 to July 04, 2023
[7.5 °C]
[Light Black, grab sample at 11:02]
[Sampling location: Latitude 25°7'N, Longitude 118°21'E
[Light Yellow, grab sample at 11:00]
[Sampling location: Latitude 25°7'N, Longitude 118°21'E
[Black, composite sample at 10:50]
[Sampling location: Latitude 25°7'N, Longitude 118°21'E
Learning research Educado ED / 11/ Eorigicado ETO ET E
Intertek Testing Services Ltd., Shenzhen
Intertek Testing Services Ltd., Shenzhen
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[C74D106817474]
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Tests conducted:

As requested by a brand program, for details refer to attached page(s).

Prepared And Checked By:

For Intertek Testing Services Shenzhen Ltd.Guangzhou Branch

James Ma

Textile lab Senior Manager



Number: GZHT02750592

Summary of test results:

Wastewater / MRSL - Test items	Untreated Wastewater
Alkylphenol ethoxylates / Alkylphenols (APEOs/APs)	ND
Anti-Microbials & Biocides	ND
Chlorinated Parafins	ND
Chlorobenzenes and Chlorotoluenes	ND
Chlorophenols	ND
Dimethyl Formamide (DMFa) (*)	ND
Dyes – Carcinogenic or Equivalent Concern	ND
Dyes – Disperse (Allergenic)	ND
Dyes – Navy Blue Colourant	ND
Flame Retardants	ND
Glycols / Glycol Ethers	ND
Halogenated solvents	ND
Organotin compounds	ND
Other/Miscellaneous Chemicals (^)	ND
Perfluorinated & Polyfluorinated chemicals (PFCs)	ND
Phthalates (Ortho-phthalates)	ND
Polycyclic aromatic hydrocarbons (PAHs)	ND
Restricted Aromatic Amines (Cleavable from Azo- colourants)	ND
UV Absorbers	ND
Volatile Organic Compounds (VOC)	ND

Wastewater / Heavy metals - Test items		Effluent	
	Foundational	Progressive	Aspirational
Chromium (VI)			Meet
Arsenic			Meet
Cadmium			Meet
Lead			Meet
Mercury			Meet

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TEST REPORT

SOFTLINES WASTEWATER TESTING TEST REPORT (TEXTILES)

Sludge - Disposal Pathways

Α

Sludge / Heavy metals - Test items	Sludge (Total)	Sludge (Leachate)
Antimony	Meet	-
Arsenic	Not Meet	Meet
Barium	Meet	-
Cadmium	Meet	-
Cobalt	Meet	-
Copper	Meet	-
Lead	Not Meet	Meet
Nickel	Meet	-
Selenium	Meet	-
Silver	Meet	-
Chromium (total)	Not Meet	Meet
Zinc	Meet	-
Chromium VI	Meet	-
Mercury	Meet	-

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Sludge / Anion - Test items	Sludge
Cyanide	Report only, refer data

Sludge / Conventional parameters - Test items	Sludge
pH	Report only, refer data
% Solids	Report only, refer data
Paint filter test	Report only, refer data
Faecal coliform	Report only, refer data

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Sludge / MRSL - Test items	Sludge
Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): including all isomers	Report only, refer data
Polycyclic Aromatic Hydrocarbons (PAHs)	Report only, refer data
Chlorotoluenes	Report only, refer data

Note:	
	1)
ND = Not detected (less than reporting limit	t)
D = Detected	
N/A = Not applicable	- = Did not perform
# = No comment	* = See Remark
(S) = The samples were subcontracted to In	tertek [xxxxx] for testing.
(T) =If sample temperature is greater than	8°C and less than 10°C when received from the laboratory.
(TT) = If sample temperature is exceeded :	10°C when received from the laboratory.
@ = Maximum holding time exceeded.	
(*) = Sample and report for mock leather	er.
(^) = Borate, zinc salt would report ND	when total boron or total zinc less than 100 μg/L.
[f] = On-site test by sampler.	

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Number: GZHT02750592

Tests Conducted (As Requested By The Applicant) **Sample / Wastewater**

1 Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): Including All Isomers:

NP/OP: With reference to ISO 18857-2 (modified dichloromethane extraction) with GC-MS analysis. OPEO/NPEO (n>2): With reference to ASTM D7742 or ISO 18857-2 with GC-MS and LC-MS-MS analysis.

Chemical substances	CAS no.	Reporting limit (µg/L)	Untreated wastewater	Unit
Nonylphenol ethoxylates (NPEO)	9016-45-9; 26027-38-3; 37205-87-1; 68412-54-4; 127087-87-0	5	ND	μg/L
Nonylphenol (NP), mixed isomers	104-40-5; 11066-49-2; 25154-52-3; 84852-15-3	5	ND	μg/L
Octylphenol ethoxylates (OPEO)	9002-93-1; 9036-19-5; 68987-90-6	5	ND	μg/L
Octylphenol (OP), mixed isomers	140-66-9; 1806-26-4; 27193-28-8	5	ND	μg/L

Remark: ND = Not detected (less than reporting limit)



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Tests Conducted (As Requested By The Applicant)

2 Anti- Microbials & Biocides:

OPP, Triclosan: With reference to US EPA 8270E and BS EN 12673-1999 Solvent extraction, derivatization with KOH, acetic anhydride followed by GC-MS analysis.

Permethrin: With reference to US EPA 8270E Solvent extraction, followed by GC-MS analysis.

Chemical substances	CAS no.	Reporting limit (µg/L)	Untreated wastewater	Unit
o-Phenylphenol (+salts)	90-43-7	100	ND	μg/L
Triclosan	3380-34-5	100	ND	μg/L
Permethrin	Multiple	500	ND	μg/L

Remark: ND = Not detected (less than reporting limit)

3 Chlorinated Parafins:

For MCCP: With reference to EPA 3510, analysis by ISO18219-2:2021 with GC-MS-NCI or LC-MS-MS analysis. For SCCP: With reference to EPA 3510, analysis by ISO18219-1:2021, ISO 12010:2019 with GC-MS-NCI or LC-MS-MS analysis.

Chemical substances	CAS no.	Reporting limit (µg/L)	Untreated wastewater	Unit
Medium-chain Chlorinated paraffins (MCCPs) (C14-C17)	85535-85-9	500	ND	μg/L
Short-chain Chlorinated paraffin (C10 – C13)	85535-84-8	25	ND	μg/L

Remark: ND = Not detected (less than reporting limit)



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Tests Conducted (As Requested By The Applicant)

4 Chlorobenzenes And Chlorotoluenes:

With reference to USEPA 8260D, USEPA 8270E, Dichloromethane extraction followed by GC-MS analysis.

Chemical substances	CAS no.	Reporting limit (µg/L)	Untreated wastewater	Unit
1,2-Dichlorobenzene	95-50-1	0.2	ND	μg/L
Other isomers of mono-, di-, tri-, tetra-, penta- and hexa- Chlorobenzene and mono-, di-, tri-, tetra- and penta- chlorotoluene	Multiple	0.2	ND	μg/L

Remark: ND = Not detected (less than reporting limit)



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Tests Conducted (As Requested By The Applicant)

5 Chlorophenols:

With reference to US EPA 8270E and BS EN 12673-1999, Solvent extraction, derivatization with KOH, acetic anhydride followed by GC-MS.

Chemical substances	CAS no.	Reporting limit (µg/L)	Untreated wastewater	Unit
2-Chlorophenol	95-57-8	0.5	ND	μg/L
3-Chlorophenol	108-43-0	0.5	ND	μg/L
4-Chlorophenol	106-48-9	0.5	ND	μg/L
2,3-Dichlorophenol	576-24-9	0.5	ND	μg/L
2,4-Dichlorophenol	120-83-2	0.5	ND	μg/L
2,5-Dichlorophenol	583-78-8	0.5	ND	μg/L
2,6-Dichlorophenol	87-65-0	0.5	ND	μg/L
3,4-Dichlorophenol	95-77-2	0.5	ND	μg/L
3,5- Dichlorophenol	591-35-5	0.5	ND	μg/L
2,3,4-Trichlorophenol	15950-66-0	0.5	ND	μg/L
2,3,5-Trichlorophenol	933-78-8	0.5	ND	μg/L
2,3,6-Trichlorophenol	933-75-5	0.5	ND	μg/L
2,4,5-Trichlorophenol	95-95-4	0.5	ND	μg/L
2,4,6-Trichlorophenol	88-06-2	0.5	ND	μg/L
3,4,5-Trichlorophenol	609-19-8	0.5	ND	μg/L
2,3,4,5-Tetrachlorophenol	4901-51-3	0.5	ND	μg/L
2,3,4,6-Tetrachlorophenol	58-90-2	0.5	ND	μg/L
2,3,5,6-Tetrachlorophenol	935-95-5	0.5	ND	μg/L
Pentachlorophenol (PCP)	87-86-5	0.5	ND	μg/L

Remark: ND = Not detected (less than reporting limit)



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Tests Conducted (As Requested By The Applicant)

6 Dimethyl Formamide (DMFa):

With reference to US EPA 8270E.

Chemical substances	CAS no.	Reporting limit (µg/L)	Untreated wastewater	Unit
Dimethyl formamide; N,N-dimethylformamide (DMFa) (*)	68-12-2	1000	ND	μg/L

Remark: ND = Not detected (less than reporting limit)

(*) = Sample and report for mock leather.



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Tests Conducted (As Requested By The Applicant)

7 Dyes – Carcinogenic or Equivalent Concern:

By Liquid extraction, LC-MS-MS analysis.

Chemical substances	CAS no.	Reporting limit (µg/L)	Untreated wastewater	Unit
Basic violet 3 with >0.1% of Michler's Ketone	548-62-9	500	ND	μg/L
C.I. Acid Red 26	3761-53-3	500	ND	μg/L
C.I. Acid Violet 49	1694-09-3	500	ND	μg/L
C.I. Basic Blue 26 (with Michler's Ketone > 0.1%)	2580-56-5	500	ND	μg/L
C.I. Basic Green 4 (malachite green chloride)	569-64-2	500	ND	μg/L
C.I. Basic Green 4 (malachite green oxalate)	2437-29-8	500	ND	μg/L
C.I. Basic Green 4 (malachite green)	10309-95-2	500	ND	μg/L
C.I. Basic Red 9	569-61-9	500	ND	μg/L
C.I. Basic Violet 14	632-99-5	500	ND	μg/L
C.I. Direct Black 38	1937-37-7	500	ND	μg/L
C.I. Direct Blue 6	2602-46-2	500	ND	μg/L
C.I. Direct Red 28	573-58-0	500	ND	μg/L
C.I. Disperse Blue 1	2475-45-8	500	ND	μg/L
C.I. Disperse Blue 3	2475-46-9	500	ND	μg/L
Disperse Orange 11	82-28-0	500	ND	μg/L

Remark: ND = Not detected (less than reporting limit)



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Tests Conducted (As Requested By The Applicant)

8 Dyes - Disperse (Allergenic):

By Liquid extraction, LC-MS-MS analysis.

Chemical substances	CAS no.	Reporting limit (µg/L)	Untreated wastewater	Unit
Disperse Blue 102	12222-97-8	50	ND	μg/L
Disperse Blue 106	12223-01-7	50	ND	μg/L
Disperse Blue 124	61951-51-7	50	ND	μg/L
Disperse Blue 26	3860-63-7	50	ND	μg/L
Disperse Blue 35	12222-75-2 56524-77-7	50	ND	μg/L
Disperse Blue 7	3179-90-6	50	ND	μg/L
Disperse Brown 1	23355-64-8	50	ND	μg/L
Disperse Orange 1	2581-69-3	50	ND	μg/L
Disperse Orange 3	730-40-5	50	ND	μg/L
Disperse Orange 37/59/76	13301-61-6	50	ND	μg/L
Disperse Red 1	2872-52-8	50	ND	μg/L
Disperse Red 11	2872-48-2	50	ND	μg/L
Disperse Red 17	3179-89-3	50	ND	μg/L
Disperse Yellow 1	119-15-3	50	ND	μg/L
Disperse Yellow 3	2832-40-8	50	ND	μg/L
Disperse Yellow 39	12236-29-2	50	ND	μg/L
Disperse Yellow 49	54824-37-2	50	ND	μg/L
Disperse Yellow 9	6373-73-5	50	ND	μg/L

Remark: ND = Not detected (less than reporting limit)



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Tests Conducted (As Requested By The Applicant)

Dyes - Navy Blue Colourant:

By Liquid extraction, LC-MS-MS analysis.

Chemical substances	CAS no.	Reporting limit (µg/L)	Untreated wastewater	Unit
Component 1: C39H23Cl-CrN7O12S 2Na	118685-33-9	500	ND	μg/L
Component 2: C46H-30CrN10O20S2 3Na	Not Allocated	500	ND	μg/L

Remark: ND = Not detected (less than reporting limit)



TEST REPORT

SOFTLINES WASTEWATER TESTING TEST REPORT (TEXTILES)

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Tests Conducted (As Requested By The Applicant)

10 Flame Retardants:

Other flame retardant substances: With reference to US EPA 8270E, Dichloromethane extraction GC-MS or LC-MS-MS analysis.

Borate salt: determined as total boron via ICP analysis.

Chemical substances	CAS no.	Reporting limit (µg/L)	Untreated wastewater	Unit
2,2-Bis(bromomethyl)-1,3- propanediol (BBMP)	3296-90-0	25	ND	μg/L
Bis(2,3-dibromopropyl) phosphate (BIS)	5412-25-9	25	ND	μg/L
Decabromodiphenyl ether (DecaBDE)	1163-19-5	25	ND	μg/L
Hexabromocyclododecane (HBCDD)	3194-55-6	25	ND	μg/L
Octabromodiphenyl ehter (OctaBDE)	32536-52-0	25	ND	μg/L
Pentabromodiphenyl ether (PentaBDE)	32534-81-9	25	ND	μg/L
Polybromobiphenyls (PBBs)	59536-65-1	25	ND	μg/L
Tetrabromobisphenol A (TBBPA)	79-94-7	25	ND	μg/L
Tris-(2-chloro-1-methylethyl) phosphate (TCPP)	13674-84-5	25	ND	μg/L
Tris(1-aziridinyl)phosphine oxide) (TEPA)	545-55-1	25	ND	μg/L
Tris(1,3-dichloro-isopropyl) phosphate (TDCP)	13674-87-8	25	ND	μg/L
Tris(2-chloroethyl) phosphate (TCEP)	115-96-8	25	ND	μg/L
Tris(2,3-dibromopropyl) phosphate (TRIS)	126-72-7	25	ND	μg/L
Decabromobiphenyl (DecaBB)	13654-09-6	25	ND	μg/L
Dibromobiphenyls (DiBB)	Multiple	25	ND	μg/L
Octabromobiphenyls (OctaBB)	Multiple	25	ND	μg/L



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Dibromopropylether	21850-44-2	25	ND	μg/L
Heptabromodiphenyl ether (HeptaBDE)	68928-80-3	25	ND	μg/L
Hexabromodiphenyl ether (HexaBDE)	36483-60-0	25	ND	μg/L
Monobromobiphenyls (MonoBB)	Multiple	25	ND	μg/L
Monobromodiphenylethers (MonoBDEs)	Multiple	25	ND	μg/L
Nonabromobiphenyls (NonaBB)	Multiple	25	ND	μg/L
Nonabromodiphenyl ether (NonaBDE)	63936-56-1	25	ND	μg/L
Tetrabromodiphenyl ether (TetraBDE)	40088-47-9	25	ND	μg/L
Tribromodiphenylethers (TriBDEs)	Multiple	25	ND	μg/L
Boric acid **	10043-35-3 11113-50-1	100 in Boron	ND	μg/L
Diboron trioxide **	1303-86-2	100 in Boron	ND	μg/L
Disodium octaborate **	12008-41-2	100 in Boron	ND	μg/L
Disodium tetraborate anhydrous **	1303-96-4 1330-43-4	100 in Boron	ND	μg/L
Tetraboron disodium heptaoxide, hydrate **	12267-73-1	100 in Boron	ND	μg/L

Remark: ND = Not detected (less than reporting limit)

^{**} Report total boron directly, no conversion from Boron salt.



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Tests Conducted (As Requested By The Applicant)

11 Glycols / Glycol Ethers:

With reference to US EPA 8270E, Liquid extraction, GC-MS analysis.

Chemical substances	CAS no.	Reporting limit (µg/L)	Untreated wastewater	Unit
2-ethoxyethanol	110-80-5	50	ND	μg/L
2-ethoxyethyl acetate	111-15-9	50	ND	μg/L
2-methoxyethanol	109-86-4	50	ND	μg/L
2-methoxyethylacetate	110-49-6	50	ND	μg/L
2-methoxypropylacetate	70657-70-4	50	ND	μg/L
Bis(2-methoxyethyl)-ether	111-96-6	50	ND	μg/L
Ethylene glycol dimethyl ether	110-71-4	50	ND	μg/L
Triethylene glycol dimethyl ether	112-49-2	50	ND	μg/L

Remark: ND = Not detected (less than reporting limit)

12 Halogenated Solvents:

With reference to USEPA 8260D, Headspace GC-MS analysis.

Chemical substances	CAS no.	Reporting limit (µg/L)	Untreated wastewater	Unit
1,2-Dichloroethane	107-06-2	1	ND	μg/L
Methylene chloride	75-09-2	1	ND	μg/L
Tetrachloroethylene	127-18-4	1	ND	μg/L
Trichloroethylene	79-01-6	1	ND	μg/L

Remark: ND = Not detected (less than reporting limit)



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Tests Conducted (As Requested By The Applicant)

13 Organotin Compounds:

With reference to ISO 17353, Derivatisation with NaB (C2H5)4, with GC-MS analysis.

Chemical substances	CAS no.	Reporting limit (µg/L)	Untreated wastewater	Unit
Dipropyltin compounds (DPT)	Multiple	0.01	ND	μg/L
Mono-, di- and tri-butyltin derivatives	Multiple	0.01	ND	μg/L
Mono, di-, and tri-methyltin derivatives	Multiple	0.01	ND	μg/L
Mono, di-, and tri-octyltin derivatives	Multiple	0.01	ND	μg/L
Mono, di-, and tri-phenyltin derivatives	Multiple	0.01	ND	μg/L
Tetrabutyltin compounds (TeBT)	Multiple	0.01	ND	μg/L
Tripropyltin Compounds (TPT)	Multiple	0.01	ND	μg/L
Tetraoctyltin compounds (TeOT)	Multiple	0.01	ND	μg/L
Tricyclohexyltin (TCyHT)	Multiple	0.01	ND	μg/L
Tetraethyltin Compounds (TeET)	Multiple	0.01	ND	μg/L

Remark: ND = Not detected (less than reporting limit)



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Tests Conducted (As Requested By The Applicant)

14 Other/Miscellaneous Chemicals:

Others: With reference to Liquid extraction, LC-MS-MS analysis. Borate salt: determined as total boron and total zinc via ICP analysis.

Chemical substances	CAS no.	Reporting limit (µg/L)	Untreated wastewater	Unit
AEEA [2-(2-aminoethylamino)ethanol]	111-41-1	500	ND	μg/L
Bisphenol A	80-05-7	10	ND	μg/L
Thiourea	62-56-6	50	ND	μg/L
Quinoline	91-22-5	50	ND	μg/L
Borate, zinc salt (^)	12767-90-7	100 in Boron & 100 in Zinc	Boron: ND Zinc: ND	μg/L

Remark: ND = Not detected (less than reporting limit)

(^) = Report total boron & total zinc individually, and no conversion from boron / zinc salt.

15 Perfluorinated & Polyfluorinated Chemicals (PFCs):

PFCs: With reference to EPA 537:2020 with LC-MSMS.

FTOH: With reference to EPA 8270E, solvent extraction followed by GC-MS.

Chemical substances	CAS no.	Reporting limit (µg/L)	Untreated wastewater	Unit
Perfluorooctane sulfonate (PFOS) and related substances, Perfluorooctanoic acid (PFOA)	Multiple	0.01	ND	μg/L
Perfluorooctanoic acid (PFOA) related substances	Multiple	1	ND	μg/L

Remark: ND = Not detected (less than reporting limit)



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Tests Conducted (As Requested By The Applicant)

16 Phthalates - Including All Other Esters Of Ortho - Phthalic Acid:

With reference to USEPA 8270E, ISO 18856, Dichloromethane extraction GC-MS analysis.

Chemical substances	CAS no.	Reporting limit (µg/L)	Untreated wastewater	Unit
1,2-benzenedicarboxylic acid, di- C6-8- branched alkyl esters, C7- rich (DIHP)	71888-89-6	10	ND	μg/L
1,2-benzenedicarboxylic acid, di- C7-11- branched and linear alkyl esters (DHNUP)	68515-42-4	10	ND	μg/L
Bis(2-methoxyethyl) phthalate (DMEP)	117-82-8	10	ND	μg/L
Butyl benzyl phthalate (BBP)	85-68-7	10	ND	μg/L
Di-cyclohexyl phthalate (DCHP)	84-61-7	10	ND	μg/L
Di-iso-decyl phthalate (DIDP)	26761-40-0	10	ND	μg/L
Di-iso-octyl phthalate (DIOP)	27554-26-3	10	ND	μg/L
Di-isobutyl phthalate (DIBP)	84-69-5	10	ND	μg/L
Di-isononyl phthalate (DINP)	28553-12-0	10	ND	μg/L
Di-n-hexyl phthalate (DnHP)	84-75-3	10	ND	μg/L
Di-n-octyl phthalate (DNOP)	117-84-0	10	ND	μg/L
Di-n-pentylphthalates	131-18-0	10	ND	μg/L
Di-n-propyl phthalate (DPRP)	131-16-8	10	ND	μg/L
Di(ethylhexyl) phthalate (DEHP)	117-81-7	10	ND	μg/L
Dibutyl phthalate (DBP)	84-74-2	10	ND	μg/L
Diethyl phthalate (DEP)	84-66-2	10	ND	μg/L
Diisopentylphthalates	605-50-5	10	ND	μg/L
Dinonyl phthalate (DNP)	84-76-4	10	ND	μg/L

Remark: ND = Not detected (less than reporting limit)



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Tests Conducted (As Requested By The Applicant)

17 Polycyclic Aromatic Hydrocarbons (PAHs):

With reference to US EPA 8270E, solvent extraction GC-MS analysis.

Chemical substances	CAS no.	Reporting limit (µg/L)	Untreated wastewater	Unit
Acenaphthene	83-32-9	1	ND	μg/L
Acenaphthylene	208-96-8	1	ND	μg/L
Anthracene	120-12-7	1	ND	μg/L
Benzo[a]anthracene	56-55-3	1	ND	μg/L
Benzo[a]pyrene (BaP)	50-32-8	1	ND	μg/L
Benzo[b]fluoranthene	205-99-2	1	ND	μg/L
Benzo[e]pyrene	192-97-2	1	ND	μg/L
Benzo[ghi]perylene	191-24-2	1	ND	μg/L
Benzo[j]fluoranthene	205-82-3	1	ND	μg/L
Benzo[k]fluoranthene	207-08-9	1	ND	μg/L
Chrysene	218-01-9	1	ND	μg/L
Dibenz[a,h]anthracene	53-70-3	1	ND	μg/L
Fluoranthene	206-44-0	1	ND	μg/L
Fluorene	86-73-7	1	ND	μg/L
Indeno[1,2,3-cd]pyrene	193-39-5	1	ND	μg/L
Naphthalene	91-20-3	1	ND	μg/L
Phenanthrene	85-01-8	1	ND	μg/L
Pyrene	129-00-0	1	ND	μg/L

Remark: ND = Not detected (less than reporting limit)



TEST REPORT

SOFTLINES WASTEWATER TESTING TEST REPORT (TEXTILES)

Tests Conducted (As Requested By The Applicant)

18 Restricted Aromatic Amines (Cleavable from Azo-colourants):

With reference to reduction step with sodium dithionite, solvent extraction, EPA 8270E and ISO 14362-1 and ISO 14362-3 (if needed) with GC-MS and LC-MS-MS analysis.

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Chemical substances	CAS no.	Reporting limit (µg/L)	Untreated wastewater	Unit
2-Naphthylamine	91-59-8	0.1	ND	μg/L
2-Naphthylammoniumacetate	553-00-4	0.1	ND	μg/L
2,4-Xylidine	95-68-1	0.1	ND	μg/L
2,4,5-Trimethylaniline	137-17-7	0.1	ND	μg/L
2,4,5-Trimethylaniline hydrochloride	21436-97-5	0.1	ND	μg/L
2,6-Xylidine	87-62-7	0.1	ND	μg/L
3,3'-Dichlorobenzidine	91-94-1	0.1	ND	μg/L
3,3'-Dimethoxybenzidine	119-90-4	0.1	ND	μg/L
3,3'-Dimethylbenzidine	119-93-7	0.1	ND	μg/L
4-Aminoazobenzene	60-09-3	0.1	ND	μg/L
4-Aminodiphenyl	92-67-1	0.1	ND	μg/L
4-Chloro-o-toluidine	95-69-2	0.1	ND	μg/L
4-Chloro-o-toluidinium chloride	3165-93-3	0.1	ND	μg/L
4-Chloroaniline	106-47-8	0.1	ND	μg/L
4-methoxy-m-phenylene diammonium sulphate; 2,4-diaminoanisole sulphate	39156-41-7	0.1	ND	μg/L
4-methoxy-m-phenylenediamine	615-05-4	0.1	ND	μg/L
4-methyl-m-phenylenediamine	95-80-7	0.1	ND	μg/L
4,4'-Methylene-bis(2-chloroaniline)	101-14-4	0.1	ND	μg/L
4,4'-methylenedi-o-toluidine	838-88-0	0.1	ND	μg/L
4,4'-methylenedianiline	101-77-9	0.1	ND	μg/L
4,4'-Oxydianiline	101-80-4	0.1	ND	μg/L
4,4'-Thiodianiline	139-65-1	0.1	ND	μg/L
5-Nitro-o-toluidine	99-55-8	0.1	ND	μg/L
6-methoxy-m-toluidine	120-71-8	0.1	ND	μg/L
Benzidine	92-87-5	0.1	ND	μg/L
o-Aminoazotoluene	97-56-3	0.1	ND	μg/L
o-Anisidine	90-04-0	0.1	ND	μg/L
o-Toluidine	95-53-4	0.1	ND	μg/L

Remark : ND = Not detected (less than reporting limit)



Number: GZHT02750592

Tests Conducted (As Requested By The Applicant)

19 UV Absorbers:

With reference to US EPA 8270E, solvent extraction GC-MS analysis.

Chemical substances	CAS no.	Reporting limit (µg/L)	Untreated wastewater	Unit
2-(2H-benzotriazol-2-yl)-4-(tert- butyl)-6-(sec- butyl) phenol (UV-350)	36437-37-3	100	ND	μg/L
2-(2H-benzotriazol-2-yl)-4,6- ditertpentylphenol (UV-328)	25973-55-1	100	ND	μg/L
2-benzotriazol-2-yl-4,6-di- tertbutylphenol (UV-320)	3846-71-7	100	ND	μg/L
2,4-Di-tert-butyl-6-(5- chlorobenzotriazole-2-yl) phenol (UV- 327)	3864-99-1	100	ND	μg/L

Remark: ND = Not detected (less than reporting limit)



Number: GZHT02750592

Tests Conducted (As Requested By The Applicant)

20 Volatile Organic Compounds (VOCs):

Benzene and Xylene: With reference to USEPA 8260D, Headspace GC-MS analysis.

m, o, p-cresol: With reference to US EPA 8270E and BS EN 12673-1999 solvent extraction, derivatization with KOH, acetic anhydride followed by GC-MS.

Toluene: With reference to HJ 1067 or EPA 8260D Purge and trap, GC-MS analysis.

Chemical substances	CAS no.	Reporting limit (µg/L)	Untreated wastewater	Unit
Benzene	71-43-2	1	ND	μg/L
m-cresol	108-39-4	1	ND	μg/L
o-cresol	95-48-7	1	ND	μg/L
p-cresol	106-44-5	1	ND	μg/L
Xylene	1330-20-7	1	ND	μg/L
Toluene (*)	108-88-3	1	ND	μg/L

Remark: ND = Not detected (less than reporting limit)

(*) = Sample and report for mock leather.

21 Heavy Metals:

With reference to US EPA 200.8, USEPA 218.6.

Chemical	Limit		Reporting	Effluent	Unit	
substances	Foundational	Progressive	Aspirational	limit (mg/L)		
Chromium (VI)	0.05 mg/L	0.005 mg/L	0.001 mg/L	0.001	ND	mg/L
Arsenic	0.05 mg/L	0.01 mg/L	0.005 mg/L	0.005	ND	mg/L
Cadmium	0.1 mg/L	0.05 mg/L	0.01 mg/L	0.01	ND	mg/L
Lead	0.1 mg/L	0.05 mg/L	0.01 mg/L	0.01	ND	mg/L
Mercury	0.01 mg/L	0.005 mg/L	0.001 mg/L	0.001	ND	mg/L

Remark: ND = Not detected (less than reporting limit)



Number: GZHT02750592

Tests Conducted (As Requested By The Applicant)

Sample / Sludge

Sludge flux (weight/time) and / or flow data volume/time: 10 kg/weeks

22 Heavy Metals:

Other heavy metals: With reference to acid/peroxide digestion EPA 3050 or EPA 6020B with ICP/OES, or ICP-MS analysis.

Chromium VI: With reference to alkaline digestion USEPA 3060a or USEPA 7196 with Colourimetric UV/VIS analysis.

Mercury: With reference to Dissolution, acid digestion USEPA 3051a or USEPA 6020b with CVAA or ICP MS analysis.

Chemical substances	Reporting limit (Dry weight) (mg/kg)	Sludge (Dry weight)	Unit
Antimony	5	ND	mg/kg
Arsenic	5	11.6	mg/kg
Barium	200	ND	mg/kg
Cadmium	1	ND	mg/kg
Cobalt	400	ND	mg/kg
Copper	50	ND	mg/kg
Lead	5	29.8	mg/kg
Nickel	20	ND	mg/kg
Selenium	5	5.60	mg/kg
Silver	50	ND	mg/kg
Total Chromium	50	116	mg/kg
Zinc	400	514	mg/kg
Chromium (VI)	20	ND	mg/kg
Mercury	1	ND	mg/kg

Remark: ND = Not detected (less than reporting limit)



Number: GZHT02750592

Tests Conducted (As Requested By The Applicant)

23 Leachate heavy metals:

With reference to toxicity leachate extraction procedure EPA 1311 followed by Acid digestion EPA 3051A, with ICP-OES, ICP-MS or USEPA 6020a analysis.

Chromium VI: With reference to toxicity leachate extraction procedure EPA 1311 followed by USEPA 7196 Colourimetric UV/VIS analysis.

Mercury: With reference to toxicity leachate extraction procedure EPA 1311 followed by acid digestion EPA 3051a with EPA 6020b CVAA or ICP MS analysis.

Chemical substances	Reporting limit (mg/L)	Sludge	Unit
Arsenic	0.5	ND	mg/L
Cadmium	0.15	-	mg/L
Total Chromium	5	ND	mg/L
Lead	0.5	ND	mg/L
Antimony	0.6	-	mg/L
Barium	35	-	mg/L
Cobalt	80	-	mg/L
Copper	10	-	mg/L
Nickel	3.5	-	mg/L
Selenium	0.5	-	mg/L
Silver	5	-	mg/L
Zinc	50	-	mg/L
Chromium (VI)	2.5	-	mg/L
Mercury	0.05	-	mg/L

Remark: ND = Not detected (less than reporting limit)



Number: GZHT02750592

Tests Conducted (As Requested By The Applicant)

24 Anions:

With reference to HJ745 with Colourimetry analysis.

Chemical substances	Reporting limit (Dry weight) (mg/kg)	Sludge (Dry weight)	Unit
Cyanide	20	ND	mg/kg

Remark: ND = Not detected (less than reporting limit)

25 Conventional Parameters:

Chemical substances	Test method	Reporting limit (Dry weight)	Sludge (Dry weight)	Unit
pН	HJ962	N/A	8.55	N/A
% Solids	НЈ613	N/A	11.2	%
Paint Filter Test^	USEPA 9095B	N/A	Pass	N/A
Fecal Coliform	USEPA 1681	10	484	MPN/g

Remark: ND = Not detected (less than reporting limit)

^{^ -} Report "Pass" when Paint Filter Test does not contain free liquid; Report "Fail" when Paint Filter Test does contain free liquid.



Number: GZHT02750592

Tests Conducted (As Requested By The Applicant)

26 Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): including all isomers:

With reference to US EPA 3550, ISO 18857-2, ISO 18254-1, with GC-MS and LC-MS-MS analysis.

Chemical substances	CAS no.	Reporting limit (Dry weight) (mg/kg)	Sludge (Dry weight)	Unit
Nonylphenol ethoxylates (NPEO)	9016-45-9; 26027-38-3; 37205-87-1; 68412-54-4; 127087-87-0	0.4	ND	mg/kg
Nonylphenol (NP), mixed isomers	104-40-5; 11066-49-2; 25154-52-3; 84852-15-3	0.4	ND	mg/kg
Octylphenol ethoxylates (OPEO)	9002-93-1; 9036-19-5; 68987-90-6	0.4	ND	mg/kg
Octylphenol (OP), mixed isomers	140-66-9; 1806-26-4; 27193-28-8	0.4	ND	mg/kg

Remark: ND = Not detected (less than reporting limit)



Number: GZHT02750592

Tests Conducted (As Requested By The Applicant)

27 Polycyclic Aromatic Hydrocarbons (PAHs):

With reference to US EPA 3540, US EPA 8270 with GC-MS analysis.

Chemical substances	CAS no.	Reporting limit (Dry weight) (mg/kg)	Sludge (Dry weight)	Unit
Acenaphthene	83-32-9	0.2	ND	mg/kg
Acenaphthylene	208-96-8	0.2	ND	mg/kg
Anthracene	120-12-7	0.2	ND	mg/kg
Benzo[a]anthracene	56-55-3	0.2	ND	mg/kg
Benzo[a]pyrene (BaP)	50-32-8	0.2	ND	mg/kg
Benzo[b]fluoranthene	205-99-2	0.2	ND	mg/kg
Benzo[e]pyrene	192-97-2	0.2	ND	mg/kg
Benzo[ghi]perylene	191-24-2	0.2	ND	mg/kg
Benzo[j]fluoranthene	205-82-3	0.2	ND	mg/kg
Benzo[k]fluoranthene	207-08-9	0.2	ND	mg/kg
Chrysene	218-01-9	0.2	ND	mg/kg
Dibenz[a,h]anthracene	53-70-3	0.2	ND	mg/kg
Fluoranthene	206-44-0	0.2	ND	mg/kg
Fluorene	86-73-7	0.2	ND	mg/kg
Indeno[1,2,3-cd]pyrene	193-39-5	0.2	ND	mg/kg
Naphthalene	91-20-3	0.2	ND	mg/kg
Phenanthrene	85-01-8	0.2	ND	mg/kg
Pyrene	129-00-0	0.2	ND	mg/kg

Remark: ND = Not detected (less than reporting limit)

28 Chlorotoluenes:

With reference to US EPA 3550, US EPA 8270E with GC-MS analysis.

Chemical substances	CAS no.	Reporting limit (Dry weight) (mg/kg)	Sludge (Dry weight)	Unit
Other isomers of mono-, di-, tri-, tetra- and penta- chlorotoluene	Multiple	0.2	ND	mg/kg

Remark: ND = Not detected (less than reporting limit)



TEST REPORT (TEXTILES)

SOFTLINES WASTEWATER TESTING

Number: GZHT02750592

Tests Conducted (As Requested By The Applicant)

Appendix 1: reference to ZDHC WWSG v2.1 Table 4B

Parameters		Disposal pathways						
	Total metals	A and B	С	D	E	F	G	G
	and anions	(Leachate	(Leachate	(Leachate	(Leachate	(Leachate	(Leachate	(Total
	threshold	result in	result in	result in	result in	result in	result in	metals limit
	values (mg/kg)	mg/L)	mg/L)	mg/L)	mg/L)	mg/L)	mg/L)	in mg/kg)
Arsenic	10		5	2.75	0.5	0.5	0.5	75
Cadmium	3		1	0.58	0.15	0.15	0.15	85
Total	100		15	10	5	5	5	3000
Chromium								
Lead	10		5	2.75	0.5	0.5	0.5	840
Antimony	12		15	7.8	0.6	0.6	0.6	Sample and
Barium	700	Report	100	67.5	35	35	35	report only
Cobalt	1600	only if	80	80	80	80	80]
Copper	200	required to	25	17.5	10	10	10	4300
Nickel	70	test	20	11.75	3.5	3.5	3.5	420
Selenium	10		1	0.75	0.5	0.5	0.5	100
Silver	100		5	5	5	5	5	Sample and
								report only
Zinc	1000		250	150	50	50	50	7500
Chromium VI	50		5	3.75	2.5	2.5	2.5	50
Mercury	1		0.2	0.125	0.05	0.05	0.05	57



Number: GZHT02750592

Tests Conducted (As Requested By The Applicant)

Appendix 2: reference to ZDHC WWSG v2.1 Table 4C

Parameters	Disposal pathways					
	A and B	С	D	Е	F	G
pH	Sample and report only	5 – 11 s.u.	5 – 11 s.u.	5 – 11 s.u.	6.5 – 9 s.u.	6.5 – 9 s.u.
% Solids		Sample and report only	Sample and	Sample and report only	Sample and report only	Sample and report only
Fecal Coliform			report only		< 1000 (MPN/g)	
Paint Filter Test		Sample and	Pa	ass Paint filter t	< 1000 (Sample and report only
Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): including all isomers		report only		< 0.	4 mg/kg	
Polycyclic Aromatic Hydrocarbons (PAHs) Chlorotoluenes				< 0.2 mg/kg		

Appendix 3: reference to ZDHC WWSG v2.1 Table 4D

Parameters	Disposal pathways						
	A and B	С	D	E	F	G	
Cyanide	Report only if required to test	100 mg/kg	85 mg/kg	70 mg/kg	70 mg/kg	70 mg/kg	



TEST REPORT

SOFTLINES WASTEWATER TESTING TEST REPORT (TEXTILES)

Number: GZHT02750592

Tests Conducted (As Requested By The Applicant)

Photo of sampling points:





Untreated wastewater

Effluent



Sludge



TEST REPORT

SOFTLINES WASTEWATER TESTING TEST REPORT (TEXTILES)

Number: GZHT02750592

Tests Conducted (As Requested By The Applicant)

Photo of samples:





Untreated wastewater

Effluent



Sludge



Number: GZHT02750592

Tests Conducted (As Requested By The Applicant)

Attachment – sampling protocol for wastewater & sludge:

| Comparison | Comparison



TEST REPORT

SOFTLINES WASTEWATER TESTING TEST REPORT (TEXTILES)

Number: GZHT02750592

Tests Conducted (As Requested By The Applicant)

Integrated States (1) and present and pre



Number: GZHT02750592

End of Report

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