

## SOFTLINES WASTEWATER TESTING

## TEST REPORT

Number: TURA230118828

Date of sampling	08/11/2023
Reporting Date	10/11/2023

Audit ID	157823	Audit firm	INTERTEK - TURKEY
Company name	DINAMIK RAUS TEKSTIL SANAYI VE DIS TICARET LIMITED SIRKETI		
Contact person	ELA ŞİMAR		
Type of tax - tax ID no	2970636017		
Address	CIHANGIR MAH. SEHIT KOM. CVS. MURAT ALTINTAS SK. 17 /2		
Region state province	ISTANBUL		
Town city / village	AVCILAR		
Zip/Post code	34325		
Country	TURKEY		

Type of wastewater discharge	
ETP	Own ETP
Pre - treatment	YES
Equalization tank	YES
Type of waste discharge	Indirect discharge
Description of discharge	The mill has a wastewater treatment plant discharges to municipalities ETP through sewage system.
[If direct discharge] ambient temperature of receiving water body:	N/A
Average total industrial wastewater generated:	200 m3/day

Sludge Disposal Pathway	E
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Sampler accreditation certification number (ZDHC):		ZDHC-A-22-E-C001068-R21CD-FA2B0	
Sample description	Simple	Composite	Comments
(1) Untreated wastewater (BT)	[Transparent, grab sample at 14:00] [Sampling location: Latitude 40.99250, Longitude 28.69814]	X	X
(2) Treated wastewater (AT)	[Transparent, grab sample at 14:10] [Sampling location: Latitude 40.99250, Longitude 28.69817]	X	X
(3) Sludge	[Black, grab sample at 14:05] [Sampling location: Latitude 40.99260, Longitude 28.69810]	X	X

Local Legal Data	
Local Legal Standard name [a]	N/A
Parameters (ZDHC WWG V2) exceeded local regulation:	N/A
Discharge permit provided:	N/A

Internal description – Intertek Lab Issuing Final Test Report	
Internal codification number	N/A
Reference sample number	TURA230118828
Received on	09/11/2023
Analysis carried out from	09/11/2023 to 10/11/2023
Arrival Temperature at Lab	5.2 °C
Comments	Samples received within 18 hours.
Reporting date	10/11/2023

Internal description – Intertek Subcontracted Lab	
Internal codification number	Not Applicable
Reference sample number	Not Applicable
Received on	Not Applicable
Analysis carried out from	Not Applicable
Arrival Temperature at Lab	Not Applicable
Comments	Not Applicable
Reporting date	Not Applicable

Summary of test results		
Wastewater Test items	Sample 1 (Before treatment)	Sample 2 (After treatment)
Global effluent parameters ZDHC	N/A	N/A
Heavy metals	N/A	ND
Alkylphenols (APs) & Alkylphenol ethoxylates (APEOs)	ND	N/A
Chlorobenzenes and Chlorotoluenes	ND	N/A
Chlorophenols	ND	N/A
Azo dyes	ND	N/A
Carcinogenic dyes	ND	N/A
Disperse dyes	ND	N/A
Flame retardants	ND	N/A
Glycols	ND	N/A
Chlorinated solvents	ND	N/A
Organotin compounds	ND	N/A
Phthalates	ND	N/A
Perfluorinated chemicals (PFCs)	ND	N/A
Polycyclic aromatic hydrocarbons (PAHs)	ND	N/A
Volatile organic compounds (VOCs)	ND	N/A
Anti - Microbials & Biocides	ND	N/A
Chlorinated parafins	ND	N/A
N,N-di-methylformamide (DMFa)	ND	N/A
Dyes-Navy Blue Colourant	ND	N/A
Other/Miscellaneous Chemicals	ND	N/A
UV Absorbers	ND	N/A

Sludge Test items	Sample
Sludge Parameters – Step 1 - Metals	ND
Sludge Parameters – Step 1 - Anions	ND
Sludge Parameters - Step 1 - Conventional	D
Sludge Parameters - Step 1 - MRSL - Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): including all isomers	ND
Sludge Parameters - Step 1 - MRSL - Polycyclic Aromatic Hydrocarbons (PAHs)	ND
Sludge Parameters - Step 1 - MRSL – Chlorotoluenes	ND
Sludge Parameters - Step 2 - Metals	N/A

**Remark (Indicated in each parameter)**

ND = Not detected

D = Detected

\* = See remark

@ = Maximum holding time exceeded,

1 µg/L = 0.001 ppm

1ppm = 1000 µg/L

1 mg/kg = 1 ppm

NA = Not applicable

- = Did not perform

(f)= parameter tested in field

(T)= handling temperature exceeded

(S) = The analysis was subcontracted to Intertek [Intertek Turkey Food Laboratory] for testing.

(^) = Borate, zinc salt would report ND when total boron or total zinc less than 100 µg/L.

# = Non accredited parameter

[a] = The local legal standard name and legal standard no. is referenced to discharge permit (or contractual agree by CETP) that provided by company.

For and on behalf of

Intertek Testing Service Turkey Limited

Prepared and Checked By :



Eralp Anil  
Environmental Engineer  
For Intertek Testing Services Turkey

Authorized By :



Kerem Can  
Consumer Products Operational Excellence Director  
For Intertek Testing Services Turkey

## Test results

## 1. Global effluent parameters

Parameters	Test method	Limit			Legal Requirement	Reporting Limit	Result Sample	Unit
		Foundational	Progressive	Aspirational			After Treatment	
Temperature	SM 2550 B	35°C	30°C	25°C	N/A	N/A	N/A	°C
Temperature difference[°C]	SM 2550 B	Δ+15°C	Δ+10°C	Δ+5°C	N/A	N/A	N/A	°C
TSS	SM 2540 D	50 mg/L	15 mg/L	5 mg/L	N/A	5 mg/L	N/A	mg/L
COD	SM 5220 D	150 mg/L	80 mg/L	40 mg/L	N/A	40 mg/L	N/A	mg/L
Total-N	IS 3025 (Sum of SM4500-Norg B, SM4500-NO2- B, SM4500-NO3- E)	20 mg/L	10 mg/L	5 mg/L	N/A	5 mg/L	N/A	mg/L
pH	SM 4500-H+	6-9	6-9	6-9	N/A	N/A	N/A	pH
Colour [m-1]	ISO 7887-B	7;5;3	5;3;2	2;1;1	N/A	N/A	N/A	[m-1]
BOD <sub>5</sub>	SM 5210-B	30 mg/L	15 mg/L	5 mg/L	N/A	5 mg/L	N/A	mg/L
Ammonium-N	SM 4500 NH3 B& F	10 mg/L	1 mg/L	0.5 mg/L	N/A	0.5 mg/L	N/A	mg/L
Total-P	EPA3015 A& ISO11885	3 mg/L	0.5 mg/L	0.1 mg/L	N/A	0.1 mg/L	N/A	mg/L
AOX	ISO 9562	3 mg/L	0.5 mg/L	0.1 mg/L	N/A	0.1 mg/L	N/A	mg/L
Oil and grease	USEPA 1664	10 mg/L	2 mg/L	0.5 mg/L	N/A	0.5 mg/L	N/A	mg/L
Phenol	SM 5530-B& C	0.5 mg/L	0.01 mg/L	0.001 mg/L	N/A	0.001 mg/L	N/A	mg/L
E. Coli <sup>(S)</sup>	ISO 9308-1	126 [MPN/100-ml]	126 [MPN/100-ml]	126 [MPN/100-ml]	N/A	126 [MPN/100-ml]	N/A	[MPN/100-ml]
Foam	N/A	Not visible	Not visible	Not visible	N/A	N/A	N/A	/
Cyanide	SM 4500-CN-C&E	0.2 mg/L	0.1 mg/L	0.05 mg/L	N/A	0.05 mg/L	N/A	mg/L
Sulfide	SM 4500-S2-D	0.5 mg/L	0.05 mg/L	0.01 mg/L	N/A	0.01 mg/L	N/A	mg/L
Sulfite	SM 4500 SO32 C	2 mg/L	0.5 mg/L	0.2 mg/L	N/A	0.2 mg/L	N/A	mg/L
Dissolved Oxygen (DO)	SM 4500-O-G	Sample and report only			N/A	N/A	N/A	mg/L
Total Chlorine	ISO 7393-2	Sample and report only			N/A	0.2 mg/L	N/A	mg/L
Total Dissolved Solids (TDS)	SM 2540-C	Sample and report only			N/A	10 mg/L	N/A	mg/L
Chloride	SM 4500-Cl C	Sample and report only			N/A	10 mg/L	N/A	mg/L
Sulfate	SM 4500 SO4 E	Sample and report only			N/A	10 mg/L	N/A	mg/L
Wastewater Flowrate	N/A	Report only			N/A	N/A	N/A	m <sup>3</sup> /day

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## 2. Heavy metals

Others; With reference to In House Testing Method "IHTM AL.2.439" (Modified from EPA 3015A ve EPA 6020B) followed by ICP-MS analysis.

Chromium (VI); With reference to ISO 18412 followed by spectrophotometric analysis.

Heavy metals	CAS no.	Limit			Reporting limit (mg/L)	Legal Requirement	Result	Unit
		Foundational	Progressive	Aspirational			After Treatment	
Arsenic (As)	Various	0.05 mg/L	0.01 mg/L	0.005 mg/L	0.005 mg/L	N/A	ND	mg/L
Cadmium (Cd)	Various	0.1 mg/L	0.05 mg/L	0.01 mg/L	0.01 mg/L	N/A	ND	mg/L
Mercury (Hg)	Various	0.01 mg/L	0.005 mg/L	0.001 mg/L	0.001 mg/L	N/A	ND	mg/L
Lead (Pb)	Various	0.1 mg/L	0.05 mg/L	0.01 mg/L	0.01 mg/L	N/A	ND	mg/L
Antimony (Sb)	Various	0.1 mg/L	0.05 mg/L	0.01 mg/L	0.01 mg/L	N/A	N/A	mg/L
Cobalt (Co)	Various	0.05 mg/L	0.02 mg/L	0.01 mg/L	0.01 mg/L	N/A	N/A	mg/L
Nickel (Ni)	Various	0.2 mg/L	0.1 mg/L	0.05 mg/L	0.05 mg/L	N/A	N/A	mg/L
Silver (Ag)	Various	0.1 mg/L	0.05 mg/L	0.005 mg/L	0.005 mg/L	N/A	N/A	mg/L
Copper (Cu)	Various	1 mg/L	0.5 mg/L	0.25 mg/L	0.25 mg/L	N/A	N/A	mg/L
Zinc (Zn)	Various	5.0 mg/L	1.0 mg/L	0.5 mg/L	0.5 mg/L	N/A	N/A	mg/L
Total Chromium	Various	0.2 mg/L	0.1 mg/L	0.05 mg/L	0.05 mg/L	N/A	N/A	mg/L
Chromium VI (Cr VI)	Various	0.05 mg/L	0.005 mg/L	0.001 mg/L	0.001 mg/L	N/A	ND	mg/L
Barium (Ba)	Various	Sample and Report only			0.001 mg/L	N/A	N/A	mg/L
Selenium (Se)	Various	Sample and Report only			0.001 mg/L	N/A	N/A	mg/L
Tin (Sn)	Various	Sample and Report only			0.001 mg/L	N/A	N/A	mg/L

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### 3. Alkylphenols (APs) & AlkylphenolEthoxylates (APEOs)

APs&APEOs (n=1,2):With reference to In House Testing Method, "IHTM AL.2.421" (modified from ISO 18857-1,ISO 18857-2,ASTM D7065) ZDHC Wastewater Guidelines dichloromethane extraction GC-MS analysis.

APs&APEOs (n>2): With reference to In House Testing Method "IHTM AL.2.421" (modified from ISO 18254-1) LC-MS-MS analysis.

Alkylphenols (APs) & Alkylphenoethoxylates (APEOs)	CAS no.	Lab Reporting limit (µg/L)	ZDHC Reporting limit (µg/L)	Result Sample 1 (Before treatment)	Unit
Octylphenol (OP), mixed isomers	140-66-9/ 1806-26-4/ 27193-28-8	5	5	ND	µg/L
Nonylphenol (NP), mixed isomers	104-40-5/ 11066-49-2/ 25154-52-3/84852-15-3	5	5	ND	µg/L
Octylphenoethoxylates (OPEOs)	9002-93-1; 9036-19-5; 68987-90-6	5	5	ND	µg/L
Nonylphenoethoxylates (NPEOs)	9016-45-9/26027-38-3/ 37205-87-1/68412-54-4/127087-87-0	5	5	ND	µg/L

### 4. Chlorobenzenes & Chlorotoluenes

With reference to In House Testing Method "IHTM AL.2.421" (modified from EPA 3510C, EPA 8260D, EPA 8270E) ZDHC Wastewater Guidelines Dichloromethane extraction followed by GC-MS analysis.

Chlorobenzenes & Chlorotoluenes	CAS no.	Lab Reporting limit (µg/L)	ZDHC Reporting limit (µg/L)	Result Sample 1 (Before treatment)	Unit
Chlorobenzene	108-90-7	0.2	0.2	ND	µg/L
1,2-Dichlorobenzene	95-50-1	0.2	0.2	ND	µg/L
1,3-Dichlorobenzene	541-73-1	0.2	0.2	ND	µg/L
1,4-Dichlorobezene	106-46-7	0.2	0.2	ND	µg/L
1,2,3-Trichlorobenzene	87-61-6	0.2	0.2	ND	µg/L
1,2,4-Trichlorobenzene	120-82-1	0.2	0.2	ND	µg/L
1,3,5-Trichlorobenzene	108-70-3	0.2	0.2	ND	µg/L
1,2,3,4-Tetrachlorobenzene	634-66-2	0.2	0.2	ND	µg/L
1,2,3,5-Tetrachlorobenzene	634-90-2	0.2	0.2	ND	µg/L
1,2,4,5-Tetrachlorobenzene	95-94-3	0.2	0.2	ND	µg/L
Pentachlorobenzene	608-93-5	0.2	0.2	ND	µg/L
Hexachlorobenzene	118-74-1	0.2	0.2	ND	µg/L
2-Chlorotoluene	95-49-8	0.2	0.2	ND	µg/L
3-Chlorotoluene	108-41-8	0.2	0.2	ND	µg/L
4-Chlorotoluene	106-43-4	0.2	0.2	ND	µg/L
2,3-Dichlorotoluene	32768-54-0	0.2	0.2	ND	µg/L
2,4-Dichlorotoluene	95-73-8	0.2	0.2	ND	µg/L
2,5-Dichlorotoluene	19398-61-9	0.2	0.2	ND	µg/L
2,6-Dichlorotoluene	118-69-4	0.2	0.2	ND	µg/L
3,4-Dichlorotoluene	95-75-0	0.2	0.2	ND	µg/L

3,5-Dichlorotoluene	25186-47-4	0.2	0.2	ND	µg/L
2,3,4-Trichlorotoluene	7359-72-0	0.2	0.2	ND	µg/L
2,3,6-Trichlorotoluene	2077-46-5	0.2	0.2	ND	µg/L
2,4,5-Trichlorotoluene	6639-30-1	0.2	0.2	ND	µg/L
2,4,6-Trichlorotoluene	23749-65-7	0.2	0.2	ND	µg/L
3,4,5-Trichlorotoluene	21472-86-6	0.2	0.2	ND	µg/L
2,3,4,5-Tetrachlorotoluene	76057-12-0	0.2	0.2	ND	µg/L
2,3,5,6-Tetrachlorotoluene	29733-70-8	0.2	0.2	ND	µg/L
2,3,4,6-Tetrachlorotoluene	875-40-1	0.2	0.2	ND	µg/L
Pentachlorotoluene	877-11-2	0.2	0.2	ND	µg/L

### 5. Chlorophenols

With reference to In House Testing Method "IHTM AL.2.421" (Modified from EPA 3510C, EPA 8270E) ZDHC Wastewater Guidelines followed by GC-MS analysis.

Chlorophenols	CAS no.	Lab Reporting limit (µg/L)	ZDHC Reporting limit (µg/L)	Result Sample 1 (Before treatment)	Unit
2-Chlorophenol	95-57-8	0.5	0.5	ND	µg/L
3-Chlorophenol	108-43-0	0.5	0.5	ND	µg/L
4-Chlorophenol	106-48-9	0.5	0.5	ND	µg/L
2,3-Dichlorophenol	576-24-9	0.5	0.5	ND	µg/L
2,4-Dichlorophenol	120-83-2	0.5	0.5	ND	µg/L
2,5-Dichlorophenol	583-78-8	0.5	0.5	ND	µg/L
2,6-Dichlorophenol	87-65-0	0.5	0.5	ND	µg/L
3,4-Dichlorophenol	95-77-2	0.5	0.5	ND	µg/L
3,5-Dichlorophenol	591-35-5	0.5	0.5	ND	µg/L
2,3,4-Trichlorophenol	15950-66-0	0.5	0.5	ND	µg/L
2,3,5-Trichlorophenol	933-78-8	0.5	0.5	ND	µg/L
2,3,6-Trichlorophenol	933-75-5	0.5	0.5	ND	µg/L
2,4,5-Trichlorophenol	95-95-4	0.5	0.5	ND	µg/L
2,4,6-Trichlorophenol	88-06-2	0.5	0.5	ND	µg/L
3,4,5-Trichlorophenol	609-19-8	0.5	0.5	ND	µg/L
2,3,4,5-Tetrachlorophenol	4901-51-3	0.5	0.5	ND	µg/L
2,3,4,6-Tetrachlorophenol	58-90-2	0.5	0.5	ND	µg/L
2,3,5,6-Tetrachlorophenol	935-95-5	0.5	0.5	ND	µg/L
Pentachlorophenol (PCP)	87-86-5	0.5	0.5	ND	µg/L

## 6. Azo dyes

With reference to In House Testing Method "IHTM AL.2.421" (Modified from EPA 3510C, ISO 14362-1) ZDHC Wastewater Guidelines followed by GC-MS analysis.

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



**7. Carcinogenic dyes**

With reference to In House Testing Method "IHTM AL.2.421" (modified from DIN 54231) ZDHC Wastewater Guidelines followed by LC-MS analysis.

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

**8. Disperse dyes**

With reference to In House Testing Method "IHTM AL.2.421" (modified from DIN 54231) ZDHC Wastewater Guidelines followed by LC-MS analysis.

Disperse dyes	CAS no.	Lab Reporting limit (µg/L)	ZDHC Reporting limit (µg/L)	Result Sample 1 (Before treatment)	Unit
Disperse Yellow 1	119-15-3	50	50	ND	µg/L
Disperse Blue 102	12222-97-8	50	50	ND	µg/L
Disperse Blue 106	12223-01-7	50	50	ND	µg/L
Disperse Yellow 39	12236-29-2	50	50	ND	µg/L
Disperse Orange 37/59/76	13301-61-6	50	50	ND	µg/L
Disperse Brown 1	23355-64-8	50	50	ND	µg/L
Disperse Orange 1	2581-69-3	50	50	ND	µg/L
Disperse Yellow 3	2832-40-8	50	50	ND	µg/L
Disperse Red 11	2872-48-2	50	50	ND	µg/L
Disperse Red 1	2872-52-8	50	50	ND	µg/L
Disperse Red 17	3179-89-3	50	50	ND	µg/L

Disperse Blue 7	3179-90-6	50	50	ND	µg/L
Disperse Blue 26	3860-63-7	50	50	ND	µg/L
Disperse Yellow 49	54824-37-2	50	50	ND	µg/L
Disperse Blue 35	12222-75-2	50	50	ND	µg/L
Disperse Blue 124	61951-51-7	50	50	ND	µg/L
Disperse Yellow 9	6373-73-5	50	50	ND	µg/L
Disperse Orange 3	730-40-5	50	50	ND	µg/L
Disperse Blue 35	56524-77-7	50	50	ND	µg/L

### 9. Flame retardants

With reference to In House Testing Method "IHTM AL.2.421"(Modified from EPA 3510C,EPA 527,ISO 22032) ZDHC Wastewater Guidelines followed by GC-MS and ICP-MS analysis.

With reference to In House Testing Method "IHTM AL.2.421" (Modified from EPA 3510C, EPA 8321B) ZDHC Wastewater Guidelines followed by LC-MS-MS analysis.

Flame retardants	CAS no.	Lab Reporting limit (µg/L)	ZDHC Reporting limit (µg/L)	Result Sample 1 (Before treatment)	Unit
Tris(2-chloroethyl) phosphate (TCEP)	115-96-8	25	25	ND	µg/L
Decabromodiphenyl ether (DecaBDE)	1163-19-5	25	25	ND	µg/L
Tris(2,3-dibromopropyl) phosphate (TRIS)	126-72-7	25	25	ND	µg/L
Pentabromodiphenyl ether (PentaBDE)	32534-81-9	25	25	ND	µg/L
Octabromodiphenyl ether (OctaBDE)	32536-52-0	25	25	ND	µg/L
Bis(2,3-dibromopropyl) phosphate	5412-25-9	25	25	ND	µg/L
Tris(1-aziridinyl)phosphine oxide (TEPA)	545-55-1	25	25	ND	µg/L
Polybromobiphenyls (PBBs)	59536-65-1	25	25	ND	µg/L
Tetrabromobisphenol A (TBBPA)	79-94-7	25	25	ND	µg/L
Hexabromocyclododecane (HBCDD)	3194-55-6	25	25	ND	µg/L
2,2-Bis(bromomethyl)-1,3-propanediol (BBMP)	3296-90-0	25	25	ND	µg/L
Tris(1,3-dichloro-isopropyl) phosphate (TDPCP)	13674-87-8	25	25	ND	µg/L
Tris-(2-chloro-1-methylethyl) phosphate (TCPP)	13674-84-5	25	25	ND	µg/L
Decabromobiphenyl (DecaBB)	13654-09-6	25	25	ND	µg/L
Dibromobiphenyls (DiBB)	Various	25	25	ND	µg/L
Octabromobiphenyls (OctaBB)	Various	25	25	ND	µg/L
Dibromopropylether	21850-44-2	25	25	ND	µg/L
Heptabromodiphenyl ether (HeptaBDE)	68928-80-3	25	25	ND	µg/L
Hexabromodiphenyl ether (HexaBDE)	36483-60-0	25	25	ND	µg/L
Monobromobiphenyls (MonoBB)	Various	25	25	ND	µg/L
Monobromodiphenylethers (MonoBDEs)	Various	25	25	ND	µg/L
Nonabromobiphenyls (NonaBB)	Various	25	25	ND	µg/L
Nonabromodiphenyl ether (NonaBDE)	63936-56-1	25	25	ND	µg/L
Tetrabromodiphenyl ether (TetraBDE)	40088-47-9	25	25	ND	µg/L
Tribromodiphenylethers (TriBDEs)	Various	25	25	ND	µg/L
Boric acid**	10043-35-3 / 11113-50-1	100 in Boron	100 in Boron	ND	µg/L
Diboron trioxide**	1303-86-2	100 in Boron	100 in Boron	ND	µg/L
Disodium octaborate**	12008-41-2	100 in Boron	100 in Boron	ND	µg/L
Disodium tetraborate anhydrous**	1303-96-4 / 1330-43-4	100 in Boron	100 in Boron	ND	µg/L
Tetraboron disodium heptaoxide, hydrate**	12267-73-1	100 in Boron	100 in Boron	ND	µg/L

\*\* Report total boron directly, no conversion from Boron salt.

**10. Glycols**

With reference to In House Testing Method "IHTM AL.2.421" (Modified from EPA 3510C) ZDHC Wastewater Guidelines followed by GC-MS analysis.

Glycols	CAS no.	Lab Reporting limit (µg/L)	ZDHC Reporting limit (µg/L)	Result Sample 1 (Before treatment)	Unit
Bis(2-methoxyethyl)-ether	111-96-6	50	50	ND	µg/L
2-ethoxyethanol	110-80-5	50	50	ND	µg/L
2-ethoxyethyl acetate	111-15-9	50	50	ND	µg/L
Ethylene glycol dimethyl ether	110-71-4	50	50	ND	µg/L
2-methoxyethanol	109-86-4	50	50	ND	µg/L
2-methoxyethylacetate	110-49-6	50	50	ND	µg/L
2-methoxypropylacetate	70657-70-4	50	50	ND	µg/L
Triethylene glycol dimethyl ether	112-49-2	50	50	ND	µg/L

**11. Chlorinated solvents**

With reference to In House Testing Method "IHTM AL.2.421" (Modified from EPA 8260D, EPA 5021A) ZDHC Wastewater Guidelines followed by Headspace GC-MS analysis.

Chlorinated solvents	CAS no.	Lab Reporting limit (µg/L)	ZDHC Reporting limit (µg/L)	Result Sample 1 (Before treatment)	Unit
1,2-Dichloroethane	107-06-2	1	1	ND	µg/L
Methylene chloride	75-09-2	1	1	ND	µg/L
Trichloroethene	79-01-6	1	1	ND	µg/L
Tetrachloroethene	127-18-4	1	1	ND	µg/L

**12. Organotin compounds**

With reference to In House Testing Method "IHTM AL.2.421" (Modified from EPA 3510C, ISO 17353) ZDHC Wastewater Guidelines followed by GC-MS analysis.

Organotin compounds	CAS no.	Lab Reporting limit (µg/L)	ZDHC Reporting limit (µg/L)	Result Sample 1 (Before treatment)	Unit
Mono-, di-and tri-methyltin derivatives	Various	0.01	0.01	ND	µg/L
Mono-, di-and tri-butyltin derivatives	Various	0.01	0.01	ND	µg/L
Mono-, di-and tri-phenyltin derivatives	Various	0.01	0.01	ND	µg/L
Mono-, di-and tri-octyltin derivatives	Various	0.01	0.01	ND	µg/L
Tricyclohexyltin (TCyHT)	Various	0.01	0.01	ND	µg/L
Dipropyltin compounds (DPT)	Various	0.01	0.01	ND	µg/L

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Tetrabutyltin compounds (TeBT)	Various	0.01	0.01	ND	µg/L
Tripropyltin Compounds (TPT)	Various	0.01	0.01	ND	µg/L
Tetraoctyltin compounds (TeOT)	Various	0.01	0.01	ND	µg/L
Tetraethyltin Compounds (TeET)	Various	0.01	0.01	ND	µg/L

**13. Phthalates**

With reference to In House Testing Method "IHTM AL.2.421" (Modified from EPA 3510C, EPA 8270E, ISO 18856, ISO 14389) ZDHC Wastewater Guidelines followed by GC-MS analysis.

Phthalates	CAS no.	Lab Reporting limit (µg/L)	ZDHC Reporting limit (µg/L)	Result Sample 1 (Before treatment)	Unit
Di-2-ethylhexyl phthalate (DEHP)	117-81-7	10	10	ND	µg/L
Dimethoxyethyl phthalate (DMEP)	117-82-8	10	10	ND	µg/L
Di-n-octyl phthalate (DNOP)	117-84-0	10	10	ND	µg/L
Di-iso-decyl phthalate (DIDP)	26761-40-0/68515-49-1	10	10	ND	µg/L
Di-iso-nonyl phthalate (DINP)	28553-12-0/68515-48-0	10	10	ND	µg/L
Di-n-hexyl phthalate (DnHP)	84-75-3	10	10	ND	µg/L
Dibutyl phthalate (DBP)	84-74-2	10	10	ND	µg/L
Butyl benzyl phthalate (BBP)	85-68-7	10	10	ND	µg/L
Diethyl phthalate (DEP)	84-66-2	10	10	ND	µg/L
Di-n-propyl phthalate (DPRP)	131-16-8	10	10	ND	µg/L
Di-iso-butyl phthalate (DIBP)	84-69-5	10	10	ND	µg/L
Di-cyclohexyl phthalate (DCHP)	84-61-7	10	10	ND	µg/L
Di-iso-octyl phthalate (DIOP)	27554-26-3	10	10	ND	µg/L
1,2-benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	68515-42-4	10	10	ND	µg/L
1,2-benzenedicarboxylic acid, di-C6-11-branched alkyl esters, C7-rich (DIHP)	71888-89-6	10	10	ND	µg/L
Di-n-pentylphthalates	131-18-0	10	10	ND	µg/L
Diisopentylphthalates	605-50-5	10	10	ND	µg/L
Dinonyl phthalate (DNP)	84-76-4	10	10	ND	µg/L

**14. Perfluorinated chemicals (PFCs)**

PFCs: With reference to In House Testing Method "IHTM AL.2.421" (modified from DIN 38407-42, CEN/TS 15968) ZDHC Wastewater Guidelines followed by LC-MS-MS analysis.

FTOH: With reference to In House Testing Method "IHTM AL.2.421" (modified from EPA 3510C, CEN/TS 15968, Journal of Chromatography A, 1178 (2008) 199-205) ZDHC Wastewater Guidelines followed by GC-MS analysis.

Perfluorinated chemicals (PFCs)	CAS no.	Lab Reporting limit (µg/L)	ZDHC Reporting limit (µg/L)	Result Sample 1 (Before treatment)	Unit
Perfluoro-octanoic acid (PFOA)	335-67-1	0.01	0.01	ND	µg/L
Perfluoro-octane-sulfonic acid (L-PFOS)	1763-23-1	0.01	0.01	ND	µg/L
Perfluoro-octane-sulfon-amide (PFOSA)	754-91-6	0.01	0.01	ND	µg/L
N-Methyl-perfluoro-octane-sulfon-amide(N-Me-FOSA)	31506-32-8	0.01	0.01	ND	µg/L
N-Ethyl-perfluoro-octane-sulfon-amide (N-Et-FOSA)	4151-50-2	0.01	0.01	ND	µg/L
N-Methyl-perfluoro-octane-sulfon-amido-ethanol(N-Me-FOSEalcohol)	24448-09-7	0.01	0.01	ND	µg/L
N-Ethyl-Perfluoro-octane-sulfon-amido-ethanol(N-Et-FOSEalcohol)	1691-99-2	0.01	0.01	ND	µg/L
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	39108-34-4	1	1	ND	µg/L
2-Perfluorooctylethanol (8:2 FTOH)	678-39-7	1	1	ND	µg/L
1H,1H,2H,2H-Perfluorodecyl acrylate (8:2 FTA)	27905-45-9	1	1	ND	µg/L
1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA)	1996-88-9	1	1	ND	µg/L
Methyl perfluorooctanoate (Me-PFOA)	376-27-2	1	1	ND	µg/L
Ethyl perfluorooctanoate Et-PFOA	3108-24-5	1	1	ND	µg/L

**15. Polycyclic aromatic hydrocarbons (PAHs)**

With reference to In House Testing Method "IHTM AL.2.421" (Modified from EPA 3510C, EPA 8270E, DIN 38407-39) ZDHC Wastewater Guidelines followed by GC-MS analysis.

Polycyclic aromatic hydrocarbons (PAHs)	CAS no.	Lab Reporting limit (µg/L)	ZDHC Reporting limit (µg/L)	Result Sample 1 (Before treatment)	Unit
Benzo(a)pyrene (BaP)	50-32-8	1	1	ND	µg/L
Anthracene	120-12-7	1	1	ND	µg/L
Pyrene	129-00-0	1	1	ND	µg/L
Benzo(ghi)perylene	191-24-2	1	1	ND	µg/L
Benzo(e)pyrene	192-97-2	1	1	ND	µg/L
Indeno (1,2,3-cd)pyrene	193-39-5	1	1	ND	µg/L
Benzo(j)fluoranthene	205-82-3	1	1	ND	µg/L
Benzo(b)fluoranthene	205-99-2	1	1	ND	µg/L
Fluoranthene	206-44-0	1	1	ND	µg/L
Benzo(k)fluoranthene	207-08-09	1	1	ND	µg/L
Acenaphthylene	208-96-8	1	1	ND	µg/L

Chrysene	218-01-9	1	1	ND	µg/L
Dibenz(a,h)anthracene	53-70-3	1	1	ND	µg/L
Benzo(a)anthracene	56-55-3	1	1	ND	µg/L
Acenaphthene	83-32-9	1	1	ND	µg/L
Phenanthrene	85-01-8	1	1	ND	µg/L
Fluorene	86-73-7	1	1	ND	µg/L
Naphthalene	91-20-3	1	1	ND	µg/L

**16. Volatile organic compounds (VOCs)**

With reference to In House Testing Method "IHTM AL.2.421" (modified from EPA 8260D ve EPA 5021A) ZDHC Wastewater Guidelines followed by Headspace GC-MS analysis.

Volatile organic compounds (VOCs)	CAS no.	Lab Reporting limit (µg/L)	ZDHC Reporting limit (µg/L)	Result Sample 1 (Before treatment)	Unit
Benzene	71-43-2	1	1	ND	µg/L
Xylene	1330-20-7	1	1	ND	µg/L
o-cresol	95-48-7	1	1	ND	µg/L
p-cresol	106-44-5	1	1	ND	µg/L
m-cresol	108-39-4	1	1	ND	µg/L
Toluene*	108-88-3	1	1	ND	µg/L

\*Report for mock leather only

**17. Anti - Microbials & Biocides**

With reference to In House Testing Method "IHTM AL.2.421" (Modified from EPA 3510C, EPA 8270E) ZDHC Wastewater Guidelines Solvent

Anti - Microbials & Biocides	CAS no.	Lab Reporting limit (µg/L)	ZDHC Reporting limit (µg/L)	Result Sample 1 (Before treatment)	Unit
o-Phenylphenol (+salts)	90-43-7	100	100	ND	µg/L
Triclosan	3380-34-5	100	100	ND	µg/L
Permethrin	Multiple	500	500	ND	µg/L

**18. Chlorinated paraffins**

With reference to In House Testing Method "IHTM AL.2.421" (modified from EPA 3510C, ISO 12010) ZDHC Wastewater Guidelines Solvent extraction, followed by GC-ECNI-MS analysis.

Chlorinated paraffins	CAS no.	Lab Reporting limit (µg/L)	ZDHC Reporting limit (µg/L)	Result Sample 1 (Before treatment)	Unit
Short-chain Chlorinated paraffin (C10 – C13)	85535-84-8	25	25	ND	µg/L
Medium-chain Chlorinated paraffins (MCCPs) (C14-C17)	85535-85-9	500	500	ND	µg/L

**19. N,N-di-methylformamide (DMFa)**

With reference to In House Testing Method "IHTM AL.2.475" (modified from DIN 54439) followed by GC-MS analysis.

N,N-di-methylformamide (DMFa)	CAS no.	Lab Reporting limit (µg/L)	ZDHC Reporting limit (µg/L)	Result Sample 1 (Before treatment)	Unit
Dimethyl formamide; N,N-dimethylformamide(DMFa)*	68-12-2	1000	1000	ND	µg/L

\*Report for mock leather only

**20. Dyes-Navy Blue Colourant**

With reference to In House Testing Method "IHTM AL.2.421" (modified from DIN 54231) ZDHC Wastewater Guidelines followed by LC-MS analysis.

Dyes-Navy Blue Colourant	CAS no.	Lab Reporting limit (µg/L)	ZDHC Reporting limit (µg/L)	Result Sample 1 (Before treatment)	Unit
Component 1: C39H23Cl-CrN7O12S 2Na	118685-33-9	500	500	ND	µg/L
Component 2: C46H-30CrN10O20S2 3Na	Not Allocated	500	500	ND	µg/L

**21. Other/Miscellaneous Chemicals**

Others: With reference to In House Testing Method "IHTM AL.2.421" ZDHC Wastewater Guidelines followed by LC-MS-MS analysis.

Quinoline: With reference to In House Testing Method "IHTM AL.2.421" (Modified from DIN 54231) ZDHC Wastewater Guidelines followed by LC-MS-MS analysis.

Borate salt: determined as total boron and total zinc with reference to In House Testing Method "IHTM AL.2.428" (Modified from EPA 3051A, ISO 17294-2 ve EPA 6020B) ZDHC Wastewater Guidelines followed by ICP-MS analysis.

Other/Miscellaneous Chemicals	CAS no.	Lab Reporting limit (µg/L)	ZDHC Reporting limit (µg/L)	Result Sample 1 (Before treatment)	Unit
AEEA [2-(2-aminoethylamino)ethanol]	111-41-1	500	500	ND	µg/L
Bisphenol A	80-05-7	10	10	ND	µg/L
Thiourea	62-56-6	50	50	ND	µg/L
Quinoline	91-22-5	50	50	ND	µg/L
Borate, zinc salt (^)	12767-90-7	100 in Boron & 100 in Zinc	100 in Boron & 100 in Zinc	Boron: ND Zinc: ND	µg/L

**22. UV Absorbers**

With reference to In House Testing Method "IHTM AL.2.421" ZDHC Wastewater Guidelines followed by GC-MS analysis.

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

**Remark (Indicated in each parameter)**

ND = Not detected

D = Detected

(f)= parameter tested in field

@ = Maximum holding time exceeded,

1 µg/L = 0.001 ppm

1ppm = 1000 µg/L

1 mg/kg = 1 ppm

N/A = Not applicable

- = Did not perform

(T)= handling temperature exceeded

# = Non accredited parameter

(S) = The analysis was subcontracted to Intertek [Intertek Turkey Food Laboratory] for testing.

(^)= Borate, zinc salt would report ND when total boron or total zinc less than 100 µg/L.

# = Non accredited parameter

[a] = The local legal standard name and legal standard no. is referenced to discharge permit (or contractual agree by CETP) that provided by company.



**23. Sludge Parameters – Step 1 - Metals**

Others: With reference to In House Testing Method "IHTM AL.2.428"(EPA 3051A, ISO 17294-2 ve EPA 6020B'den modifiye edilmiştir) ZDHC Wastewater Guidelines followed by ICP-MS analysis.Chromium VI: With reference to In House Testing Method "IHTM AL.2.428"(ISO 18412, TS EN ISO 18412'den modifiye edilmiştir.) ZDHC Wastewater Guidelines followed by Colourimetric UV/VIS analysis.

Sludge Parameters – Step 1 - Metals	CAS no.	Lab Reporting limit (mg/kg)	ZDHC Reporting limit (mg/kg)	Result	Unit
Antimony	Various	5	5	ND	mg/kg
Arsenic	Various	5	5	ND	mg/kg
Barium	Various	200	200	ND	mg/kg
Cadmium	Various	1	1	ND	mg/kg
Cobalt	Various	400	400	ND	mg/kg
Copper	Various	50	50	ND	mg/kg
Lead	Various	5	5	ND	mg/kg
Nickel	Various	20	20	ND	mg/kg
Selenium	Various	5	5	ND	mg/kg
Silver	Various	50	50	ND	mg/kg
Total Chromium	Various	50	50	ND	mg/kg
Zinc	Various	400	400	ND	mg/kg
Chromium (VI)	Various	20	20	ND	mg/kg
Mercury	Various	1	1	ND	mg/kg

**24. Sludge Parameters – Step 1 - Anions**

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

Sludge Parameters – Step 1 - Anions	CAS no.	Lab Reporting limit (mg/kg)	ZDHC Reporting limit (mg/kg)	Result	Unit
Cyanide	-	20	20	ND	mg/kg

**25. Sludge Parameters - Step 1 – Conventional**

Sludge Parameters – Step 1 - Conventional	CAS no.	Lab Reporting limit	ZDHC Reporting limit	Result	Unit
pH	USEPA SW 9045D	N/A	N/A	7.4	N/A
% Solids	USEPA 160.3	N/A	N/A	24.4	%
Paint Filter Test	USEPA 9095B	N/A	N/A	Pass	N/A
Fecal Coliform <sup>(5)</sup>	ISO 7899-2	10 MPN/g	10 MPN/g	ND	MPN/g

**26. Sludge Parameters - Step 1 - MRSL - Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): including all isomers**

APs/APEOs (n=1,2): With reference to In House Testing Method, "IHTM AL.2.428" (modified from EPA 3540C, ISO 18857-2 ZDHC Wastewater Guidelines dichloromethane extraction GC-MS analysis.

APs/APEOs (n>2): With reference to In House Testing Method "IHTM AL.2.428" (modified from EPA 3550C, ISO 18254-1) LC-MS-MS analysis.

Sludge Parameters - Step 1 - MRSL - Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): including all isomers	Test Method	Lab Reporting limit (mg/kg)	ZDHC Reporting limit (mg/kg)	Result	Unit
Nonylphenol ethoxylates (NPEO)	9016-45-9; 26027-38-3; 37205-87-1; 68412-54-4; 127087-87-0	0.4	0.4	ND	mg/kg
Nonylphenol (NP), mixed isomers	104-40-5; 11066-49-2; 25154-52-3; 84852-15-3	0.4	0.4	ND	mg/kg
Octylphenol ethoxylates (OPEO)	9002-93-1; 9036-19-5; 68987-90-6	0.4	0.4	ND	mg/kg
Octylphenol (OP), mixed isomers	140-66-9; 1806-26-4; 27193-28-8	0.4	0.4	ND	mg/kg

**27. Sludge Parameters - Step 1 - MRSL - Polycyclic Aromatic Hydrocarbons (PAHs)**

With reference to In House Testing Method "IHTM AL.2.428" (modified from EPA 3540C, EPA 8270E, DIN 38407-39) ZDHC Wastewater Guidelines followed by GC-MS analysis.

Sludge Parameters - Step 1 - MRSL - Polycyclic Aromatic Hydrocarbons (PAHs)	CAS no.	Lab Reporting limit (mg/kg)	ZDHC Reporting limit (mg/kg)	Result	Unit
Acenaphthene	83-32-9	0.2	0.2	ND	mg/kg
Acenaphthylene	208-96-8	0.2	0.2	ND	mg/kg
Anthracene	120-12-7	0.2	0.2	ND	mg/kg
Benzo[a]anthracene	56-55-3	0.2	0.2	ND	mg/kg
Benzo[a]pyrene (BaP)	50-32-8	0.2	0.2	ND	mg/kg
Benzo[b]fluoranthene	205-99-2	0.2	0.2	ND	mg/kg
Benzo[e]pyrene	192-97-2	0.2	0.2	ND	mg/kg
Benzo[ghi]perylene	191-24-2	0.2	0.2	ND	mg/kg
Benzo[j]fluoranthene	205-82-3	0.2	0.2	ND	mg/kg
Benzo[k]fluoranthene	207-08-9	0.2	0.2	ND	mg/kg
Chrysene	218-01-9	0.2	0.2	ND	mg/kg
Dibenz[a,h]anthracene	53-70-3	0.2	0.2	ND	mg/kg
Fluoranthene	206-44-0	0.2	0.2	ND	mg/kg
Fluorene	86-73-7	0.2	0.2	ND	mg/kg

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Indeno[1,2,3-cd]pyrene	193-39-5	0.2	0.2	ND	mg/kg
Naphthalene	91-20-3	0.2	0.2	ND	mg/kg
Phenanthrene	85-01-8	0.2	0.2	ND	mg/kg
Pyrene	129-00-0	0.2	0.2	ND	mg/kg

**28. Sludge Parameteres - Step 1 - MRSL – Chlorotoluenes**

With reference to In House Testing Method "IHTM AL.2.428" (modified from EPA 3510C, EPA 8260D, EPA 8270E) ZDHC Wastewater Guidelines followed by GC-MS analysis.

Sludge Parameteres - Step 1 - MRSL – Chlorotoluenes	CAS no.	Lab Reporting limit (mg/kg)	ZDHC Reporting limit (mg/kg)	Result	Unit
2-Chlorotoluene	95-49-8	0.2	0.2	ND	mg/kg
3-Chlorotoluene	108-41-8	0.2	0.2	ND	mg/kg
4-Chlorotoluene	106-43-4	0.2	0.2	ND	mg/kg
2,3-Dichlorotoluene	32768-54-0	0.2	0.2	ND	mg/kg
2,4-Dichlorotoluene	95-73-8	0.2	0.2	ND	mg/kg
2,5-Dichlorotoluene	19398-61-9	0.2	0.2	ND	mg/kg
2,6-Dichlorotoluene	118-69-4	0.2	0.2	ND	mg/kg
3,4-Dichlorotoluene	95-75-0	0.2	0.2	ND	mg/kg
3,5-Dichlorotoluene	25186-47-4	0.2	0.2	ND	mg/kg
2,3,4-Trichlorotoluene	7359-72-0	0.2	0.2	ND	mg/kg
2,3,6-Trichlorotoluene	2077-46-5	0.2	0.2	ND	mg/kg
2,4,5-Trichlorotoluene	6639-30-1	0.2	0.2	ND	mg/kg
2,4,6-Trichlorotoluene	23749-65-7	0.2	0.2	ND	mg/kg
3,4,5-Trichlorotoluene	21472-86-6	0.2	0.2	ND	mg/kg
2,3,4,5-Tetrachlorotoluene	76057-12-0	0.2	0.2	ND	mg/kg
2,3,5,6-Tetrachlorotoluene	29733-70-8	0.2	0.2	ND	mg/kg
2,3,4,6-Tetrachlorotoluene	875-40-1	0.2	0.2	ND	mg/kg
Pentachlorotoluene	877-11-2	0.2	0.2	ND	mg/kg

**29. Sludge Parameteres - Step 2 – Metals**

Others: With reference to ISO 17294-2 with ICP-MS analyses.

Chromium VI: With reference to Toxicity leachate extraction procedure ISO 18412 with Colourimetric UV/VIS analyses.

Mercury: With reference to EPA 6020b with ICP-MS analysis.

Sludge Parameteres - Step 2 – Metals	CAS no.	Lab Reporting limit (ppm)	ZDHC Reporting limit (ppm)	Result	Unit
Antimony	Various	0.12	0.6	N/A	mg/kg
Arsenic	Various	0.1	0.5	N/A	mg/kg
Barium	Various	7	35	N/A	mg/kg
Cadmium	Various	0.03	0.15	N/A	mg/kg
Cobalt	Various	16	80	N/A	mg/kg
Copper	Various	2	10	N/A	mg/kg
Lead	Various	0.1	0.5	N/A	mg/kg
Nickel	Various	0.7	3.5	N/A	mg/kg
Selenium	Various	0.1	0.5	N/A	mg/kg
Silver	Various	1	5	N/A	mg/kg

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Total Chromium	Various	1	5	N/A	mg/kg
Zinc	Various	10	50	N/A	mg/kg
Chromium (VI)	Various	0.5	2.5	N/A	mg/kg
Mercury	Various	0.01	0.05	N/A	mg/kg

**Remark (Indicated in each parameter)**

ND = Not detected

D = Detected

(f)= parameter tested in field

@ = Maximum holding time exceeded,

1 µg/L = 0.001 ppm

1ppm = 1000 µg/L

1 mg/kg = 1 ppm

# = Non accredited parameter

[a] = The local legal standard name and legal standard no. is referenced to discharge permit (or contractual agree by CETP) that provided by company.

N/A = Not applicable

- = Did not perform

(T)= handling temperature exceeded

# = Non accredited parameter

(S) = The analysis was subcontracted to Intertek [Intertek Turkey Food Laboratory] for testing.

## Appendix 1: Reference to ZDHC WWSG v2.1 Table 4B

Parameters	Total metals and anions threshold values (mg/kg)	A and B (Leachate result in mg/L)	Disposal pathways					
			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	4300
Copper	200		25	17.5	10	10	10	
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	

## 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
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		< 0.2 mg/kg				
Aromatic						
Hydrocarbons (PAHs)						
Chlorotoluenes						

## Appendix 2: 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

Number: TURA230118828



Photo of before treatment area

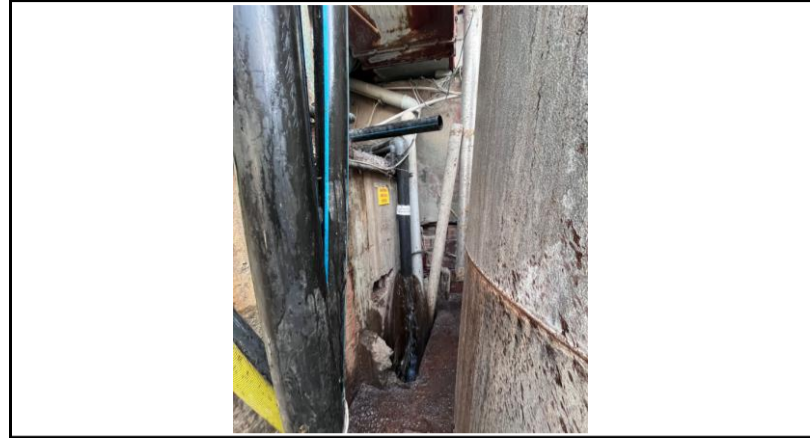


Photo of after treatment area



Photo of sampling point (before treatment)



Photo of sampling point (after treatment)



Photo of Sludge Area



Photo of Sampling Point (Sludge)



Photo of facility gate



Photo of wastewater sample (before treatment)



Photo of wastewater sample (after treatment)



Photo of sludge sample



## ZDHC İzleme / Monitoring

<b>Atıksu ve Çamur Numune Alım Tutanağı, ZDHC SAP 2.1'e göre Ek-E dahil.</b> <b>Sampling Protocol for Wastewater and Sludge acc. ZDHC SAP 2.1 incl. Apdx. E</b>									
<b>Firma Adı</b> Facility Name:	Dinamik Ras Tekstil Sanayi ve Ticaret Ltd Sti								
<b>Adres ve İlgili</b> Address and Contact:	Cihangir mah. Sağlık Kom. Aş. Marmarış Altınos sk 17/2 Akar / 157								
<b>Firma Türü</b> Facility Type:	<input checked="" type="checkbox"/> Boya & Apre Dyeing & Finishing	<input type="checkbox"/> Kumaş Fabrikası Fabric Mill	<input checked="" type="checkbox"/> Yıkama & Apre Washing & Finishing	<input type="checkbox"/> Doğal Deri İşleme Natural Leather proc.	<input type="checkbox"/> Baskı Printing	<input type="checkbox"/> Yapay Deri İşleme Synthetic Leather proc.			
<b>Numune Alım Tarihi</b> Date of sampling:	08.11.2023								
<b>Genel Numune Kodu</b> Sample General ID (Eğer Varsa / If Available):	<input type="checkbox"/> Direkt Deşarj / Direct Discharge	<input checked="" type="checkbox"/> Dolaylı Deşarj / Indirect Discharge	<input type="checkbox"/> Sıfır Sıvı Deşarjı / Zero Liquid Discharge (ZLD)	<input type="checkbox"/> Sentetik Selülozik Elyaf / MMCF	<input type="checkbox"/> Arıtmasız / Without Treatment	<input type="checkbox"/> Ön Arıtmalı / With Pre-treatment			
<b>Deşarj Tanımı</b> Discharge Description:	Bazma ve yıkama sonrası deşarj								
<b>Hava Durumu</b> Weather Conditions:	Numune Alım Gününde / On Sampling Day: Güneşli			Önceki Gün / On Day Before: Güneşli					
<b>Numune Türü ve Detayları (ayrıca 2. Sayfaya bakın) / Sample Type and Details (also see page 2)</b>									
<input checked="" type="checkbox"/> Atıksu Deşarjı / Effluent Discharge	<input type="checkbox"/> Direkt / Direct:	Veya / or <input checked="" type="checkbox"/> Dolaylı / Indirect		<input checked="" type="checkbox"/> Homojenizasyon / Dengeleme Tankı Mevcut with Homogenisation / Equalisation Tank (HT) Present:					
	Numune alım zamanlarını ve saha ölçümlerini sayfa 2'deki numune detaylarına yazınız. Enter sampling times in sample details (page 2), and measure field parameters.	Numune alım zamanlarını yazınız. Talep harici saha ölçümleri gerekli değildir. Enter sampling time(s) for indirect discharge. Field parameters are not required, except on client's request.		<b>Hidrolik Bekleme Süresi / Hydraulic Retention Time (HRT):</b> 24 saat h (= Tank Hacmi Volume of tank [m <sup>3</sup> ] / Debi Flow Rate [m <sup>3</sup> /h]) HRT >12 saat ise, arıtma öncesi ve sonrası anlık numune alımı yapılır. If HRT > 12h, grab sampling for both untreated and treated wastewater from a point after the HT could be applied.					
<input type="checkbox"/> Ön arıtılmış Atıksu, Çamursuz / Pre-treated WW without sludge	<input checked="" type="checkbox"/> Arıtılmamış Atıksu / Untreated Wastewater	<input type="checkbox"/> Proses-Kullanım Suyu / Incoming Water	<input type="checkbox"/> Sentetik Selülozik Elyaf / MMCF						
<input checked="" type="checkbox"/> Çamur seçilen bertaraf yoluyla* Sludge with below disposal pathway: Çamur Yaşı / Age of Sludge: 2 gün/ hafta (days/ weeks)									
<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input checked="" type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G			
>1000 °C Harici Yakma Tesisi >1000 °C Offsite Incineration)	Kontrollü Düzenli Depolama Sahası Landfill with Significant Control	Kontrollü Düzenli Depolama Sahası Building products processed >1000 °C	Sınırlı Kontrollü Düzenli Depolama Sahası Landfill with Limited Control	<1000 °C Yapı Malzemesi Üretim Prosesi / Yakma Incineration / Building Products Processed <1000 °C	Düzensiz Depolama Sahası Landfill with No Control	Arazi Islahı Land Application			
*Eğer bertaraf yolu bilgisi sağlanmazsa, bertaraf yolu 'F' olarak kabul edilir. if supplier cannot provide information, pathway 'F' shall be assumed.									
<b>Üretilen Çamur Hacmi:</b> 1.5 m <sup>3</sup> Sludge Volume Produced	<b>Om<sup>3</sup>/saat (m<sup>3</sup>/h) OL/saniye (L/sn)</b> ODiğer Birim (Belirtiniz) Other Unit (Specify):	<input checked="" type="checkbox"/> Firmadan Alınan Bilgi Per Facility Info		<input type="checkbox"/> Ölçülen Measured	<input type="checkbox"/> Tahmini Estimated				
<input type="checkbox"/> Proses Kimyasalları Process Chemical	<input type="checkbox"/> Sıvı Liquid	<input type="checkbox"/> Katı (Toz / Granül / Parçacıklı) Solid (Powder / Granulate / Pieces)		<input checked="" type="checkbox"/> 'İşlemden' 'In Process'	<input checked="" type="checkbox"/> Depo / Stoktan From Warehouse / Storage				
<b>Numune Alım Zamanları</b> Times of Sampling	<b>Arıtılmamış Atıksu</b> Untreated	1	2	3	4	5	6	7	Veya Anlık or Grab: 14:00
	<b>Dolaylı Deşarj</b> Effluent Indirect:	1	2	3	4	5	6	7	Veya Anlık or Grab: 14:10
	<b>Kullanım Suyu</b> Incoming:	1	2	3	4	5	6	7	Veya Anlık or Grab:
	<b>Sıvı Çamur</b> Liquid Sludge:	1	2	3	4	5	6	7	Kuru Çamur Solid Sludge: 14:05
<b>Fotoğraf No.</b> (veya Tarih & Saat / Aralık) Picture ID (or Date & Time / Interval):	<b>Numune Alım Noktalarının GPS Koordinatları</b> GPS Coordinates of Sampling Points:								
	<b>Kullanım Suyu/ Incoming W.:</b>	Lat.: ON OS			Long.: OE OW				
	<b>Arıtılmamış Atıksu/ Untreated WW:</b>	Lat.: ON OS 40.33220			Long.: OE OW 28.63814				
	<b>Deşarj/ Effluent:</b>	Lat.: ON OS 40.33220			Long.: OE OW 28.63817				
	<b>Çamur/ Sludge:</b>	Lat.: ON OS 40.33220			Long.: OE OW 28.63814				

## ZDHC İzleme / Monitoring

Numune Detayları		Saha ölçüm parametreleri sadece <b>direkt deşarj</b> için gereklidir. Ancak dolaylı deşarj için talep varsa bu alan kullanılmalıdır.						
Sample Details		Field parameters usually are required only for <b>direct discharge</b> . If client requests also for indirect discharge, use below fields.						
<input type="checkbox"/> Kompozit Numune Alım Composite Sample	<input checked="" type="checkbox"/> Anlık Numune Alım (Ortalama değer kolonunu kullanın) Grab Sample (Use column for Averaged Readings and fields at right)	Alınan Numunelerin Hacmi Volume of Aliquot(s): <u>20.00</u> mL						
Numune Alma Zamanları Time of Taking Discrete Sample	1	2	3	4	5	6	7	Ortalama Değerler veya Anlık Numune Ölçümleri Ava. Readings or Grab Sample:
pH:								
Sıcaklık kTemp. of	Atıksu Deşarj WW Discharge	°C	°C	°C	°C	°C	°C	°C
	Alın Ortam Receiving Water	°C	°C	°C	°C	°C	°C	°C
Debi Flow Rate:	m <sup>3</sup> /sa.(h)	m <sup>3</sup> /sa.(h)	m <sup>3</sup> /sa.(h)	m <sup>3</sup> /sa.(h)	m <sup>3</sup> /sa.(h)	m <sup>3</sup> /sa.(h)	m <sup>3</sup> /sa.(h)	<u>200</u> m <sup>3</sup> /gün(d)
Çözülmüş Oksijen Dissolved Oxygen:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Toplam Klor Total Chlorine:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Kalıcı Köpük Persistent Foam:	<input type="radio"/> Var / Yes <input checked="" type="radio"/> Yok / No	<input type="radio"/> Var / Yes <input checked="" type="radio"/> Yok / No	<input type="radio"/> Var / Yes <input checked="" type="radio"/> Yok / No	<input type="radio"/> Var / Yes <input checked="" type="radio"/> Yok / No	<input type="radio"/> Var / Yes <input checked="" type="radio"/> Yok / No	<input type="radio"/> Var / Yes <input checked="" type="radio"/> Yok / No	<input type="radio"/> Var / Yes <input checked="" type="radio"/> Yok / No	<input type="radio"/> Var / Yes <input checked="" type="radio"/> Yok / No
Numune adedi yedi'den fazla ve eğer yukarıdaki alan yeterli gelmezse, yorumlar kısmını kullanın. Use comment field if number of samples is greater than seven, or if above fields are otherwise not sufficient.								
Numune Alım Metodu Sampling Technique:	<input type="radio"/> Otomatik Numune Alım Automated Sampling							
	<input checked="" type="radio"/> Beher ile With Beaker							
	<input type="radio"/> Diğer Other: ..							
Atıksu Debi Bilgisi (Deşarj) Wastewater Flow Data (Effluent / Discharge)								
Ölçüm Sistemi System:	<input type="checkbox"/> Debi Metre (Firmanın) Flow Meter (In Facility)	<input type="checkbox"/> Boru (O) Pipe	<input type="checkbox"/> Su yolu (U) Flume	<input type="checkbox"/> V Çentikli Savak (V) Wier				
Çap [cm] Diameter								
Su Derinliği [cm] Water Depth								
Akış Hızı [cm/sec] Flow Speed								
Genel Saha Parametreleri ve Duyusal Veriler (mümkün olduğu kadar) General Field Parameters and Sensory Data (as far as applicable)								
Type	Ortam Sıcaklığı / T ambient air [°C]	Koku / Odour	Colour / Renk	Köpük / Foam	Yüzer Madde / Floating Matter			
Kullanım Incoming				<input type="radio"/> Var / Yes <input checked="" type="radio"/> Yok / No	<input type="radio"/> Var / Yes <input checked="" type="radio"/> Yok / No			
Artılmamış Untreated	<u>23°C</u>	<u>Yok</u>	<u>Selirp</u>	<input type="radio"/> Var / Yes <input checked="" type="radio"/> Yok / No	<input type="radio"/> Var / Yes <input checked="" type="radio"/> Yok / No			
Deşarj Effluent	<u>23°C</u>	<u>Yok</u>	<u>Selirp</u>	<input type="radio"/> Var / Yes <input checked="" type="radio"/> Yok / No	<input type="radio"/> Var / Yes <input checked="" type="radio"/> Yok / No			
Saha Kalite Kontrol Çalışması Field Testing QA/QC								
Parametre Parameter	Lab. Kontrol Numunesi Hedef Değer Lab. Control Sample Target Value	Lab. Kontrol Numunesi Ölçülen Değer Lab. Control Sample Measured Value	Doğruluk [%] Accuracy					
pH								
Toplam Klor / Total Chlorine								
Diğer Gözlemler / Other Observations:								
<u>Deşarjın her 200 m<sup>3</sup> için 200 m<sup>3</sup> için. Beklenen</u> <u>Sıcaklık 24.5 olarak bulun edilmiştir. 26.5 için yukarıda belirtilen</u>								
İlave Yorumlar (ör., kullanılan kısaltmalar, alternatif olarak ölçülen debi ve okumalar, vb.) Additional Comments (e.g., abbreviations used, alternatively measured flow and readings, etc.):								
<u>İbce yorum yokdur.</u>								



## SAMPLING PROTOCOL (PAGE 3 OF 3)



Form LG.469/30.05.2023/Rev.1

**ZDHC İzleme / Monitoring****ZDHC Atıksu Numune Alımı - Firma Onayı ZDHC Wastewater Sampling - Facility Confirmation**

Atıksu numuneleri firmanın normal üretim düzeni ve atıksu deşarjı kapsamında alınmıştır. Aşağıda belirtilen numune alım personeli sahada bulunarak numuneleri toplamıştır.

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.

**Numune Alım Personeli (Ad-Soyad & E-mail Adresi)**

Sampling Person (Name &amp; E-mail Address):

Hoson İRENCİ  
hoson.irenci@intertek.com

**Firma İsmi**Facility Name: DİNAMİK RAUS TEKSTİL  
SAN. VE TİC. LTD. ŞTİ.**Numune Alım Personeli ZDHC Akreditasyon Numarası**

Sampler's ZDHC Accreditation No.:

2D4E-A-22-E-(02106)-R1CD-FA2B2

**Firma Temsilcisi Ad-Soyad**

Facility's Representative Name:

Ela Simar

**Numune Alım Personeli İmza**

Sampler's Signature:

**Firma Temsilcisi İmza ve Firma Kaşesi**

Facility's Representative Signature and Stamp:

DİNAMİK RAUS TEKSTİL SANAYİ  
TİC. LTD. ŞTİ.  
Cihangir Mah. Şehit Kom. Çvş.  
Murat Altıntaş Sk. 17/2 Avcılar/İstanbul  
AVCILAR V.D. 297 063 5017  
Tic. Sic. No:97256-5



Testing period: From 09/11/2023 to 10/11/2023

\*\*\*\*\*

End of report

This report is made solely on the basis of your instructions and/or information and materials supplied. Results refer only to samples received in the lab. It is not intended to be a recommendation for any particular course of action. Intertek does 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 is expressly contained in the terms and conditions governing Intertek's 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 and careful basis and we do not accept any liability to you for any 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 wilful misconduct.

