



# TEST REPORT

## Technical Report

(7222)213-0110

August 15<sup>th</sup>,2022

Date Received

August 2<sup>nd</sup>,2022

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Factory Company Name:

GULIPEK KUMAS VE IPLIK SAN. VE TIC. A.S.

Factory Address:

KALE MAH. KILICLAR CAD. NO:11/1 16450 KESTEL-BURSA/TURKEY

Sampling Method:

I001) Raw Wastewater – 6 hours - Time – weighted Composite

Sample Pick Up Date:

August 2<sup>nd</sup>,2022

Wastewater Discharge to:

Centralized ETP

On-Site Effluent Treatment Plant (ETP):

No

Discharge Type:

Indirect Discharge

Off-site ETP name

Uludag Organized Industrial Zone

(if applicable):

Off-site ETP address

Kurtulus Mah. Ataturk Cad. No: 218 Gursu/Bursa

(if applicable):

Local Regulation: / Ordinance / requirements related to wastewater discharged are followed:

N/A

Permit Validation Date:

15/09/2022

Parameters Exceeded Local Regulation

Legal compliance:

Legal Compliance

Conventional Parameters:

Meet discharge license criteria

MRSL Parameters:

Not Detected

Test Period:

August 3<sup>rd</sup>,2022-August 14<sup>th</sup>,2022

Sample Description:

I001) Purple liquid– Raw Wastewater

Parameters exceeded maximum holding time:

NA

## Bureau Veritas

Consumer Products Services, Inc.

Yalçın Koraş Caddesi No:22 Erdiç Binaları A Blok

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**REMARK1:** The factory discharges its wastewater to the Uludag Organized Industrial Zone. This report has not been compared according to Uludag Organized Industrial Zone limits because Uludag Organized Industrial Zone does not request limit values from this factory.

**REMARK**

If there are questions or concerns on this report, please contact the following persons:

General enquiry and invoicing

Kerem Can

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Technical enquiry-Chemical

Ayca Cevikus

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This report shown the test result of the auxiliary chemical and/or raw material samples, which collected during particular factory audit. The results of this report shall not be used for any regulatory compliance purposes.

\* The sampling is agreed with client.

**BUREAU VERITAS CONSUMER PRODUCTS SERVICES TEST LABORATUVARLARI LTD. STI**

PREPARED BY:

**Ayca Cevikus**  
**MEA CDM & CSR**  
**Manager**

**Kerem Can**  
**General Manager, CPS Turkey**

## Executive Summary

<b>1A) Conventional Parameters</b>	<b>I001</b>
Temperature	NR
TSS	
COD	
Total-N	
pH Value	
Color [m <sup>-1</sup> ] (436nm; 525nm; 620nm)	
BOD <sub>5</sub>	
Ammonium-N	
Total-P	
AOX	
Oil and Grease	
Phenol	
Coliform	
Persistent Foam	
ANIONS - Cyanide	
ANIONS - Sulfide	
ANIONS - Sulfite	
Dry mass (total solids)	NR
<b>1B) Conventional Parameters – METALS</b>	NA

<b>ZDHC MRSL Substances</b>	<b>I001</b>
2A) APs and APEOs	ND
2B) Chlorobenzenes and Chlorotoluenes	ND
2C) Chlorophenols	ND
2D) Azo Dyes	ND
2E) Carcinogenic Dyes	ND
2F) Disperse Dyes	ND
2G) Flame Retardants	ND
2H) Glycols	ND
2I) Halogenated Solvents	ND
2J) Organotin Compounds	ND
2K) Perfluorinated and Polyfluorinated Chemicals	ND
2L) Phthalates	ND
2M) Polycyclic Aromatic Hydrocarbons	ND
2N) Volatile Organic Compounds	ND

### Note / Key :

- ☐ - Meet discharge license criteria
- ☒ - Exceed discharge license criteria
- NR - Not Requested / Not required
- D** - Detected
- ND - Not Detected
- NA - Not Applicable



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## **Objective**

The environment samples were tested for below parameters.

- 1B) Conventional Parameters – METALS
- 2A) APs and APEOs
- 2B) Chlorobenzenes and Chlorotoluenes
- 2C) Chlorophenols
- 2D) Azo Dyes
- 2E) Carcinogenic Dyes
- 2F) Disperse Dyes
- 2G) Flame Retardants
- 2H) Glycols
- 2I) Halogenated Solvents
- 2J) Organotin Compounds
- 2K) Perfluorinated and Polyfluorinated Chemicals
- 2L) Phthalates
- 2M) Polycyclic Aromatic Hydrocarbons
- 2N) Volatile Organic Compounds

## **Sampling Plan**

One environment sample was sampled per factory, including 1) Raw wastewater. Total number of sample collected will be depended on the actual factory facilities and manufacturing processes.

Method of sampling used is time-weighted composite grab samples (agreed with client). Composite sampling shall be performed for no less than six hours, with no more than one hour between discrete samples. Each discrete sample shall be of equal volume. Wastewater and freshwater samples should, as much as possible, be collected simultaneously, during the time that PU is in normal operation. The sampling shall aim to analyse the snapshot of water quality characteristics of the operating PU. Under no circumstance shall samples be taken during times when the production process is not running or the wastewater is diluted due to heavy rainfall, etc.

Remark :

- Sampling procedure refers to ZDHC Wastewater and Sludge Laboratory Sampling and Analysis Plan
- Field data records are attached in Appendix C.



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## Test Result

### **Parameters - METALS**

<b>Parameter</b>	<b>1001 (mg/L)</b>
<b>Antimony (Sb)</b>  Direct Discharge Limit: Foundational 0.1 mg/L; Progressive 0.05 mg/L; Aspirational 0.01 mg/L  Indirect Discharge Limit: Not applicable	0.107
<b>Chromium (Cr), total</b>  Direct Discharge Limit: Foundational 0.1 mg/L; Progressive 0.05 mg/L; Aspirational 0.01 mg/L  Indirect Discharge Limit: Not applicable	0.013
<b>Cobalt (Co)</b>  Direct Discharge Limit: Foundational 0.1 mg/L; Progressive 0.05 mg/L; Aspirational 0.01 mg/L  Indirect Discharge Limit: Not applicable	0.00115
<b>Copper (Cu)</b>  Direct Discharge Limit: Foundational 0.1 mg/L; Progressive 0.05 mg/L; Aspirational 0.01 mg/L  Indirect Discharge Limit: Not applicable	0.036
<b>Nickel (Ni)</b>  Direct Discharge Limit: Foundational 0.1 mg/L; Progressive 0.05 mg/L; Aspirational 0.01 mg/L  Indirect Discharge Limit: Not applicable	0.0078
<b>Silver (Ag)</b>  Direct Discharge Limit: Foundational 0.1 mg/L; Progressive 0.05 mg/L; Aspirational 0.01 mg/L  Indirect Discharge Limit: Not applicable	ND
<b>Zinc (Zn)</b>  Direct Discharge Limit: Foundational 0.1 mg/L; Progressive 0.05 mg/L; Aspirational 0.01 mg/L  Indirect Discharge Limit: Not applicable	0.312



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Parameter	I001 (mg/L)
<b>Arsenic (As)</b>  Direct Discharge Limit: Foundational 0.1 mg/L; Progressive 0.05 mg/L; Aspirational 0.01 mg/L  Indirect Discharge Limit: Not applicable	ND
<b>Cadmium (Cd)</b>  Direct Discharge Limit: Foundational 0.1 mg/L; Progressive 0.05 mg/L; Aspirational 0.01 mg/L  Indirect Discharge Limit: Not applicable	ND
<b>Chromium VI (CrVI)</b>  Direct Discharge Limit: Foundational 0.1 mg/L; Progressive 0.05 mg/L; Aspirational 0.01 mg/L  Indirect Discharge Limit: Not applicable	ND
<b>Lead (Pb)</b>  Direct Discharge Limit: Foundational 0.1 mg/L; Progressive 0.05 mg/L; Aspirational 0.01 mg/L  Indirect Discharge Limit: Not applicable	ND
<b>Mercury (Hg)</b>  Direct Discharge Limit: Foundational 0.1 mg/L; Progressive 0.05 mg/L; Aspirational 0.01 mg/L  Indirect Discharge Limit: Not applicable	0.00045



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Others Priority Chemical Groups

	<b>I001 (µg/L)</b>
2A) APs and APEOs	ND
2B) Chlorobenzenes and Chlorotoluenes	ND
2C) Chlorophenols	ND
2D) Azo Dyes	ND
2E) Carcinogenic Dyes	ND
2F) Disperse Dyes	ND
2G) Flame Retardants	ND
2H) Glycols	ND
2I) Halogenated Solvents	ND
2J) Organotin Compounds	ND
2K) Perfluorinated and Polyfluorinated Chemicals	ND
2L) Phthalates	ND
2M) Polycyclic Aromatic Hydrocarbons	ND
2N) Volatile Organic Compounds	ND

Remark :

- Test method, reporting limit and list of chemical are summarized in Appendix B.
- ND = Not detected (Please refer to reporting limit shown in Appendix B).

**APPENDIX A - Photo of the Sample/ Sampling Location**

I001) Sampling Point  
N/S 40° 12' 25.04"  
E/W 29° 12' 31.04"



I001) Sampling Point Surrounding Environment  
N/S 40° 12' 25.04"  
E/W 29° 12' 31.04"



I001) All sampled bottles with label



I001) pH value



I001) Sample for Phthalate Testing



I001) Packaging







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## APPENDIX B

Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)	Sludge (mg/kg)	
2A. Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): including all isomers	Nonylphenol NP, mixed isomers	Various (incl. 104-40-5, 11066-49-2, 25154-52-3, 84852-15-3)	5	0.4	NP/OP: ISO 18857-2 (modified dichloromethane extraction) or ASTM D7065 (GC/MS or LC/MS(-MS))  OPEO/NPEO: ISO18857-2 or ASTM D7065(LC/MS; GC/MS or LC/MSMS for n=1,2)  APEO 1-18
	Octylphenol OP, mixed isomers	Various (incl. 140-66-9, 1806-26-4, 27193-28-8)	5	0.4	
	Octylphenol ethoxylates (OPEO)	Various (incl. 9002-93-1, 9036-19-5, 68987-90-6)	5	0.4	
	Nonylphenol ethoxylates (NPEO)	Various (inc. 9016-45-9, 26027-38-3, 37205-87-1, 68412-54-4, 127087-87-0)	5	0.4	
2B. Chlorobenzenes and Chlorotoluenes	Monochlorobenzene	108-90-7	0.2	0.2	USEPA 8260B, 8270D. Dichloromethane extraction followed by GC/MS
	1,2-Dichlorobenzene	95-50-1	0.2	0.2	
	1,3-Dichlorobenzene	541-73-1	0.2	0.2	
	1,4-Dichlorobenzene	106-46-7	0.2	0.2	
	1,2,3-Trichlorobenzene	87-61-6	0.2	0.2	
	1,2,4-Trichlorobenzene	120-82-1	0.2	0.2	
	1,3,5-Trichlorobenzene	108-70-3	0.2	0.2	
	1,2,3,4-Tetrachlorobenzene	634-66-2	0.2	0.2	
	1,2,3,5-Tetrachlorobenzene	634-90-2	0.2	0.2	
	1,2,4,5-Tetrachlorobenzene	95-94-3	0.2	0.2	
	Pentachlorobenzene	608-93-5	0.2	0.2	
	Hexachlorobenzene	118-74-1	0.2	0.2	
	2-Chlorotoluene	95-49-8	0.2	0.2	
	3-Chlorotoluene	108-41-8	0.2	0.2	
	4-Chlorotoluene	106-43-4	0.2	0.2	
	2,3-Dichlorotoluene	32768-54-0	0.2	0.2	
	2,4-Dichlorotoluene	95-73-8	0.2	0.2	
	2,5-Dichlorotoluene	19398-61-9	0.2	0.2	
	2,6-Dichlorotoluene	118-69-4	0.2	0.2	
	3,4-Dichlorotoluene	95-75-0	0.2	0.2	
	3,5-Dichlorotoluene	25186-47-4	0.2	0.2	
	2,3,4-Trichlorotoluene	7359-72-0	0.2	0.2	
	2,3,6-Trichlorotoluene	2077-46-5	0.2	0.2	
	2,4,5-Trichlorotoluene	6639-30-1	0.2	0.2	
	2,4,6-Trichlorotoluene	23749-65-7	0.2	0.2	
	3,4,5-Trichlorotoluene	21472-86-6	0.2	0.2	
	2,3,4,5-Tetrachlorotoluene	76057-12-0	0.2	0.2	
	2,3,5,6-Tetrachlorotoluene	29733-70-8	0.2	0.2	
	2,3,4,6-Tetrachlorotoluene	875-40-1	0.2	0.2	
	Pentachlorotoluene	877-11-2	0.2	0.2	
2C. Chlorophenols	2-Chlorophenol	95-57-8	0.5	0.05	USEPA 8270 D Solvent extraction, derivatisation with KOH, acetic anhydride followed by GC/MS
	3-Chlorophenol	108-43-0	0.5	0.05	
	4-Chlorophenol	106-48-9	0.5	0.05	
	2,3-Dichlorophenol	576-24-9	0.5	0.05	
	2,4-Dichlorophenol	120-83-2	0.5	0.05	
	2,5-Dichlorophenol	583-78-8	0.5	0.05	
	2,6-Dichlorophenol	87-65-0	0.5	0.05	
	3,4-Dichlorophenol	95-77-2	0.5	0.05	
	3,5-Dichlorophenol	591-35-5	0.5	0.05	



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Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)	Sludge (mg/kg)	
	2,3,4-Trichlorophenol	15950-66-0	0.5	0.05	
	2,3,5-Trichlorophenol	933-78-8	0.5	0.05	
	2,3,6-Trichlorophenol	933-75-5	0.5	0.05	
	2,4,5-Trichlorophenol	95-95-4	0.5	0.05	
	2,4,6-Trichlorophenol	88-06-2	0.5	0.05	
	3,4,5-Trichlorophenol	609-19-8	0.5	0.05	
	2,3,4,5-Tetrachlorophenol	4901-51-3	0.5	0.05	
	2,3,4,6-Tetrachlorophenol	58-90-2	0.5	0.05	
	2,3,5,6-Tetrachlorophenol	935-95-5	0.5	0.05	
	Pentachlorophenol (PCP)	87-86-5	0.5	0.05	
2D. Dyes - Azo (Forming Restricted Amines)	4,4'-Methylene-bis-(2-chloro-aniline)	101-14-4	0.1	0.2	EN 14362. Reduction step with Sodiumdithionite, solvent extraction, GC/MS or LC/MS
	4,4'-methylenedianiline	101-77-9	0.1	0.2	
	4,4'-Oxydianiline	101-80-4	0.1	0.2	
	4-Chloroaniline	106-47-8	0.1	0.2	
	3,3'-Dimethoxybenzidine	119-90-4	0.1	0.2	
	3,3'-Dimethylbenzidine	119-93-7	0.1	0.2	
	6-methoxy-m-toluidine (p-Cresidine)	120-71-8	0.1	0.2	
	2,4,5-Trimethylaniline	137-17-7	0.1	0.2	
	4,4'-Thiodianiline	139-65-1	0.1	0.2	
	4-Aminoazobenzene	60-09-3	0.1	0.2	
	4-Methoxy-m-phenylenediamine	615-05-4	0.1	0.2	
	4,4'-Methylene-di-o-toluidine	838-88-0	0.1	0.2	
	2,6-Xyldine	87-62-7	0.1	0.2	
	o-Anisidine	90-04-0	0.1	0.2	
	2-Naphthylamine	91-59-8	0.1	0.2	
	3,3'-Dichlorobenzidine	91-94-1	0.1	0.2	
	4-Aminodiphenyl	92-67-1	0.1	0.2	
	Benzidine	92-87-5	0.1	0.2	
	o-Toluidine	95-53-4	0.1	0.2	
	2,4-Xyldine	95-68-1	0.1	0.2	
	4-Chloro-o-toluidine	95-69-2	0.1	0.2	
	4-Methyl-m-phenylenediamine	95-80-7	0.1	0.2	
	o-Aminoazotoluene	97-56-3	0.1	0.2	
	5-nitro-o-toluidine	99-55-8	0.1	0.2	
2E. Dyes- Carcinogenic or Equivalent Concern	C.I. Direct Black 38	1937-37-7	500	10	Liquid Extraction LC/MS
	C.I. Direct Blue 6	2602-46-2	500	10	
	C.I. Acid Red 26	3761-53-3	500	10	
	C.I. Basic Red 9	569-61-9	500	10	
	C.I. Direct Red 28	573-58-0	500	10	
	C.I. Basic Violet 14	632-99-5	500	10	
	C.I. Disperse Blue 1	2475-45-8	500	10	
	C.I. Disperse Blue 3	2475-46-9	500	10	
	C.I. Basic Blue 26 (with Michler's Ketone > 0.1%)	2580-56-5	500	10	
	C.I. Basic Green 4 (malachite green chloride)	569-64-2	500	10	
	C.I. Basic Green 4 (malachite green oxalate)	2437-29-8	500	10	
	C.I. Basic Green 4 (malachite green)	10309-95-2	500	10	
	Disperse Orange 11	82-28-0	500	10	



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Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)	Sludge (mg/kg)	
2F. Dyes-disperse (sensitizing)	Disperse Yellow 1	119-15-3	50	2	Liquid Extraction LC/MS
	Disperse Blue 102	12222-97-8	50	2	
	Disperse Blue 106	12223-01-7	50	2	
	Disperse Yellow 39	12236-29-2	50	2	
	Disperse Orange 37/59/76	13301-61-6	50	2	
	Disperse Brown 1	23355-64-8	50	2	
	Disperse Orange 1	2581-69-3	50	2	
	Disperse Yellow 3	2832-40-8	50	2	
	Disperse Red 11	2872-48-2	50	2	
	Disperse Red 1	2872-52-8	50	2	
	Disperse Red 17	3179-89-3	50	2	
	Disperse Blue 7	3179-90-6	50	2	
	Disperse Blue 26	3860-63-7	50	2	
	Disperse Yellow 49	54824-37-2	50	2	
	Disperse Blue 35	12222-75-2	50	2	
	Disperse Blue 124	61951-51-7	50	2	
	Disperse Yellow 9	6373-73-5	50	2	
	Disperse Orange 3	730-40-5	50	2	
	Disperse Blue 35	56524-77-7	50	2	
2G. Flame Retardants	Tris(2-chloroethyl) phosphate (TCEP)	115-96-8	5	1	ISO 22032, USEPA527 and USEPA8321B. Dichloromethane extraction GC/MS or LC/MS(-MS)
	Decabromodiphenyl ether (DecaBDE)	1163-19-5	5	1	
	Tris(2,3-dibromopropyl) phosphate (TRIS/TDBPP)	126-72-7	5	1	
	Pentabromodiphenyl ether (PentaBDE)	32534-81-9	5	1	
	Octabromodiphenyl ether (OctaBDE)	32536-52-0	5	1	
	Bis(2,3-dibromopropyl) phosphate (BIS/BDBPP)	5412-25-9	5	1	
	Tris(aziridinyl)-phosphineoxide (TEPA)	545-55-1	5	1	
	Polybromobiphenyls (PBBs)	59536-65-1	5	1	
	Tetrabromobisphenol A (TBBPA)	79-94-7	5	1	
	Hexabromocyclododecane (HBCDD)	3194-55-6	5	1	
	2,2-Bis(bromomethyl)-1,3-propanediol (BBMP)	3296-90-0	5	1	
	Tris(1,3-dichloro-isopropyl) phosphate (TDCP)	13674-87-8	5	1	
	Short chain chlorinated paraffins (SCCPs) (C10-C13)	85535-84-8	5	1	
2H. Glycols	Bis(2-methoxyethyl)-ether	111-96-6	50	10	US EPA 8270 Liquid Extraction LC/MS
	2-ethoxyethanol	110-80-5	50	10	
	2-ethoxyethyl acetate	111-15-9	50	10	
	Ethylene glycol dimethyl ether	110-71-4	50	10	
	2-methoxyethanol	109-86-4	50	10	
	2-methoxyethylacetate	110-49-6	50	10	
	2-methoxypropylacetate	70657-70-4	50	10	
	Triethylene glycol dimethyl ether	112-49-2	50	10	

Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)	Sludge (mg/kg)	
2I. Halogenated Solvents	1,2-Dichloroethane	107-06-2	1	2	USEPA 8260B Headspace GC/MS or Purgeand-Trap-GC/MS
	Methylene Chloride	75-09-2	1	2	
	Trichloroethylene	79-01-6	1	2	
	Tetrachloroethylene	127-18-4	1	2	
2J. Organotin Compounds	Mono-, di- and tri-methyltin derivatives	Multiple	0.01	0.2	ISO 17353 Derivatisation with NaB(C <sub>2</sub> H <sub>5</sub> ) GC/MS
	Mono-, di- and tri-butyltin derivatives	Multiple	0.01	0.2	
	Mono-, di- and tri-phenyltin derivatives	Multiple	0.01	0.2	
	Mono-, di- and tri-octyltin derivatives	Multiple	0.01	0.2	
	Monomethyltin	Multiple	0.01	0.2	
	Dimethyltin	Multiple	0.01	0.2	
	Trimethyltin	Multiple	0.01	0.2	
	Monobutyltin	Multiple	0.01	0.2	
	Dibutyltin	Multiple	0.01	0.2	
	Tributyltin	Multiple	0.01	0.2	
	Monophenyltin	Multiple	0.01	0.2	
	Diphenyltin	Multiple	0.01	0.2	
	Triphenyltin	Multiple	0.01	0.2	
	Monooctyltin	Multiple	0.01	0.2	
	Diocetyl tin	Multiple	0.01	0.2	
	Triocetyl tin	Multiple	0.01	0.2	
2K. Perfluorinated and Polyfluorinated Chemicals (PFCs)	Perfluorooctanesulfonic acid (PFOS)	1763-23-1	0.01	0.10	DIN 38407-42 (modified) Ionic PFC: Concentration or direct injection, LC/MS(-MS); Non-ionic PFC (FTOH): derivatisation with acetic anhydride, followed by GC/MS
	Perfluoro-n-octanoic acid (PFOA)	335-67-1	0.01	0.10	
	Perfluorobutanesulfonic acid (PFBS)	29420-49-3, 29420-43-3	0.01	0.10	
	Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	0.01	0.10	
	8:2 FTOH	678-39-7	1	1	
	6:2 FTOH	647-42-7	1	1	
2L. Phthalates (including all other esters of phthalic acid)	Di-2-ethylhexyl phthalate (DEHP)	117-81-7	10	2	US EPA 8270D, ISO 18856 Dichloromethane extraction GC/MS
	Dimethoxyethyl phthalate (DMEP)	117-82-8	10	2	
	Di-n-octyl phthalate (DNOP)	117-84-0	10	2	
	Di-iso-decyl phthalate (DIDP)	26761-40-0	10	2	
	Di-iso-nonyl phthalate (DINP)	28553-12-0	10	2	
	Di-n-hexyl phthalate (DnHP)	84-75-3	10	2	
	Dibutyl phthalate (DBP)	84-74-2	10	2	
	Butyl benzyl phthalate (BBP)	85-68-7	10	2	
	Dinonyl phthalate (DNP)	84-76-4	10	2	
	Diethyl phthalate (DEP)	84-66-2	10	2	
	Di-n-propyl phthalate (DPRP)	131-16-8	10	2	
	Di-iso-butyl phthalate (DIBP)	84-69-5	10	2	
	Di-cyclohexyl phthalate (DCHP)	84-61-7	10	2	



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Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)	Sludge (mg/kg)	
	Di-iso-octyl phthalate (DIOP)	27554-26-3	10	2	
	1,2-benzenedicarboxylic acid, di-C7-11-branched and linearalkyl esters (DHNUP)	68515-42-4	10	2	
	1,2-benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6	10	2	
2M. Polycyclic Aromatic Hydrocarbons (PAHs)	Benzo[a]pyrene (BaP)	50-32-8	1	0.2	DIN 38407-39 Solvent extraction GC/MS
	Anthracene	120-12-7	1	0.2	
	Pyrene	129-00-0	1	0.2	
	Benzo[ghi]perylene	191-24-2	1	0.2	
	Benzo[e]pyrene	192-97-2	1	0.2	
	Indeno[1,2,3-cd]pyrene	193-39-5	1	0.2	
	Benzo[j]fluoranthene	205-82-3	1	0.2	
	Benzo[b]fluoranthene	205-99-2	1	0.2	
	Fluoranthene	206-44-0	1	0.2	
	Benzo[k]fluoranthene	207-08-9	1	0.2	
	Acenaphthylene	208-96-8	1	0.2	
	Chrysene	218-01-9	1	0.2	
	Dibenz[a,h]anthracene	53-70-3	1	0.2	
	Benzo[a]anthracene	56-55-3	1	0.2	
	Acenaphthene	83-32-9	1	0.2	
	Phenanthrene	85-01-8	1	0.2	
	Fluorene	86-73-7	1	0.2	
	Naphthalene	91-20-3	1	0.2	
2N. Volatile Organic Compound (VOCs)	Benzene	71-43-2	1	2	ISO 11423-1 Headspace- or Purge-and-Trap-GC/MS
	Xylene	1330-20-7	1	2	
	o-cresol	95-48-7	1	2	
	p-cresol	106-44-5	1	2	
	m-cresol	108-39-4	1	2	
1A. Conventional Parameters	Temperature	—	N/A	N/A	Apply the standard methods that best apply to the region (ISO, EU, US, China), please refer to ZDHC Wastewater Guidelines for more details on the testing method and the levels (Foundational, Progressive, and Aspirational).
	TSS	—	N/A	N/A	
	COD	—	N/A	N/A	
	Total-N	—	N/A	N/A	
	pH	—	N/A	N/A	
	Color [m <sup>-1</sup> ] (436nm; 525nm; 620nm)	—	N/A	N/A	
	BOD5	—	N/A	N/A	
	Ammonium-N	—	N/A	N/A	
	Total-P	—	N/A	N/A	
	AoX	—	N/A	N/A	
	Oil and Grease	—	N/A	N/A	
	Phenol	—	N/A	N/A	
	Coliform(bacteria/100ml)	—	N/A	N/A	
	Persistent Foam	—	Not visible	Not visible	Cyanide: With reference to APHA 4500 CN—B,C&E and followed by UV analysis
	<b>ANIONS</b>				
	Cyanide( CN- )	Various (incl. 57-12-5)	0.02	1	
	Sulfide	—	N/A	N/A	
	Sulfite	—	N/A	N/A	
1B. Conventional Parameters -	Antimony( Sb )	7440-36-0	0.001	N/A	Various Acid Digestion with
	Chromium( Cr ), total	7440-47-3	0.001	N/A	



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Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)	Sludge (mg/kg)	
<b>METALS</b>	Cobalt( Co )	7440-48-4	0.001	N/A	ICP analysis  Please refer to ZDHC Wastewater Guidelines for more details on the testing method and the levels (Foundational, Progressive, and Aspirational).  Cr(VI): Various Solvent extraction and derivatisation followed by UV analysis
	Copper( Cu )	7440-50-8	0.001	N/A	
	Nickel (Ni)	7440-02-0	0.001	N/A	
	Silver (Ag)	7440-22-4	0.001	N/A	
	Zinc( Zn )	7440-66-6	0.001	N/A	
	Arsenic (As)	7440-38-2	0.001	2	
	Cadmium( Cd )	7440-43-9	0.0001	2	
	Chromium VI( CrVI )	18540-29-9	0.001	2	
	Lead( Pb )	7439-92-1	0.001	2	
	Mercury (Hg)	7439-97-6	0.00005	0.2	
<b>3. Conventional Parameters</b>	Dry mass (total solids)	—	N/A	N/A	US EPA 160.3 / 209A

Note / Key :

U. S. EPA = United States Environmental Protection Agency

APHA = American Public Health Association

## APPENDIX C – Onsite Field Data Record Sheet

FIELD DATA RECORD ON ZERO DISCHARGE SAMPLE (COMPOSITE / INDIVIDUAL SAMPLING)		CPSD-AN-00613-DATA 04	
		Issue Date:	
		Version No.: 14	
		Business Line: Analytical	

  

**General Data**

Laboratory Sample Number: 72222130110

Client Name: GULIPEK KUMAS VE IPLIK TICARET VE SANAYI A.S.

Field Contact Person: Elif Cetintepe Phone No: +90 531 696 70 01

Project (Facility Name and Address): KALE MAH. KILICLAR CAD. NO:11/1 KESTEL/BURSA

Sampling Location / Description: BEFORE TREATMENT

Sample Identification: Zero discharge with sampling plan

Sample Type: Composite Sample

Name of Sampler: Ahmet Hilmi ROZ

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

Date of collection: 02.08.2022

Factory Type: Dyeing / Printing / Washing / Finishing / Others (please specify):

\*Note: It would be selected more than one

  

**Field Data for Wastewater**

Arrival Time:		Departure Time:	
Field Parameters	pH :	Temp : °C	Color :
Control No. of field equipment	Flow rate : (volume/min)		
Factory with effluent treatment plant:	Yes <input type="radio"/> No <input checked="" type="radio"/>		
Sample matrix:	Incoming water (If required)		
	x Wastewater before treatment		
	Wastewater after treatment – water at discharge point		
Sampler container number			
	1	2	3
	4	5	6
	7	8	
Recording time	ID	Time	
		12.45	11.45
		12.45	13.45
		14.45	15.45
		16.45	17.45
		18.45	19.45
		20.45	21.45
		22.45	23.45
		24.45	25.45
		26.45	27.45
		28.45	29.45
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		5	





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FIELD DATA RECORD ON ZERO DISCHARGE SAMPLE (COMPOSITE / INDIVIDUAL SAMPLING)				CPSD-AN-00613-DATA 04	
				Issue Date:	
				Version No.: 14	
				Business Line: Analytical	
Tests (Conventional Parameters)	Test required (V)	Total of sample size	Type of container	Preservation method	
Combined test or Individual test (Remark 4)	17. Total suspended solids (TSS)	2000 mL total or 2000 mL each	Amber Glass, washed with nitric acid,	Without adding acid Store sample at 2-8°C	
	18. Total dissolved solids (TDS)				
19. 5-day Biochemical Oxygen Demand (BOD5)		1000 mL			
20. Colour		100 mL			
21. Heavy Metals except Cr(VI) & Total-P (Remark 6)	✓	9 mL	PE, washed with nitric acid	Acidify to pH 2 with HNO <sub>3</sub> and store at 2-8°C	
22. Cyanide		500 mL	Amber Glass, washed with pesticide grade acetone	Adjust pH 12 with 50% NaOH, add 0.05 mL of 10% Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> and store sample at 2-8°C	
23. Cr(VI)	✓	95 mL	Amber Glass; washed with nitric acid	Filter by 0.45µm filter in field, fill to full container without air gap; adjust pH to 9.0-9.5 by adding ammonium buffer. Store sample at 2-8°C	
24. Chemical oxygen demand (COD)		150 mL		Acidify to pH 2 with H <sub>2</sub> SO <sub>4</sub> Store sample at 2-8°C	
25. Phenols		500 mL			
26. Oil and Grease & Total Hydrocarbon		1000 mL			
27. *Formaldehyde		25 mL		Fill to full container without air gap; acidify to pH 2 with H <sub>2</sub> SO <sub>4</sub> and store sample at 2-8°C	
28. Sulfide (Remark 5)		50 mL	PE, washed with pesticide grade Acetone;	Fill to full container without air gap; add 2 drops of 2M zinc acetate, adjust pH to 9 with 6M NaOH Store sample at 2-8°C	
29. Total Coliform (Remark 6)		125 mL	PE, clean, sterile, non-reactive	Add 0.05 mL of 10% Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> Store sample at 2-8°C	
30. Faecal Coliform (Remark 6)		125 mL			
31. Persistent foam		N.A.	Foam higher than 45 cm (visual estimation): Yes / No		
32. Sulfite		100 mL	Amber Glass, washed with pesticide grade acetone	Add 1mL of 2.5% EDTA, 0.5g zinc acetate Store sample at 2-8°C	
33. Total-N		100 mL	Amber Glass; washed with nitric acid;	Acidify to pH 2 with H <sub>2</sub> SO <sub>4</sub> Store sample at 2-8°C	
34. Ammonium-N		500 mL			
35. Adsorbable organically bound halogens (AOX)		100 mL			
36. Acute aquatic toxicity: Luminus Bacteria; Fish Egg; Daphne; Algae;		1000 mL		Without adding acid Store sample at 2-8°C	
37. Sulphate		100 mL			
38. Chloride		100 mL			
39. Others:					
Observation/ Remark:					

\*Remarks:

- Individual sampling can be performed upon request
- The minimum sampling time for 2019 ZDHC guideline is 6 hours with no more than one hour between discrete samples. Sampling time could be adjusted upon request.
- Scope of ZDHC guideline: Parameter 1-9, 12, 14-17, 19-26, 28, 29, 31-35  
Scope of synthetic leather industry: Parameter 1-9, 12, 14-21, 23-26, 28, 30, 31, 33, 34, 37, 38  
Scope of MMCF: Parameter 5, 15, 17, 19-21, 23 - 26, 28, 33-36  
Free primary aromatic amine, pesticides, nitrosamine and formaldehyde are not in the scope of ZDHC Guideline, they are tested upon request.
- Refer to CPSD-AN-G00019-STIP01, locations with those CPSD test capability inside TCD matrix can perform the combined test.
- Refer to CPSD-AN-000570-MTHD for additional pretreatment of sulfide if only dissolved sulfide is required to be tested.
- Refer to CPSD-AN-00613-MTHD for preparation of field blank for specific parameters.

Recorded by:

Ahmet Hilmi Böz  
Full name:

Date: 02.08.2022

Comment from factory

Acknowledgement by factory

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

Signatory of Factory Representative:

Full Name: BÜRO YOLDAŞ

Date: 02.08.2022

GÜLİPEK  
KUMAŞ ve İPLİK TİCARET VE SANAYİ A.Ş.  
Ertuğrulgazi YD 420 001 0051 BURSA

-before



## APPENDIX D – Legal Requirements and Permits



Dosya : 15  
Evrak No : 2022-646  
Konu : Ortaklık Belgesi Talebi Hk.  
Pay No : 147

Bursa, 15.06.2022

### İLGİLİ MAKAMA

Proje alanımız içerisinde; ULUDAĞ OSB, KALE MAH., KILIÇLAR CAD., NO: 11/1 KESTEL/BURSA, Pafta No:H22D05D4B, Ada No:106, Parsel No:4 adresinde "BOYAHANE" sektöründe 105 kişi çalışanı ile faaliyet gösteren GÜLİPEK KUMAŞ VE İPLİK TİCARET VE SANAYİ ANONİM ŞİRKETİ firması Endüstriyel atıksu kategorisinde 1.350,00 m<sup>3</sup>/gün debi ve 147 pay numarası ile kooperatifimizin ortağıdır.

Firmanın deşarj ettiği evsel ve endüstriyel nitelikli atıksuları biyolojik ve biyolojik arıtmaya ilave kimyasal madde desteği ile "Su Kirliliği Kontrolü Yönetmeliği" Tablo-19 a göre, kooperatifimiz arıtma tesisinde arıtılmaktadır.

Bilgilerinize arz/rica ederiz.

Saygılarımızla,

Mehmet AYDIN  
Genel Müdür

- Not: Bu yazı verilen tarihten itibaren 3 aylık süre için geçerlidir.

Not: 5070 sayılı Elektronik İmza Kanunu gereği bu belge elektronik imza ile imzalanmıştır.



S.S. YEŞİL ÇEVRE ARITMA TESİSİ İŞLETME KOOPERATİFİ  
Zafer Mah. Yeşil Çevre Cad. No:5 P.K. 16590 Güzne/BURSA  
Tel: +90 224 376 13 60 - 60444 59 80 - Fax: +90 224 376 13 62  
E-mail: info@yesilcevre.com.tr / yesilcevre@yesilcevre.com.tr - Web: www.yesilcevre.com.tr

in @yesil\_cevre @yesil\_cevre @yesilcevreburda @yesilcevreburda

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