



AB-0342-T
144416272
04/25

**TÜV Rheinland**  
**Uluslararası Standartlar Sertifikasyon ve Denetim A.Ş.**  
Saniye Ermutlu Sokak Çolakoğlu Plaza B Blok No:12 Kozyatağı-İSTANBUL

**Test Report No.:** 144416272

Page 1 of 26

**Client:**

**Elyaf Tekstil Sanayi ve Ticaret Anonim Şirketi**  
Ahmet Vefik Paşa OSB Mah. Bosna Cad. No:10 Kestel / BURSA  
Contact Person : Selin SARITOPRAK

**Buyer's Name**

:-

**Factory Details**

Factory Name : **Elyaf Tekstil Sanayi ve Ticaret Anonim Şirketi**  
Factory Address : Ahmet Vefik Paşa OSB Mah. Bosna Cad. No:10 Kestel / BURSA  
On-site ETP : Central  
Polyester wet processing facility : Not provided  
Discharge Type of Wastewater : Indirect discharge without pretreatment  
Wastewater flow rate: 980 m<sup>3</sup> /day

**For Indirect discharge**

Name of public wastewater treatment plants(CETP) : S.S. Yeşil Çevre Hizmet ve İşletme Kooperatifi  
Address of public wastewater treatment plants(CETP) : Kumlukulan, Zafer Cd. No:160 P.K. 16580 Gürsu/BURSA

**Sampling Details**

Onsite Application Project No : O-P-4367 Wastewater Sampling  
OA Code : O-P-4367  
Sampler Information : Talip Yılmaz, ZDHC-A-24-E-C001068-R493A-12F88  
Sampling Date : 2025-04-09  
Sampling Receiving Date : 2025-04-09  
Temperature of receipt sample : 7.8 °C  
Testing Period : 2025-04-10- 2025-04-30  
Max. Holding Time : max. holding time was not exceed  
Reporting Date : 2025-04-30

Sample Type	Total Volume	1	2	3	4	5	6	7	
Untreated Wastewater	20L	08:00	09:00	10:00	11:00	12:00	13:00	14:00	
Effluent	-	-	-	-	-	-	-	-	
Sludge	-	-	-	-	-	-	-	-	
Overall Rating		Untreated Wastewater		Effluent Wastewater		Sludge			
ZDHC Conventional Parameters + Anion		Not Tested		Not Tested		Not Tested			
ZDHC Heavy Metals		Comply		Not Tested		Not Tested			
ZDHC MRSL Parameters		Comply		Not Tested		Not Tested			
Legal Compliance		Not Tested		Not Tested		-			
Specifications		ZDHC Wastewater Guidelines Version 2.2 (September 2024) S.S. Yeşil Çevre Hizmet ve İşletme Kooperatifi							

TÜV Rheinland Uluslararası Standartlar Sertifikasyon ve Denetim A.Ş. accredited by TÜRKAK under registration number AB-0342-T for ISO/IEC 17025-2018 as test laboratory.

**TÜV Rheinland Uluslararası Standartlar Sertifikasyon ve Denetim A.Ş.**

Kozyatagi Mah. Saniye Ermutlu Sok. No:12  
Colakoglu Plaza B Blok 34742 Kadikoy Istanbul,  
Tel. +902166653200, Fax +902166653299, e-mail: info@tr.tuv.com  
MS-0010698/6\_en

The results given in this report belong to the received sample by vendor. This test report shall not be reproduced other than in full except with the permission of the laboratory. Testing reports without signature and seal are not valid. This test report is signed by digital signature. TÜV Rheinland testing laboratories apply the Zero Guard band rule for statement of conformity evaluation, unless other decision rule is required by the customer.

AB-0342-T
144416272
04/25

Test Report No.: 144416272

Page 2 of 26

The Turkish Accreditation Agency (TÜRKAK) is signatory to the multilateral agreements of the European co-operation for the Accreditation (EA) and of the International Laboratory Accreditation (ILAC) for the Mutual recognition of the test reports.

The test and/or measurement results, the uncertainties (if applicable) with confidence probability and test methods are given on the following, pages which are part of this report.

**For ad on behalf of**  
**TÜV Rheinland Uluslararası Standartlar Sertifikasyon ve Denetim A.Ş.**

2025-04-30

Date

*Elif Kocaşallı Usta / CR Assistant Project Manager*

AB-0342-T
144416272
04/25

Test Report No.: 144416272

Page 3 of 26

**Result Summary:**

Conventional Parameters**	Discharge Waste Water		Sludge
	Legal	ZDHC	
pH value	-	-	-
Temperature(#)	-	-	-
E.coli*	-	-	-
Colour	-	-	-
Persistent Foam (#)	-	-	-
Wastewater Flowrate(#)	-	-	-
Ammonium Nitrogen*	-	-	-
Adsorbable Organic Halogens (AOX)*	-	-	-
Biochemical Oxygen Demand (BOD5) – 5 Days*	-	-	-
Chemical Oxygen Demand (COD)	-	-	-
Dissolved Oxygen (DO)(#)	-	-	-
Oil and Grease*	-	-	-
Phenol*	-	-	-
Total Chloride(#)	-	-	-
Total Dissolved Solids (TDS)*	-	-	-
Total Nitrogen*	-	-	-
Total Phosphorous(#)	-	-	-
Total Suspended Solids (TSS)	-	-	-
Anion – Chloride*	-	-	-
Anion – Cyanide*	-	-	-
Anion – Sulfate*	-	-	-
Anion – Sulfide*	-	-	-
Anion – Sulfite*	-	-	-
Heavy Metals	-	Comply	-
Leachate Heavy Metals(#)	-	-	-
%Solid*	-	-	-
Paint Filter Test	-	-	-
Fecal Coliform*	-	-	-

AB-0342-T
144416272
04/25

Test Report No.: 144416272

Page 4 of 26

Manufacturing Restricted Substances List (MRSL)	
Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs) (#)	O
Anti-Microbials & Biocides(#)	O
Chlorinated Paraffins(#)	O
Chlorobenzenes and Chlorotoluenes (#)	O
Chlorophenols (#)	O
Dimethyl formamide (DMFa)(#)	O
Dyes – Carcinogenic or Equivalent Concern (#)	O
Dyes – Disperse (Sensitizing) (#)	O
Dyes – Navy Blue Colorant(#)	O
Flame Retardants (##)	O
Glycols/Glycol Ethers	O
Halogenated Solvents	O
Organotin Compounds (#)	O
Perfluorinated and Polyfluorinated Chemicals (PFCs) (#)	O
Other / Miscellaneous Chemicals (#)	O
Phthalates	O
Polycyclic Aromatic Hydrocarbons (PAHs)	O
Dyes – Azo (Forming Restricted Amines) (#)	O
UV Absorbers(#)	O
Volatile Organic Compounds (VOC)	O

**Note:** \*These tests have been carried out by a contracted laboratory (Çevre Endüstriyel Analiz Laboratuvarları Hiz. Tic. A.Ş.)  
# These tests are not covered by TURKAK accreditation.  
## PBD and PBDE parameters are not covered by TURKAK accreditation.  
Aspirational = Fullfill Aspirational Limit  
Progressive = Fullfill Progressive Limit  
Foundational = Fullfill Foundational Limit  
Exceed = Exceed Foundational Limit  
O = Comply with ZDHC Limit  
X = Not Comply with ZDHC Limit  
- = Not Tested

AB-0342-T
144416272
04/25

Test Report No.: 144416272

Page 5 of 26

**Material List:**

Field ID	Sample Type	Sample Description
D001	Indirect Discharge without pretreatment	Untreated&Effluent

**Notes:**

- \* **Untreated Wastewater** ('Raw wastewater') Wastewater that is collected prior to any treatment.
- \* **Discharge Wastewater:** Treated wastewater that is discharged to the environment, or partially treated or untreated wastewater that is discharged to a Central Effluent Treatment Plant (CETP) for further treatment. (This is not applicable to indirect discharge without pretreatment as well as to Zero Liquid Discharge facilities)
- \* **Sludge:** The residual solid, semisolid, or slurry material generated as a by-product of wastewater treatment processes, including primary, secondary and tertiary (ZLD) treatments.
- \* **Direct Discharge:** Direct discharge is a process in which the wastewater treated and generated by a supplier through its own and operated effluent treatment plant is discharged directly to the land, municipal sewers, or water bodies such as streams, lakes and oceans.
- \* **Indirect Discharge:** The discharge of wastewater through an industrial wastewater sewer system to a central effluent treatment plant (CETP) that is not owned or operated by the supplier discharging the wastewater.
- Pathway A:** On-site or Offsite Incineration at > 1000°C.
- Pathway B:** Landfill with Significant Control Measures.
- Pathway C:** Building Products Processed at > 1000°C.
- Pathway D:** Landfill with Limited Control Measures.
- Pathway E:** Offsite Incineration and Building Products Processed at < 1000°C.
- Pathway F:** Landfill with No Control Measures.
- Pathway G:** Land Application. ,for a specific purpose in approved areas.

AB-0342-T
144416272
04/25

Test Report No.: 144416272

Page 6 of 26

**Test Results:**

**1. Heavy Metals**

Test Method: Wastewater: EPA 3015A & EPA 6020B with ICP-MS; Cr (VI) : ISO 18412

Parameter	Parameter Code	Unit	Sample No.	Result
			RL	D001
Arsenic (As)	Arsenic	mg/L	0.003	<RL
Cadmium (Cd)	Cadmium	mg/L	0.01	<RL
Chromium (Cr VI)	Chromium VI	mg/L	0.001	<RL
Lead (Pb)	Lead	mg/L	0.01	<RL
Mercury (Hg)	Mercury	mg/L	0.0005	<RL
Conclusion				Comply

**Abbreviation:**

- < = less than
- RL = reporting limit
- mg/L = milligram per liter
- mg/kg = milligram per kilogram

**Remark:**

The limits according to ZDHC limit (Table 2 of ZDHC Wastewater Guidelines Version 2.2 issued in September 2024):

Parameter	ZDHC Limit for Wastewater (mg/L)		
	Foundational	Progressive	Aspirational
Arsenic (As)	0.05	0.01	0.005
Cadmium (Cd)	0.1	0.05	0.01
Chromium (Cr VI)	0.05	0.005	0.001
Lead (Pb)	0.1	0.05	0.01
Mercury (Hg)	0.01	0.005	0.001

AB-0342-T
144416272
04/25

Test Report No.: 144416272

Page 7 of 26

## 2. Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): Including All Isomers

Test method: ISO 18254-1, GC-MS and LC-MS/MS

Parameter	Parameter Code	Unit	Sample No.		D001	
			RL	ZDHC Limit	Result	
Nonylphenol (NP), mixed isomers	104-40-5 25154-52-3 11066-49-2 84852-15-3	µg/L	1	5	< RL	
Octylphenol (OP), mixed isomers	140-66-9 1806-26-4 27193-28-8	µg/L	1	5	< RL	
Nonylphenol ethoxylates (NPEO)	9016-45-9 26027-38-3 37205-87-1 68412-54-4 127087-87-0	µg/L	1	5	< RL	
Octylphenol ethoxylates (OPEO)	9002-93-1 9036-19-5 68987-90-6	µg/L	1	5	< RL	
Conclusion					--	Comply

## 3. Anti-Microbials & Biocides

Parameter	Parameter Code	Test Method	Unit	Sample No.		D001
				RL	ZDHC Limit	Result
o-Phenylphenol (+Salts)	90-43-7	Solvent extraction, derivatisation with KOH , aceticanhydride followed by GC- MS	µg/L	50	100	< RL
Triclosan	3380-34-5		µg/L	50	100	< RL
Permethrin	Multiple	Solvent extraction with GC-MS	µg/L	50	500	< RL
Conclusion						Comply

**Abbreviation:**  
 < = less than  
 RL = reporting limit  
 µg/L = microgram per liter

AB-0342-T
144416272
04/25

Test Report No.: 144416272

Page 8 of 26

#### 4. Chlorinated Paraffins

Parameter	Parameter Code	Test Method	Unit	Sample No.		D001
				RL	ZDHC Limit	Result
Medium-chain Chlorinated paraffins (MCCPs) (C14-C17)	85535-85-9	US EPA 3510, ISO 18219-2	µg/L	5	5	< RL
Short-chain Chlorinated paraffins (SCCPs) (C10-C13)	85535-84-8	US EPA 3510, ISO 18219-1 ISO 12010	µg/L	5	5	< RL
Conclusion						Comply

**Abbreviation:**  
 < = less than  
 RL = reporting limit  
 µg/L = microgram per liter

#### 5. Chlorobenzenes and Chlorotoluenes

Test method: US EPA 8260B, US EPA 8260D, Dichloromethane extraction followed by GC-MS

Parameter	Parameter Code	Unit	RL	Sample No.		D001
				ZDHC Limit	Result	
1,2-Dichlorobenzene	95-50-1	µg/L	0.1	0.2	< RL	
Other isomers of mono, di-, tri-, tetra-, penta- and hexa- Chlorobenzene and mono, di- tri-, tetra- and penta-Chlorotoluene	Multiple	µg/L	0.1	0.2	< RL	

**Abbreviation:**  
 < = less than  
 RL = reporting limit  
 µg/L = microgram per liter  
 mg/kg = milligram per kilogram

AB-0342-T
144416272
04/25

Test Report No.: 144416272

Page 9 of 26

## 6.Chlorophenols

Test method: USEPA 8270 D, Solvent extraction, derivatisation with KOH, acetic anhydride followed by GC/MS ISO 14154:2005

Parameter	Parameter Code	Unit	Sample No.		D001
			RL	ZDHC Limit	Result
2-Chlorophenol	95-57-8	µg/L	0.35	0.5	< RL
3-chlorophenol	108-43-0	µg/L	0.35	0.5	< RL
4-chlorophenol	106-48-9	µg/L	0.35	0.5	< RL
2,3-Dichlorophenol	576-24-9	µg/L	0.35	0.5	< RL
2,4-Dichlorophenol	120-83-2	µg/L	0.35	0.5	< RL
2,5-Dichlorophenol	583-78-8	µg/L	0.35	0.5	< RL
2,6-Dichlorophenol	87-65-0	µg/L	0.35	0.5	< RL
3,4-Dichlorophenol	95-77-2	µg/L	0.35	0.5	< RL
3,5-Dichlorophenol	591-35-5	µg/L	0.35	0.5	< RL
2,3,4-Trichlorophenol	15950-66-0	µg/L	0.35	0.5	< RL
2,3,5-Trichlorophenol	933-78-8	µg/L	0.35	0.5	< RL
2,3,6-Trichlorophenol	933-75-5	µg/L	0.35	0.5	< RL
2,4,5-Trichlorophenol	95-95-4	µg/L	0.35	0.5	< RL
2,4,6-Trichlorophenol	88-06-2	µg/L	0.35	0.5	< RL
3,4,5-Trichlorophenol	609-19-8	µg/L	0.35	0.5	< RL
2,3,4,5-Tetrachlorophenol	4901-51-3	µg/L	0.35	0.5	< RL
2,3,4,6-Tetrachlorophenol	58-90-2	µg/L	0.35	0.5	< RL
2,3,5,6-Tetrachlorophenol	935-95-5	µg/L	0.35	0.5	< RL
Pentachlorophenol	87-86-5	µg/L	0.35	0.5	< RL
Conclusion				--	Comply

**Abbreviation:**

- < = less than
- RL = reporting limit
- µg/L = microgram per liter
- mg/kg = milligram per kilogram

AB-0342-T
144416272
04/25

Test Report No.: 144416272

Page 10 of 26

## 7. Dimethyl Formamide (DMFa)

					Sample No.	D001
Parameter	Parameter Code	Test Method	Unit	RL	ZDHC Limit	Result
Dimethyl formamide (DMFa) *	68-12-2	USEPA 8215, USEPA8270E	µg/L	100	1000	< RL
Conclusion						Comply

**Abbreviation:**

< = less than  
RL = reporting limit  
µg/L = microgram per liter

AB-0342-T
144416272
04/25

Test Report No.: 144416272

Page 11 of 26

## 8. Dyes-Carcinogenic or Equivalent Concern

Test method: with reference to DIN 54231 Liquid extraction, LC/MSMS

Parameter	Parameter Code	Unit	Sample No.		D001
			RL	ZDHC Limit	Result
C.I. Direct Black 38	1937-37-7	µg/L	30	500	< RL
C.I. Direct Blue 6	2602-46-2	µg/L	30	500	< RL
C.I. Acid Red 26	3761-53-3	µg/L	30	500	< RL
C.I. Basic Red 9	569-61-9	µg/L	30	500	< RL
C.I. Direct Red 28	573-58-0	µg/L	30	500	< RL
C.I. Basic Violet 14	632-99-5	µg/L	30	500	< RL
C.I. Disperse Blue 1	2475-45-8	µg/L	30	500	< RL
C.I. Disperse Blue 3	2475-46-9	µg/L	30	500	< RL
C.I. Basic Blue 26 (with Michler's Ketone >0.1%)	2580-56-5	µg/L	30	500	< RL
C.I Basic Green 4 (malachite green chloride)	569-64-2	µg/L	30	500	< RL
C.I Basic Green 4 (malachite green oxalate)	2437-29-8	µg/L	30	500	< RL
C.I Basic Green 4 (malachite green)	10309-95-2	µg/L	30	500	< RL
Disperse Orange 11	82-28-0	µg/L	30	500	< RL
Basic violet 3 with >0.1% of Michler's Ketone	548-62-9	µg/L	30	500	< RL
C.I. Acid Violet 49	1694-09-3	µg/L	30	500	< RL
Conclusion					Comply

**Abbreviation:**  
 < = less than  
 RL = reporting limit  
 µg/L = microgram per liter

AB-0342-T
144416272
04/25

Test Report No.: 144416272

Page 12 of 26

## 9. Dyes – Disperse (Sensitizing)

Test method: with reference to DIN 54231 Liquid extraction, LC/MSMS

Parameter	Parameter Code	Unit	RL	Sample No.	D001
				ZDHC Limit	Result
Disperse Yellow 1	119-15-3	µg/L	30	50	< RL
Disperse Blue 102	12222-97-8	µg/L	30	50	< RL
Disperse Blue 106	12223-01-7	µg/L	30	50	< RL
Disperse Yellow 39	12236-29-2	µg/L	30	50	< RL
Disperse Orange 37/59/76	13301-61-6	µg/L	30	50	< RL
Disperse Brown 1	23355-64-8	µg/L	30	50	< RL
Disperse Orange 1	2581-69-3	µg/L	30	50	< RL
Disperse Yellow 3	2832-40-8	µg/L	30	50	< RL
Disperse Red 11	2872-48-2	µg/L	30	50	< RL
Disperse Red 1	2872-52-8	µg/L	30	50	< RL
Disperse Red 17	3179-89-3	µg/L	30	50	< RL
Disperse Blue 7	3179-90-6	µg/L	30	50	< RL
Disperse Blue 26	3860-63-7	µg/L	30	50	< RL
Disperse Yellow 49	54824-37-2	µg/L	30	50	< RL
Disperse Blue 35	12222-75-2	µg/L	30	50	< RL
Disperse Blue 124	61951-51-7	µg/L	30	50	< RL
Disperse Yellow 9	6373-73-5	µg/L	30	50	< RL
Disperse Orange 3	730-40-5	µg/L	30	50	< RL
Disperse Blue 35	56524-77-7	µg/L	30	50	< RL
Conclusion				--	Comply

**Abbreviation:**

< = less than  
 RL = reporting limit  
 µg/L = microgram per liter

AB-0342-T
144416272
04/25

Test Report No.: 144416272

Page 13 of 26

## 10. Dyes – Navy Blue Colorant

Test method: : with reference to DIN 54231, Liquid extraction, LC/MSMS

				Sample No.	D001
Parameter	Parameter Code	Unit	RL	ZDHC Limit	Result
Component 1: C39H23Cl-CrN7O12S 2Na	118685-33-9	µg/L	30	NA	< RL
Component 2: C46H-30CrN10O20S2 3Na	Not Allocated	µg/L	30	NA	< RL
Conclusion					Comply

**Abbreviation:**  
< = less than  
RL = reporting limit  
µg/L = microgram per liter

AB-0342-T
144416272
04/25

Test Report No.: 144416272

Page 14 of 26

## 11. Flame Retardants

Test method: US EPA 8270; ISO 22032; US EPA 527 and US EPA 8321B. Dichloromethane extraction, GC-MS, GC-MS/MS and LC-MS/MS

Boric acid, Diboron trioxide, Disodium octaborate, Disodium tetraborate anhydrous, Tetraboron disodium heptaoxide, hydrate : determined as total Boron via ICP-MS, ISO 17294

Parameter	Parameter Code	Unit	Sample No.		D001
			RL	ZDHC Limit	Result
Tris-(2-chloro-ethyl)-phosphate (TCEP)	115-96-8	µg/L	5	25	< RL
Decabromodiphenyl ether (DecaBDE)	1163-19-5	µg/L	5	25	< RL
Tri-(2,3-di-bromo-propyl)-phosphate (TRIS)	126-72-7	µg/L	5	25	< RL
Pentabromodiphenyl ether (PentaBDE)	32534-81-9	µg/L	5	25	< RL
Octabromodiphenyl ether (OctaBDE)	32536-52-0	µg/L	5	25	< RL
Bis-(2,3-di-bromo-propyl)-phosphate (BIS)	5412-25-9	µg/L	5	25	< RL
Tris(1-aziridinyl)phosphine oxide (TEPA)	545-55-1	µg/L	5	25	< RL
Polybromobiphenyls (PBB)	59536-65-1	µg/L	5	25	< RL
Tetra-bromo-bisphenol-A (TBbi)	79-94-7	µg/L	5	25	< RL
Hexabromocyclododecan (HBCDD)	3194-55-6	µg/L	5	25	< RL
2,2-bis(bromomethyl)-1,3-propanediol (BBMP)	3296-90-0	µg/L	5	25	< RL
Tris-(1,3-di-chloro-iso-propyl)-phosphate (TDCP)	13674-87-8	µg/L	5	25	< RL
Tris-(2-chloro-1-methylethyl) phosphate (TCPP)	13674-84-5	µg/L	5	25	< RL
Decabromobiphenyl (DecaBB)	13654-09-6	µg/L	5	25	< RL
Dibromobiphenyls (DiBB)	Multiple	µg/L	5	25	< RL
Octabromobiphenyls (OctaBB)	Multiple	µg/L	5	25	< RL
Tetrabromobisphenol A bis(dibromopropyl ether)	21850-44-2	µg/L	5	25	< RL
Heptabromodiphenyl ether (HeptaBDE)	68928-80-3	µg/L	5	25	< RL
Hexabromodiphenyl ether (HexaBDE)	36483-60-0	µg/L	5	25	< RL
Monobromobiphenyls (MonoBB)	Multiple	µg/L	5	25	< RL
Monobromodiphenylethers Multiple (MonoBDEs)	Multiple	µg/L	5	25	< RL
Nonabromobiphenyls (NonaBB)	Multiple	µg/L	5	25	< RL
Nonabromodiphenyl ether (NonaBDE)	63936-56-1	µg/L	5	25	< RL
Tetrabromodiphenyl ether (TetraBDE)	40088-47-9	µg/L	5	25	< RL
Tribromodiphenylethers (TriBDEs)	Multiple	µg/L	5	25	< RL
Boric acid	10043-35-3; 11113-50-1	µg/L	50	500	< RL
Diboron trioxide	1303-86-2	µg/L	50	500	< RL
Disodium octaborate	12008-41-2	µg/L	50	500	< RL
Disodium tetraborate anhydrous	1303-96-4; 1330-43-4	µg/L	50	500	< RL
Tetraboron disodium heptaoxide, hydrate	12267-73-1	µg/L	50	500	< RL
Conclusion					Comply

AB-0342-T
144416272
04/25

Test Report No.: 144416272

Page 15 of 26

## 12. Glycols/Glycol Ethers

Test Method: US EPA 8270E, Liquid Extraction, GCMS

Parameter	Parameter Code	Unit	RL	Sample No.	
				ZDHC Limit	D001 Result
Bis(2-methylethyl)ether	111-96-6	µg/L	30	50	< RL
2-Ethoxyethanol	110-80-5	µg/L	30	50	< RL
2-Ethoxyethyl acetate	111-15-9	µg/L	30	50	< RL
Ethylene glycol dimethyl ether	110-71-4	µg/L	30	50	< RL
2-Methoxyethanol	109-86-4	µg/L	30	50	< RL
2-Methoxyethyl acetate	110-49-6	µg/L	30	50	< RL
2-Methoxypropyl acetate	70657-70-4	µg/L	30	50	< RL
Triethylene Glycol Dimethyl Ether	112-49-2	µg/L	30	50	< RL
Conclusion				--	Comply

**Abbreviation:**  
 < = less than  
 RL = reporting limit  
 µg/L = microgram per liter

## 13. Halogenated Solvents

Test method: USEPA 5030 C, USEPA 8260 D Purge and-Trap GC-MS

Parameter	Parameter Code	Unit	RL	Sample No.	
				ZDHC Limit	R001 Result
1,2-dichloroethane	107-06-2	µg/L	0.5	1	< RL
Methylene chloride	75-09-2	µg/L	0.5	1	< RL
Trichloroethylene	79-01-6	µg/L	0.5	1	< RL
Tetrachloroethylene	127-18-4	µg/L	0.5	1	< RL
Conclusion				--	Comply

**Abbreviation:**  
 < = less than  
 RL = reporting limit  
 µg/L = microgram per liter

AB-0342-T
144416272
04/25

Test Report No.: 144416272

Page 16 of 26

#### 14. Organotin Compounds

Test Method: ISO 17353, Derivatisation with Sodium tetraethylborate, GC/MS

Parameter	Parameter Code	Unit	RL	Sample No.	D001
				ZDHC Limit	Result
Mono-,di-and tri-methyltin derivatives	Multiple	µg/L	0.005	0.01	< RL
Mono-,di-and tri-butyltin derivatives	Multiple	µg/L	0.005	0.01	< RL
Mono-,di-and tri-phenyltin derivatives	Multiple	µg/L	0.005	0.01	< RL
Mono-,di-and tri-octyltin derivatives	Multiple	µg/L	0.005	0.01	< RL
Dipropyltin compounds (DPT)	Multiple	µg/L	0.005	0.01	< RL
Tetrabutyltin compounds (TeBT)	Multiple	µg/L	0.005	0.01	< RL
Tripropyltin Compounds (TPT)	Multiple	µg/L	0.005	0.01	< RL
Tetraoctyltin compounds (TeOT)	Multiple	µg/L	0.005	0.01	< RL
Tricyclohexyltin (TCyHT)	Multiple	µg/L	0.005	0.01	< RL
Tetraethyltin Compounds (TeET)	Multiple	µg/L	0.005	0.01	< RL
Conclusion				--	Comply

**Abbreviation:**

- < = less than
- RL = reporting limit
- µg/L = microgram per liter

AB-0342-T
144416272
04/25

Test Report No.: 144416272

Page 17 of 26

### 15. Other / Miscellaneous Chemicals

Test Method: Liquid extraction with LC-MSMS

Borate,zinc salt: determined as total Boron and Total Zinc via ICP-MS, DIN EN ISO 17294-2

Parameter	Parameter Code	Unit	RL	Sample No.	
				ZDHC Limit	D001 Result
AEEA [2-(2-aminoethylamino) ethanol]	111-41-1	µg/L	100	500	< RL
Bisphenol A	80-05-7	µg/L	5	10	< RL
Thiourea	62-56-6	µg/L	30	50	< RL
Quinoline	91-22-5	µg/L	0.1	50	< RL
Borate, zinc salt	12767-90-7	µg/L	50	100	< RL
Conclusion					Comply

**Abbreviation:**

- < = less than
- RL = reporting limit
- µg/L = microgram per liter

AB-0342-T
144416272
04/25

Test Report No.: 144416272

Page 18 of 26

### 16. Perfluorinated and Polyfluorinated Chemicals (PFCs)

Parameter	Parameter Code	Test Method	Unit	Sample No.		Result
				RL	ZDHC Limit	
Perfluorooctane sulfonate (PFOS) and related substances	Multiple	USEPA 8270 DIN 38407-42 (modified), Ionic PFC: Concentration or direct injection, LC/MS (-MS); Non-ionic PFC	µg/L	0.007	0.01	< RL
Perfluorooctanoic acid (PFOA) and related substances	Multiple	(FTOH): derivatisation with acetic anhydride followed by GC/MS	µg/L	0.007	1	< RL
Conclusion						Comply

**Abbreviation:**  
 < = less than  
 RL = reporting limit  
 µg/L = microgram per liter

AB-0342-T
144416272
04/25

Test Report No.: 144416272

Page 19 of 26

### 17. Phthalates – Including all other esters of phthalic acid

Test Method: EPA 8270E EPA 3510C ISO 18856 with GC-MS

Parameter	Parameter Code	Unit	RL	Sample No.	D001
				ZDHC Limit	Result
Di(ethylhexyl)phthalate (DEHP)	117-81-7	µg/L	5	10	< RL
Bis (2-methoxyethyl) phthalate (DMEP)	117-82-8	µg/L	5	10	< RL
Di-n-octyl phthalate (DNOP)	117-84-0	µg/L	5	10	< RL
Di-iso-decyl phthalate (DIDP)	26761-40-0	µg/L	5	10	< RL
Di-isononyl phthalate (DINP)	28553-12-0	µg/L	5	10	< RL
Di-n-hexyl phthalate (DnHP)	84-75-3	µg/L	5	10	< RL
Di-n-butyl phthalate (DBP)	84-74-2	µg/L	5	10	< RL
Butyl benzyl phthalate (BBP)	85-68-7	µg/L	5	10	< RL
Dinonyl phthalate (DNP)	84-76-4	µg/L	5	10	< RL
Diethyl phthalate (DEP)	84-66-2	µg/L	5	10	< RL
Di-n-propyl phthalate (DPRP)	131-16-8	µg/L	5	10	< RL
Di-isobutyl phthalate (DIBP)	84-69-5	µg/L	5	10	< RL
Di-cyclohexyl phthalate (DCHP)	84-61-7	µg/L	5	10	< RL
Di-iso-octyl phthalate (DIOP)	27554-26-3	µg/L	5	10	< RL
1,2-benzenedicarboxylic acid, di-C7-11-branched and linearalkyl esters (DHNUP)	68515-42-4	µg/L	5	10	< RL
1,2-benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6	µg/L	5	10	< RL
Di-n-pentylphthalates	131-18-0	µg/L	5	10	< RL
Diisopentylphthalates	605-50-5	µg/L	5	10	< RL
Conclusion				--	Comply

**Abbreviation:**  
 < = less than  
 RL = reporting limit  
 µg/L = microgram per liter

AB-0342-T
144416272
04/25

Test Report No.: 144416272

Page 20 of 26

### 18. Polycyclic Aromatic Hydrocarbons (PAHs)

Test Method: EPA 610 DIN 38407-39 EPA 3510C Solvent extraction GC-MS

Parameter	Parameter Code	Unit	RL	Sample No.	D001
				ZDHC Limit	Result
Benzo(a)pyrene	50-32-8	µg/L	0.1	1	< RL
Anthracene	120-12-7	µg/L	0.1	1	< RL
Pyrene	129-00-0	µg/L	0.1	1	< RL
Benzo[ghi]perylene	191-24-2	µg/L	0.1	1	< RL
Benzo(e)pyrene	192-97-2	µg/L	0.1	1	< RL
Indeno[1,2,3-cd]pyrene	193-39-5	µg/L	0.1	1	< RL
Benzo(j)fluoranthene	205-82-3	µg/L	0.1	1	< RL
Benzo[b]fluoranthene	205-99-2	µg/L	0.1	1	< RL
Fluoranthene	206-44-0	µg/L	0.1	1	< RL
Benzo[k]fluoranthene	207-08-9	µg/L	0.1	1	< RL
Acenaphthylene	208-96-8	µg/L	0.1	1	< RL
Chrysene	218-01-9	µg/L	0.1	1	< RL
Dibenz(a,h)anthracene	53-70-3	µg/L	0.1	1	< RL
Benzo[a]anthracene	56-55-3	µg/L	0.1	1	< RL
Acenaphthene	83-32-9	µg/L	0.1	1	< RL
Phenanthrene	85-01-8	µg/L	0.1	1	< RL
Fluorene	86-73-7	µg/L	0.1	1	< RL
Naphthalene	91-20-3	µg/L	0.1	1	< RL
Conclusion				--	Comply

AB-0342-T
144416272
04/25

Test Report No.: 144416272

Page 21 of 26

### 19. Restricted Aromatic Amines(Cleavable from Azo)

Test method: with reference to ISO EN 14362-1, ISO EN 14362-3, Reduction step with Sodiumdithionite, solvent extraction, GC/MS or LC-MS/MS

Parameter	Parameter Code	Unit	RL	ZDHC Limit	Result
4,4'-Methylene-bis(2-chloroaniline)	101-14-4	µg/L	0.05	0.1	< RL
4,4'-Diaminodiphenylmethane	101-77-9	µg/L	0.05	0.1	< RL
4,4'-Oxydianiline	101-80-4	µg/L	0.05	0.1	< RL
4-Chloroaniline	106-47-8	µg/L	0.05	0.1	< RL
3,3'-Dimethoxybenzidine	119-90-4	µg/L	0.05	0.1	< RL
3,3'-Dimethylbenzidine	119-93-7	µg/L	0.05	0.1	< RL
6-methoxy-m-toluidine	120-71-8	µg/L	0.05	0.1	< RL
2,4,5-Trimethylaniline	137-17-7	µg/L	0.05	0.1	< RL
4,4'-Thiodianiline	139-65-1	µg/L	0.05	0.1	< RL
4-Aminoazobenzene	60-09-3	µg/L	0.05	0.1	< RL
4-Methoxy-m-phenylenediamine	615-05-4	µg/L	0.05	0.1	< RL
4,4'-methylenedi-o-toluidine	838-88-0	µg/L	0.05	0.1	< RL
2,6-Xylidine	87-62-7	µg/L	0.05	0.1	< RL
o-Anisidine	90-04-0	µg/L	0.05	0.1	< RL
2-Naphthylamine	91-59-8	µg/L	0.05	0.1	< RL
3,3'-Dichlorobenzidine	91-94-1	µg/L	0.05	0.1	< RL
4-Aminobiphenyl	92-67-1	µg/L	0.05	0.1	< RL
Benzidine	92-87-5	µg/L	0.05	0.1	< RL
o-Toluidine	95-53-4	µg/L	0.05	0.1	< RL
2,4-Xylidine	95-68-1	µg/L	0.05	0.1	< RL
4-Chloro-o-toluidine	95-69-2	µg/L	0.05	0.1	< RL
4-methyl-m-phenylenediamine	95-80-7	µg/L	0.05	0.1	< RL
o-Aminoazotoluene	97-56-3	µg/L	0.05	0.1	< RL
5-Nitro-o-toluidine	99-55-8	µg/L	0.05	0.1	< RL
4-chloro-o-toluidinium chloride	3165-93-3	µg/L	0.05	0.1	< RL
2-Naphthylammonium acetate	553-00-4	µg/L	0.05	0.1	< RL
4-methoxy-m-phenylene diammonium sulphate	39156-41-7	µg/L	0.05	0.1	< RL
2,4,5-trimethylaniline hydrochloride	21436-97-5	µg/L	0.05	0.1	< RL
Conclusion				--	Comply

**Abbreviation:**  
 < = less than  
 RL = reporting limit  
 µg/L = microgram per liter

AB-0342-T
144416272
04/25

Test Report No.: 144416272

Page 22 of 26

## 20. UV Absorbers

Parameter	Parameter Code	Test Method	Unit	Sample No.		D001
				RL	ZDHC Limit	Result
2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl) phenol (UV-350)	36437-37-3	Liquid extraction, LC-MS-MS	µg/L	100	100	< RL
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	Liquid extraction, LC-MS-MS	µg/L	100	100	< RL
2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	Liquid extraction, LC-MS-MS	µg/L	100	100	< RL
2,4-Di-tert-butyl-6-(5-chlorobenzotriazole-2-yl) phenol (UV-327)	3864-99-1	Liquid extraction, LC-MS-MS	µg/L	100	100	< RL
Conclusion						Comply

### Abbreviation:

< = less than  
 RL = reporting limit  
 µg/L = microgram per liter

AB-0342-T
144416272
04/25

Test Report No.: 144416272

Page 23 of 26

## 21. Volatile Organic Compounds (VOC)

Test method: EPA 5030C 8260D, Purge and Trap GC-MS

Parameter	Parameter Code	Unit	RL	Sample No.	D001
				ZDHC Limit	Result
Benzene	71-43-2	µg/L	0.5	1	< RL
Xylene	1330-20-7	µg/L	0.5	1	< RL
o-cresol	95-48-7	µg/L	0.5	1	< RL
p-cresol	106-44-5	µg/L	0.5	1	< RL
m-cresol	108-39-4	µg/L	0.5	1	< RL
Toluene*	108-88-3	µg/L	0.5	1	< RL
Conclusion				--	Comply

**Abbreviation:**  
< = less than  
RL = reporting limit  
µg/L = microgram per liter

AB-0342-T
144416272
04/25

Test Report No.: 144416272

Page 24 of 26

**Sampling Photo**



AB-0342-T
144416272
04/25

Test Report No.: 144416272

Page 25 of 26

## APPENDIX A Legal Limits

pH	°C	KOI COD mg/l	BOI BOD mg/l	AKM SS mg/l	TN mg/l	TP mg/l	NH <sub>4</sub> -N mg/l
6-9	15-30	1000	400	300	43	5,7	-

Cd mg/l	Fe mg/l	TCr mg/l	Cr+6 mg/l	TCn mg/l	F mg/l	Cu mg/l	Zn mg/l	RENK Pt- Co	Yağ Gres mg/l
<0,1	<10	<2	<0,5	<1	<15	<3	<5	-	<10

AB-0342-T
144416272
04/25

## APPENDIX B Wastewater Sampling Plan

**Appendix E**

**ZDHC Wastewater Sampling Field Data Form and Representative Sample Declaration**

**Sampling Collection Information**  
 Sampling Location: *Elyaf Tekstil*  
 Sampling Device Description/Owner:  
 Sampling Mode:  AutoSampler = Manual  
 Start Time: *08:30*  
 Stop Time: *16:30*

**Sampler Information**  
 Date: *09.10.2025*  
 Sampler Name/Email:  
 Sampler ZDHC Accredited no.:  
 ZDHC Composite Sample Code:

ZDHC Wastewater Sampling Field Testing QA/QC			
Parameter	LCS Known	LCS Measured	Accuracy %
pH	—	—	—
Total Chlorine	—	—	—

  

ZDHC Wastewater Sample Collection Field Test Measurements									
Sampling Time (hour)	Temperature (°C)		pH (6/10)	Dissolved Oxygen (mg/L)	Total Chlorine (mg/L)	Persistent Foam (Yes/No)	Wastewater Flow rate (L/min)	Alternate measured flow	
	Wastewater Discharge	Receiving Water						Depth (cm)	Velocity (m/sec)
0	<i>20</i>		<i>9.3</i>			<i>NO</i>			
1	<i>20</i>		<i>9.3</i>						
2	<i>25</i>		<i>9.5</i>						
3	<i>27</i>		<i>8.9</i>						
4	<i>28</i>		<i>8.9</i>						
5	<i>25</i>		<i>8.8</i>						
6	<i>26</i>		<i>8.6</i>						
Ave*	<i>27</i>		<i>8.7</i>						

\*reported with lab data

**ZDHC Wastewater Flow Device Dimensions**

Measurement (mm)	Meter	Pipe (O)	Flume (L)	Wfer (M)
Diameter	NA	—	—	—
Depth	NA	NA	NA	—

**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.

Facility Name:  
 Facility Representative Name: *Selin Jankovic*  
 Facility Representative Signature and Stamp: *Elyaf Tekstil San. ve Tic. A.Ş.*  
Şişli-Beşiktaş Mah. 052. Mah. Beşiktaş Cad. No:119  
 34410, Beşiktaş/İSTANBUL  
 Tel: +90 212 291 5621, 5620 (gözetim)  
 E-posta: info@elyaf.com.tr

Sampler's Name: *Özgür Şimşek*  
 Sampler's ZDHC Accreditation: *ZDHC-A-24-E-C001068-R493A-12F88*  
 Sampler's Signature: *Özgür Şimşek*

ZDHC Wastewater and Sludge Laboratory Sampling and Analysis Plan (SAP) Appendix E, Version 2.1 | November 2022
ZDHC Wastewater and Sludge Laboratory Sampling and Analysis Plan (SAP) Appendix E, Version 2.1 | November 2022

- END -