

SOFTLINES WASTEWATER TESTING
TEST REPORT (TEXTILES)

Number: VNMT23028032

Report Date: 29/06/2023

Factory's name : GLORY KNITWEAR LTD.
Factory's address : NATIONAL ROAD 4, KAO VILLAGE, BEK CHAN COMMUNE,
ANGSNUOL DISTRICT, KANDAL PROVINCE, KINGDOM OF
CAMBODIA.

Type of wastewater discharge: Direct discharge
On-site Wastewater treatment plant: With wastewater treatment plant
Average total industrial wastewater generated: $\geq 15\text{m}^3/\text{day}$

Date and time of the beginning of sampling: [12/06/2023] [09:54]
Date and time of the end of sampling: [12/06/2023] [16:06]
Date received sample: [14/06/2023]
Testing period: From 14/06/2023 to 29/06/2023
Arrival temperature at laboratory: [27 °C] ^(TT)

Sample type:
Sample / Incoming water -
Sample / Untreated wastewater [Light Grey, composite sample at 9:54, 10:53, 11:54, 12:49, 13:56, 14:58, 15:53]
[Sampling location: 11.5191387, 104.7617744]
Sample / Effluent [Transparent, composite sample at 9:58, 10:59, 11:58, 12:56, 14:03, 15:04, 16:01]
[Sampling location: 11.5192188, 104.7617331]
Sample / Sludge [Black, composite sample at 10:14, 11:08, 12:10, 13:07, 14:12, 15:08, 16:06]
[Sampling location: 11.5191873, 104.7618210]

Sampling laboratory: Intertek Cambodia Ltd.
Testing laboratory: Intertek Vietnam Ltd.

ZDHC sampler accreditation certification number: C74D106817883

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



SOFTLINES WASTEWATER TESTING
TEST REPORT (TEXTILES)

Number: VNMT23028032

Summary of test results:

Wastewater / MRSL – Test items	Untreated Wastewater
Alkylphenol ethoxylates / Alkylphenols (APEOs/APs)	ND
Anti-Microbials & Biocides	ND
Chlorinated Paraffins	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
Antimony		Meet	
Chromium (VI)			Meet
Barium	Report only, refer data		
Selenium	Report only, refer data		
Tin	Report only, refer data		
Arsenic			Meet
Chromium (total)			Meet
Cobalt			Meet
Cadmium			Meet
Copper			Meet
Lead		Meet	
Nickel			Meet
Silver			Meet
Zinc			Meet
Mercury			Meet



SOFTLINES WASTEWATER TESTING
TEST REPORT (TEXTILES)

Number: VNMT23028032

Wastewater / Conventional parameters - Test items	Effluent		
	Foundational	Progressive	Aspirational
pH ^[f]	Meet		
Temperature difference ^[f]			Meet
E.coli	Meet @		
Colour		Meet	
Persistent foam ^[f]	Meet		
Wastewater flowrate ^[f]	Report only, refer data		
Ammonium-Nitrogen			Meet
AOX			Meet
Biochemical Oxygen Demand (BOD ₅)			Meet
Chemical Oxygen Demand (COD)			Meet
Dissolved Oxygen (DO) ^[f]	Report only, refer data		
Oil & Grease			Meet
Total Phenols / Phenol Index			Meet
Total Chlorine ^[f]	Report only, refer data		
Total Dissolved Solids (TDS)	Report only, refer data		
Total Nitrogen			Meet
Total Phosphorus		Meet	
Total Suspended Solids (TSS)		Meet	

Wastewater / Anions - Test items	Effluent		
	Foundational	Progressive	Aspirational
Chloride	Report only, refer data		
Cyanide, total			Meet
Sulfate	Report only, refer data		
Sulfide			Meet
Sulfite			Meet

Sludge – Disposal Pathways
B

Sludge / Heavy metals - Test items	Sludge (Total)	Sludge (Leachate)
Antimony		Report only, refer data
Arsenic		Report only, refer data
Barium		Report only, refer data
Cadmium		Report only, refer data
Cobalt	Meet	
Copper	Meet	
Lead	Meet	
Nickel	Meet	
Selenium	Meet	
Silver	Meet	
Chromium (total)	Meet	
Zinc	Meet	
Chromium VI	Meet	



SOFTLINES WASTEWATER TESTING
TEST REPORT (TEXTILES)

Number: VNMT23028032

Mercury	Report only, refer data
---------	-------------------------

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

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

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 :	
ND = Not detected (less than reporting limit)	
D = Detected	
N/A = Not applicable	- = Did not perform
# = No comment	* = See Remark
^(S) = The samples were subcontracted to Intertek [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.	
(^) = Borate, zinc salt would report ND when total boron or total zinc less than 100 µg/L.	
^[f] = On-site test by sampler.	
This report shown the test result of the environment samples of above factory which collected on specific date and time. The results of this report shall not be used for any regulatory compliance purposes.	

For and on behalf of
 Intertek Testing Services Vietnam Limited



Phuong Le, Softlines General Manager



SOFTLINES WASTEWATER TESTING
TEST REPORT (TEXTILES)

Number: VNMT23028032

Sample / Wastewater

1. Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): including all isomers

NP/OP: With reference to ISO 18857-2 (modified dichloromethane extraction) or ASTM D7065 with GC-MS or LC-MS-MS analysis.

OPEO/NPEO (n>2): With reference to ASTM D7742 or ISO 18857-2

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)

2. Anti- Microbials & Biocides

OPP, Triclosan: With reference to USEPA 8270E Solvent extraction, derivatization with KOH, acetic anhydride followed by GC-MS analysis; with reference to BS EN 12673-1999 an alternative method of solvent extraction and derivatization are included.

Permethrin: With reference to USEPA 8270E Solvent extraction, followed by GC-MS analysis; With reference to ISO 14154:2005 without derivatization and determination by LC-MS or LC-MS-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)



SOFTLINES WASTEWATER TESTING
TEST REPORT (TEXTILES)

Number: VNMT23028032

3. Chlorinated Paraffins

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)

4. Chlorobenzenes and Chlorotoluenes

With reference to USEPA 8260D, USEPA 8270E, Purge and Trap, Head Space, 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)

5. Chlorophenols

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

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



SOFTLINES WASTEWATER TESTING
TEST REPORT (TEXTILES)

Number: VNMT23028032

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)

6. Dimethyl Formamide (DMFa)

With reference to EPA 8015, 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.

7. Dyes – Carcinogenic or Equivalent Concern

By Liquid extraction, LC-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



SOFTLINES WASTEWATER TESTING
TEST REPORT (TEXTILES)

Number: VNMT23028032

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)

8. Dyes – Disperse (Allergenic)

By Liquid extraction, LC-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)

9. Dyes – Navy Blue Colourant

By Liquid extraction, LC-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



SOFTLINES WASTEWATER TESTING
TEST REPORT (TEXTILES)

Number: VNMT23028032

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

10. Flame Retardants

Other flame retardant substances: With reference to USEPA 8270E, ISO 22032, USEPA 527 and USEPA 8321B, 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 ether (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
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



SOFTLINES WASTEWATER TESTING
TEST REPORT (TEXTILES)

Number: VNMT23028032

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 Boron directly, no conversion from Boron salt.

11. Glycols / Glycol Ethers

With reference to US EPA 8270E, Liquid extraction, LC-MS or 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 or Purge and trap 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)

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

SOFTLINES WASTEWATER TESTING
TEST REPORT (TEXTILES)

Number: VNMT23028032

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)

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 & Zinc	Boron: ND Zinc: 126	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 BS EN 12673-1999, EPA 8270, GC-MS, Derivatization with acetic anhydride 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)



SOFTLINES WASTEWATER TESTING
TEST REPORT (TEXTILES)

Number: VNMT23028032

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)

17. Polycyclic aromatic hydrocarbons (PAHs)

With reference to US EPA 8270E, DIN 38407-39, 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



SOFTLINES WASTEWATER TESTING
TEST REPORT (TEXTILES)

Number: VNMT23028032

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)

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

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

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



SOFTLINES WASTEWATER TESTING
TEST REPORT (TEXTILES)

Number: VNMT23028032

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)

19. UV Absorbers

With reference to USEPA 8270, ISO 22032, USEPA 527 and USEPA 8321B, dichloromethane extraction GC-MS or LC-MS-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)

20. Volatile organic compounds (VOCs)

With reference to ISO 11423-1 Headspace or Purge and trap, GC-MS analysis.
 USEPA 8260D, add ISO 20595 static headspace for determination of VOC in wastewater
 With reference to ISO 11423-1 Headspace or Purge and trap, GC-MS analysis.
 EPA 8270, BS EN 12673-1999.
 With reference to HJ 1067 or EPA 8260D or ISO 11423-1.

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.



SOFTLINES WASTEWATER TESTING
TEST REPORT (TEXTILES)

Number: VNMT23028032

21. Heavy metals

With reference to ISO 17294, ISO 18412, US EPA 200.8, USEPA 6010C, USEPA 6020A, USEPA 218.6, USEPA 200.8-SIM, USEPA 6020A-SIM, USEPA 245.1, USEPA 245.7, HJ 700, GB 7467, GB 7475, GB 11912, GB 11907, GB 7472, HJ 597, HJ 694, IS 3025 (Part 65), IS 3025 (Part 52), IS 3025 (Part 41), IS 3025 (Part 42), IS 3025 (Part 47), IS 3025 (Part 54), IS 3025 (Part 49), IS 3025 (Part 48 cold vapor), IS 3025 (Part 65-SI).

Chemical substances	Limit			Reporting limit (mg/L)	Effluent	Unit
	Foundational	Progressive	Aspirational			
Antimony	0.1 mg/L	0.05 mg/L	0.01 mg/L	0.01	0.011	mg/L
Chromium (VI)	0.05 mg/L	0.005 mg/L	0.001 mg/L	0.001	ND	mg/L
Barium	Sample and report only			0.01	0.0687	mg/L
Selenium	Sample and report only			0.01	ND	mg/L
Tin	Sample and report only			0.01	ND	mg/L
Arsenic	0.05 mg/L	0.01 mg/L	0.005 mg/L	0.005	ND	mg/L
Chromium (total)	0.2 mg/L	0.1 mg/L	0.05 mg/L	0.05	ND	mg/L
Cobalt	0.05 mg/L	0.02 mg/L	0.01 mg/L	0.01	ND	mg/L
Cadmium	0.1 mg/L	0.05 mg/L	0.01 mg/L	0.01	ND	mg/L
Copper	1 mg/L	0.5 mg/L	0.25 mg/L	0.25	ND	mg/L
Lead	0.1 mg/L	0.05 mg/L	0.01 mg/L	0.01	0.011	mg/L
Nickel	0.2 mg/L	0.1 mg/L	0.05 mg/L	0.05	ND	mg/L
Silver	0.1 mg/L	0.05 mg/L	0.005 mg/L	0.005	ND	mg/L
Zinc	5.0 mg/L	1.0 mg/L	0.5 mg/L	0.5	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)

22. Conventional parameters

Parameters	Test method	Limit			Reporting limit	Effluent	Unit
		Foundational	Progressive	Aspirational			
pH	ISO 10523 / USEPA 150.1 / SM 4500-H+ / HJ 1147 / IS 3025 (Part 11) / Electrometric method only	6-9			N/A	7.47	[f]



SOFTLINES WASTEWATER TESTING
TEST REPORT (TEXTILES)

Number: VNMT23028032

Temperature difference	DIN 38 404-4 / USEPA 170.1 / SM 2550 / GB/T 13195 / IS 3025 (Part 9)	Δ+15 °C	Δ+10 °C	Δ+5 °C	N/A	Δ-0.65 (Temperature Of Effluent: 32.77)	[f] °C
E.coli	SM 9221B presumptive, confirm positive with SM9221F or G	126 MPN/100-ml			1.8 MPN/100-ml	9.2@	MPN/100-ml
Colour (436 nm ; 525 nm ; 620nm)	ISO 7887-B	7;5;3 [m-1]	5;3;2 [m-1]	2;1;1 [m-1]	N/A	0.14; <0.10; <0.10	[m-1]
Persistent Foam	/	No indication of Persistent foam in receiving water			N/A	Absent	[f]
Wastewater Flowrate	/	N/A			N/A	15.55	[f] m ³ /day
Ammonium-Nitrogen	ISO 11732 / ISO 7150 / USEPA 350.1 / USEPA 350.3 / SM 4500 NH ₃ – D, E, F, G, or H / HJ 535 / IS 3025 (Part 34)	10 mg/L	1 mg/L	0.5 mg/L	0.5 mg/L	ND	mg/L
AOX	ISO 9562 / HACH LCK 390 Merck 1.00675.0001 / HJ/T 83	3 mg/L	0.5 mg/L	0.1 mg/L	0.1 mg/L	ND	mg/L
Biochemical Oxygen Demand (BOD ₅)	ISO 5815-1 / USEPA 405.1 / SM 5210-B / HJ 505 / IS 3035 (Part 44)	30 mg/L	15 mg/L	8 mg/L	8 mg/L	ND	mg/L



SOFTLINES WASTEWATER TESTING
TEST REPORT (TEXTILES)

Number: VNMT23028032

Chemical Oxygen Demand (COD)	ISO 6060 / ISO 15705 / USEPA 410.4 / SM 5220-D / HJ 828 / GB/T 11914 e / IS 3025 (Part 58)	150 mg/L	80 mg/L	40 mg/L	40 mg/L	ND	mg/L
Dissolved Oxygen (DO)	ISO 5814 / EPA 360.1 / SM 4500-O-G / HJ 506	Sample and report only			N/A	2.35	^[f] mg/L
Oil and grease	ISO 9377-2 / SM 5520-B/C / USEPA 1664 revision B / HJ 637 / IS 3025 (Part 39)	10 mg/L	2 mg/L	0.5 mg/L	0.5 mg/L	ND	mg/L
Total Phenols / Phenol Index	ISO 6439 / SM 5530-B/C / HJ 503 / IS 3025 (Part 43)	0.5 mg/L	0.01 mg/L	0.001 mg/L	0.001 mg/L	ND	mg/L
Total Chlorine	ISO 7393-2 / USEPA 330.5 / SM4500-Cl-G / HJ 586	Sample and report only			0.2 mg/L	ND	^[f] mg/L
Total Dissolved Solids (TDS)	SM 2540-C / USEPA 160.1 / GB/T 5750.4-2006 / IS 3025 (Part 16)	Sample and report only			10 mg/L	192	mg/L
Total-Nitrogen	ISO 11905 – Part 1 / ISO 29441 / USEPA 351.2 / SM 4500P-J / SM 4500N-B / SM 4500N-C / HJ 636 / IS 3025 (Part 34)	20 mg/L	10 mg/L	5 mg/L	5 mg/L	ND	mg/L



SOFTLINES WASTEWATER TESTING
TEST REPORT (TEXTILES)

Number: VNMT23028032

Total-Phosphorus	ISO 17294 ISO 11885 ISO 6878 USEPA 365.4 SM 4500P-J USEPA 200.7 USEPA 200.8 USEPA 6010C USEPA 6020A GB/T 11893 / IS 3025 (Part 31) / IS 3025 (Part 65)	3 mg/L	0.5 mg/L	0.1 mg/L	0.1 mg/L	0.17	mg/L
Total Suspended Solids (TSS)	ISO 11923 / USEPA 160.2 / SM 2540D / GB/T 11901 / IS3025 (Part 17)	50 mg/L	15 mg/L	5 mg/L	5 mg/L	10.6	mg/L
Chloride	ISO 10304-1 / ISO 15923-1 / SM 4110-B / SM 4110-C / SM 4500-Cl D or E / USEPA 300 / HJ 84-2016 / IS 3025 (Part 32)	Sample and report only			10 mg/L	21.1	mg/L
Cyanide, total	ISO 6703 – 1, 2, 3 / ISO 14403 – 1, 2 / USEPA 335.2, APHA 4500-CN / HJ484	0.2 mg/L	0.1 mg/L	0.05 mg/L	0.05 mg/L	ND	mg/L
Sulfate	ISO 10304-1 / ISO 15923-1 / SM 4500 SO ₄ , E, F, G / SM 4100 B, C / USEPA 300 / USEPA 9038 / HJ 84-2016 /	Sample and report only			10 mg/L	33.9	mg/L



SOFTLINES WASTEWATER TESTING
TEST REPORT (TEXTILES)

Number: VNMT23028032

	IS 3025 (Part 24)						
Sulfide	ISO 10530 / SM 4500-S2-D, E,G, or I / HJ 1226 / IS 3025 (Part 29)	0.5 mg/L	0.05 mg/L	0.01 mg/L	0.01 mg/L	ND	mg/L
Sulfite	ISO 10304-3 / SM 4500-SO32-C / HJ 84-2016	2 mg/L	0.5 mg/L	0.2 mg/L	0.2 mg/L	ND	mg/L

Remark:

ND = Not detected (less than reporting limit)

△ is the degree above ambient temperature of receiving water body.

@ = Maximum holding time exceeded.

^[f] = On-site test by sampler.



SOFTLINES WASTEWATER TESTING
TEST REPORT (TEXTILES)

Number: VNMT23028032

Sample / Sludge

Sludge flux (weight/time) and / or flow data volume/time: 6 Litres/second

1. Heavy metals

Other heavy metals: With reference to acid/peroxide digestion EPA 3050, EPA 6010D or EPA 6020B, HJ 803 with ICP/OES, or ICP-MS analysis.

Chromium VI: With reference to alkaline digestion USEPA 3060a, USEPA 7196 or USEPA 7199, HJ 1082 with Colourimetric UV/VIS, or Colourimetric IC analysis.

Mercury: With reference to Dissolution, acid digestion USEPA 7473, USEPA 7471 b, or USEPA 3051a USEPA 7471b, or USEPA 6020b, GB/T 22105.1, HJ 923 with CVAA or ICP MS analysis.

Chemical substances	Reporting limit (Dry weight) (mg/kg)	Sludge (Dry weight)	Unit
Antimony	5	47.7	mg/kg
Arsenic	5	14.0	mg/kg
Barium	200	778.5	mg/kg
Cadmium	1	5.9	mg/kg
Cobalt	400	ND	mg/kg
Copper	50	92.9	mg/kg
Lead	5	40	mg/kg
Nickel	20	ND	mg/kg
Selenium	5	ND	mg/kg
Silver	50	ND	mg/kg
Total Chromium	50	52.9	mg/kg
Zinc	400	ND	mg/kg
Chromium (VI)	20	ND	mg/kg
Mercury	1	2.1	mg/kg

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

@ = Maximum holding time exceeded.

2. Anions

With reference to USEPA 9013, USEPA 9014, USEPA 9213, HJ745 with Colourimetry or ISE 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)

@ = Maximum holding time exceeded.



SOFTLINES WASTEWATER TESTING
TEST REPORT (TEXTILES)

Number: VNMT23028032

3. Conventional parameters

Chemical substances	Test method	Reporting limit (Dry weight)	Sludge (Dry weight)	Unit
Ph	USEPA SW 9045D / HJ962	N/A	7.06	^[f] N/A
% Solids	USEPA 160.3 / HJ613	N/A	1.72	%
Paint Filter Test ^	USEPA SW-846 / USEPA 9095B	N/A	Fail	N/A
Fecal Coliform	USEPA 1680	10 MPN/g	1.0 x 10 ⁴ @	MPN/g

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

@ = Maximum holding time exceeded.

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

^[f] = On-site test by sampler.

4. Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): including all isomers

With reference to USEPA 3540/3541, USEPA 3550, ISO 18857-2, ASTM D7065, 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)



SOFTLINES WASTEWATER TESTING
TEST REPORT (TEXTILES)

Number: VNMT23028032

5. Polycyclic aromatic hydrocarbons (PAHs)

With reference to US EPA 3540/3541, US EPA 3550, US EPA 3640, US EPA 827, HJ 805-2016 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)

6. Chlorotoluenes

With reference to US EPA 3540/3541, US EPA 3550, US EPA 3650, US EPA 827, HJ 605 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)



SOFTLINES WASTEWATER TESTING
TEST REPORT (TEXTILES)

Number: VNMT23028032

7. Leachate heavy metals

With reference to toxicity leachate extraction procedure EPA 1311 followed by Acid digestion EPA 3051A, with ICP-OES, ICP-MS or, ISO 11885, ISO 17294-2, USEPA 200.7, USEPA 200.8, USEPA 6010c, USEPA 6020a analysis.

Chromium VI: With reference to toxicity leachate extraction procedure EPA 1311 followed by ISO 18412, USEPA 7196 or USEPA 7199 Colourimetric UV/VIS, or Colourimetric IC analysis.

Mercury: With reference to toxicity leachate extraction procedure EPA 1311 followed by acid digestion EPA 7471b , EPA 3051a with ISO 12846 or ISO 17852, EPA 6020b CVAA or ICP MS analysis.

Chemical substances	Reporting limit (mg/L)	Sludge	Unit
Arsenic	0.5	ND	mg/L
Cadmium	0.15	ND	mg/L
Antimony	0.6	ND	mg/L
Barium	35	ND	mg/L
Mercury	0.05	ND	mg/L

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

SOFTLINES WASTEWATER TESTING
TEST REPORT (TEXTILES)

Number: VNMT23028032

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

Parameters	Total metals and anions threshold values (mg/kg)	Disposal pathways						
		A and B (Leachate result in mg/L)	C (Leachate result in mg/L)	D (Leachate result in mg/L)	E (Leachate result in mg/L)	F (Leachate result in mg/L)	G (Leachate result in mg/L)	G (Total metals limit in mg/kg)
Arsenic	10	Report only if required to test	5	2.75	0.5	0.5	0.5	75
Cadmium	3		1	0.58	0.15	0.15	0.15	85
Total Chromium	100		15	10	5	5	5	3000
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 report only
Barium	700		100	67.5	35	35	35	
Cobalt	1600		80	80	80	80	80	80
Copper	200		25	17.5	10	10	10	4300
Nickel	70		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	



SOFTLINES WASTEWATER TESTING
TEST REPORT (TEXTILES)

Number: VNMT23028032

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

Parameters	Disposal pathways							
	A and B	C	D	E	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 report only	Sample and report only	Sample and report only	Sample and report only	Sample and report only	
Fecal Coliform				< 1000 (MPN/g)				
Paint Filter Test				Pass Paint filter test				Sample and report only
Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): including all isomers				< 0.4 mg/kg				
Polycyclic Aromatic Hydrocarbons (PAHs)		< 0.2 mg/kg						
Chlorotoluenes								

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

Parameters	Disposal pathways					
	A and B	C	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



SOFTLINES WASTEWATER TESTING TEST REPORT (TEXTILES)

Number: VNMT23028032

Photo of sampling points:



Untreated Wastewater



Effluent



Sludge

SOFTLINES WASTEWATER TESTING TEST REPORT (TEXTILES)

Number: VNMT23028032

Photo of samples:



Untreated Wastewater



Effluent



Sludge

SOFTLINES WASTEWATER TESTING TEST REPORT (TEXTILES)

Number: VNMT23028032

Sampling protocol for wastewater & sludge:

ZDHC Monitoring

Total Quality. Assured.

Sampling Protocol for Wastewater and Sludge acc. ZDHC SAP 2.1 incl. Apdx. E

Facility Name	Glory Knitwear Ltd.		
Address and Contact:	National Road 4, Kao Village, Bek Chan commune, Angsnuol District, Kandal Province, Kingdom of Cambodia.		
Facility type : (tick all applicable)	<input type="checkbox"/> Dyeing and Finishing	<input type="checkbox"/> Fabric Mill	<input checked="" type="checkbox"/> Laundry, Washing and Finishing
	<input type="checkbox"/> Natural Leather processing	<input type="checkbox"/> Printing	<input type="checkbox"/> Synthetic Leather processing
Date of sampling:	12.06.23		
Sample General ID (if applicable):	<input checked="" type="checkbox"/> direct discharge	<input type="checkbox"/> with pre-treatment	discharge to:
	<input type="checkbox"/> indirect discharge	<input type="checkbox"/> without treatment	
	<input type="checkbox"/> Zero Liquid Discharge (ZLD)	<input checked="" type="checkbox"/> with own ETP	
	<input type="checkbox"/> MMCF		
Discharge description:			
Weather conditions:	on sampling day: Sunny	on day before: Sunny	

Fill in all above information as applicable.

Sample Type and Details (see also page 2)

<input checked="" type="checkbox"/> Effluent Discharge	<input checked="" type="radio"/> direct: Enter sampling times in Sample Details (page 2), and measure field parameters. <input type="radio"/> indirect: Enter sampling time(s) for Indirect discharge. Field parameters are not required, except on client's request.	<input type="radio"/> Facility has WWTP <input type="radio"/> Plant is in operating condition	<input type="checkbox"/> with Homogenisation / Equalisation Tank (HT) present: Hydraulic Retention Time (HRT): _____ h (= Volume of tank [m ³] / Flow rate [m ³ /h]) If HRT > 12h, grab sampling for both untreated and treated wastewater from a point after the HT can be applied.
<input type="checkbox"/> Pre-treated WW without sludge	<input type="checkbox"/> Untreated WW	<input type="checkbox"/> Incoming Water	<input type="checkbox"/> MMCF
<input checked="" type="checkbox"/> Sludge with below disposal pathway*:			
<input type="radio"/> A >1000 °C offsite incineration	<input checked="" type="radio"/> B Landfill with significant control	<input type="radio"/> C Building products processed >1000 °C	<input type="radio"/> D Landfill with limited control
<input type="radio"/> E Incineration / Building products processed <1000 °C	<input type="radio"/> F Landfill with no control	<input type="radio"/> G Land application	age of sludge: 6 days / weeks
*) if supplier cannot provide information, pathway "F" shall be assumed.			
Sludge volume generated:		<input type="radio"/> m ³ /h <input type="radio"/> L/sec <input type="radio"/> other unit (specify): _____ <input type="radio"/> per facility info <input type="radio"/> measured <input type="radio"/> estimated	
<input checked="" type="checkbox"/> Process Chemical	<input checked="" type="checkbox"/> liquid	<input type="checkbox"/> solid (powder / granulate / pieces)	<input type="checkbox"/> 'in process' <input type="checkbox"/> from warehouse/storage

Times of sampling (if applicable)	Untreated:	1 9:54	2 10:53	3 11:54	4 12:49	5 13:56	6 14:58	7 15:53	or Grab:
	Effluent (indirect):*	1	2	3	4	5	6	7	or Grab:
	Incoming:	1	2	3	4	5	6	7	or Grab:
	Sludge (liquid):	1 10:14	2 11:08	3 12:10	4 13:07	5 14:12	6 15:08	7 16:06	Solid sludge:

(for direct discharge, see below)

Picture ID (or Date & Time / Interval):

KHMTT/2023/6115

13 Jun, 2023 14:34

GPS coordinates of sampling points:

Incoming W.:	Lat.: ON OS	Long.: OE OW
Untreated WW:	Lat.: ON OS 11.5191387	Long.: OE OW 104.7617744
Effluent:	Lat.: ON OS 11.5192188	Long.: OE OW 104.7617331
Sludge:	Lat.: ON OS 11.5191873	Long.: OE OW 104.7618210

Rev 10b-3 - use with Guideline CS009.TP (Issue 10b) Page 1 of 3 Effective Date: 30-May-2023

©Intertek 2023, All Rights Reserved. Intertek is the owner of the copyright in the material and intellectual know-how presented. No parts of this material may be reproduced, adapted, or distributed outside of your company without the consent of Intertek other than to the extent necessary to view the material.



SOFTLINES WASTEWATER TESTING TEST REPORT (TEXTILES)

Number: VNMT23028032

intertek ZDHC Monitoring

Total Quality. Assured.

Sample Details *) Field parameters usually are required only for direct discharge. If client requests also for indirect discharge, use below fields.

Composite Sample Grab Sample (enter data in column for Averaged Readings and in field at right) Volume of aliquot(s): _____ mL

Time of discrete effluent sample **	1	2	3	4	5	6	7	Averaged Readings or Grab Sample:
pH:	7=58	10=59	11=58	12=56	14=03	15=04	16=01	7-47
Temp. WW discharge of receiving water	32.2 °C	32.3 °C	32.6 °C	32.9 °C	33.2 °C	33.1 °C	33.1 °C	32.77 °C
Flow rate:	0.54 L/s	0.55 L/s	0.55 L/s	0.54 L/s	0.54 L/s	0.54 L/s	0.55 L/s	15.55 m³/d avg.
Dissolved Oxygen:	2.35 mg/L	2.34 mg/L	2.33 mg/L	2.32 mg/L	2.33 mg/L	2.36 mg/L	2.36 mg/L	2.35 mg/L
Total Chlorine:	0.00 mg/L	0.00 mg/L	0.00 mg/L	0.00 mg/L	0.00 mg/L	0.00 mg/L	0.00 mg/L	0.0 mg/L
Persistent foam:	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	

**) time when discrete sample for composite was taken. Use comment field if number of samples is greater than seven, or if above fields are otherwise not sufficient.
Note: 1.0m³/h = 0.27L/s; 1.0L/s = 86.4 m³/d; 1 m³/h = 0.042 m³/d; multiply the flow rate in m³/h by the daily operation time of the ETP to get flow rate in m³/d;

Sampling procedure: automated sampling with beaker/bowl other:

Wastewater Flow Data (Effluent/Discharge)

System: Flow meter (in facility) Pipe (O) Flume (U) Wier (V)

Diameter [cm]: _____

Water Depth [cm]: _____

Flow Speed [cm/sec]: _____

General Field Parameters and Sensory Data (enter as far as applicable)

Type	T ambient air [°C]	Odour	Colour	Foaming	Floating matter
Incoming				<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Untreated			Light Greeny	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Effluent			Transparent	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Sludge			Black		

Field Testing QA/QC

Parameter	Lab Control	Sample target value	Lab Control Sample measured value	Accuracy [%]
pH		7	7.06	(100%)
Total Chlorine				

Other observations:

Additional notes (e.g., alternatively measured flow and readings, abbreviations used, etc):

pH Sludge = 7.03



SOFTLINES WASTEWATER TESTING
TEST REPORT (TEXTILES)

Number: VNMT23028032

intertek ZDHC Monitoring

Total Quality. Assured.

ZDHC Wastewater Sampling - Facility Confirmation

The Wastewater samples have been collected under the facility's normal production scale and wastewater flow rate. The sampler listed below was on-site and collected the samples.

Sampling person (name & email address):

MEY CHANTHNOUPISITH (Email: pisith.mey@intertek.com)

Facility Name:

Glory Knitwear Ltd

Sampler's ZDHC accreditation no.:

C74D106817883

Facility's Representative name:

Joanne Cheng

Sampler's Signature:

Facility's Representative Signature and Stamp:



End of report

This report is made solely on the basis of instructions and/or information and materials supplied by you (the Client), It is not intended to be a recommendation for any specific course of action. Intertek shall not accept a duty of care or any other responsibility to any person other than the Client in respect of this report and only accepts liability to the Client insofar as that which is expressly contained in the terms and conditions governing the provision of services to you. Intertek makes no warranties or representations either express or implied with respect to this report save as provided for in those terms and conditions. We have aimed to conduct the Review on a diligent, truthful and careful basis and we do not accept any liability to you for any direct or in-direct loss arising out of or in connection with this report, in contract, tort, by statute or otherwise, except in the event of our gross negligence or willful misconduct.

