



# TEST REPORT

Technical Report

(7221)256-0505

October 19<sup>th</sup>,2021

Date Received

September 24<sup>th</sup>,2021

Page 1 of 22

Factory Company Name: MAYTEKS ORME SANAYI VE TICARET A.S.  
Factory Address: M.O.S.B. ATATURK CADDESI NO:1 45030 YUNUSEMRE- MANISA/TURKEY  
Project No.: N/A  
Client Reference No.: N/A  
Sampling Method: I001) Incoming water – Grab  
I002a) Raw Wastewater (Dye House) – 6 hours - Time – weighted Composite  
I002b) Raw Wastewater (Printing House) – 6 hours - Time – weighted Composite

Sample Pick Up Date: September 23<sup>rd</sup>,2021  
Wastewater Discharge to: Centralized ETP  
On-Site Effluent Treatment Plant (ETP): No  
Discharge Type: Indirect Discharge  
Off-site ETP name (if applicable): Manisa Organized Industrial Zone  
Off-site ETP address (if applicable): Kecilikoy OSB Mah. Cumhuriyet Blv. No:14, 45030 Yunusemre-Manisa  
Local Regulation: / Ordinance / requirements related to wastewater discharged are followed: Tablo:25 Atiksularin Atiksu Altyapi Tesislerine Desarjinda Ongorulen Atiksu Standartlari (See Appendix D)  
Permit Validation Date: 10/12/2021  
Parameters Exceeded Local Regulation: No  
Legal compliance: Comply  
Conventional Parameters: N/A  
Overall Category:  
Test Period: September 24<sup>th</sup>,2021 – October 18<sup>th</sup>,2021

Sample Description:

I001) Colorless liquid – Incoming water  
I002a)Black liquid– Raw Wastewater (Dye House)  
I002b)Grey/Black/Blue liquid – Raw Wastewater (Printing House)

Parameters exceeded maximum holding time: N/A



Technical Report:

**(7221)256-0505**

October 19<sup>th</sup>,2021

Page 2 of 22

**REMARK1:** Please refer to discharge criteria of the offsite ETP attached at the end of this report.

**REMARK**

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

General enquiry and invoicing

Kerem Can [Kerem.can@bureauveritas.com](mailto:Kerem.can@bureauveritas.com)

Technical enquiry-Chemical

Ayca Cevikus [Ayca.cevikus@bureauveritas.com](mailto:Ayca.cevikus@bureauveritas.com)

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.

PREPARED BY: **Ayca Cevikus**  
**MEA CDM Manager**  
**Zero Discharge & Higg**  
**Verification &**  
**Environmental**

**Kerem Can**  
**Deputy General Manager**  
**& Operation Manager**



**Executive Summary**

<b>1A) Conventional Parameters</b>	<b>I001</b>	<b>I002a</b>	<b>I002b</b>
Temperature	NR	NR	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			
<b>1B) Conventional Parameters – METALS</b>	N/A	□	□

Note / Key :

- □ – Meet discharge license criteria
- ■ – Exceeding discharge license criteria
- NR – Not Requested / Not required
- N/A – Not Applicable

<b>ZDHC MRSL Substances</b>	<b>I001</b>	<b>I002a</b>	<b>I002b</b>
2A) APs and APEOs	NR	o	o
2B) Chlorobenzenes and Chlorotoluenes	NR	o	o
2C) Chlorophenols	NR	o	o
2D) Azo Dyes	NR	o	o
2E) Carcinogenic Dyes	NR	o	o
2F) Disperse Dyes	NR	o	o
2G) Flame Retardants	NR	o	o
2H) Glycols	NR	o	o
2I) Halogenated Solvents	NR	o	o
2J) Organotin Compounds	NR	o	o
2K) Perfluorinated and Polyfluorinated	NR	o	o
2L) Phthalates	NR	o	o
2M) Poly Aromatic Hydrocarbons	NR	o	o
2N) Volatile Organic Compounds	NR	o	o

Note / Key :

- ● – Detected
- o – Not Detected
- NR – Not Requested
- N/A – Not Applicable



Technical Report:

**(7221)256-0505**

October 19<sup>th</sup>, 2021

Page 4 of 22

## **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) Poly Aromatic Hydrocarbons
- 2N) Volatile Organic Compounds

## **Sampling Plan**

Basically, three environment samples were sampled per factory, including 1) Incoming water; 2a) Raw Wastewater (dye house); 2b) Raw Wastewater (printing house). Total number of sample collected will be depended on the actual factory facilities and manufacturing processes.

Method of sampling used is time-weighted composite 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 is with reference to below standards:
  - 1) South Australia EPA Guidelines (June 2007), Regulatory Monitoring and Testing Water and Wastewater Sampling.
  - 2) Australia EPA (Victoria) Guideline (June 2009), Sampling and Analysis of Waters, Wastewaters, Soils and Wastes.
  - 3) ISO 5667-3:2003, Water Quality - Sampling - Part 3: Guidance on the Preservation and Handling of Water Samples.
  - 4) ASTM D3976-92 (Reapproved 2010), Standard Practice for Preparation of Sediment Samples for Chemical Analysis.
- Field data records are attached in Appendix C.



Technical Report:

(7221)256-0505

October 19<sup>th</sup>, 2021

Page 5 of 22

1B) Conventional Parameters – METALS

<b>Heavy Metals</b>	<b>I001 (mg/L)</b>	<b>I002a (mg/L)</b>	<b>I002b (mg/L)</b>
Antimony( Sb ) Discharge License Criteria: Not applicable	ND	0.14	0.0043
Chromium( Cr ), total Discharge License Criteria: 5 mg/L	0.084	0.0905 (Comply with discharge license)	0.1452 (Comply with discharge license)
Cobalt( Co ) Discharge License Criteria: Not applicable	ND	ND	ND
Copper( Cu ) Discharge License Criteria: 2 mg/L	0.013	ND (Comply with discharge license)	0.241 (Comply with discharge license)
Nickel (Ni) Discharge License Criteria: 5 mg/L	ND	ND (Comply with discharge license)	ND (Comply with discharge license)
Silver (Ag) Discharge License Criteria: 5 mg/L	ND	ND (Comply with discharge license)	ND (Comply with discharge license)
Zinc( Zn ) Discharge License Criteria: 10 mg/L	ND	0.1232 (Comply with discharge license)	0.4111 (Comply with discharge license)
Arsenic (As) Discharge License Criteria: 3 mg/L	0.0026	0.0046 (Comply with discharge license)	0.0039 (Comply with discharge license)
Cadmium( Cd ) Discharge License Criteria: 2 mg/L	0.0001	ND (Comply with discharge license)	ND (Comply with discharge license)
Chromium VI( CrVI ) Discharge License Criteria: Not applicable	ND	ND	ND
Lead( Pb ) Discharge License Criteria: 3 mg/L	0.0028	0.0102 (Comply with discharge license)	0.0054 (Comply with discharge license)
Mercury (Hg) Discharge License Criteria: 0.2 mg/L	ND	ND (Comply with discharge license)	ND (Comply with discharge license)



Technical Report:

**(7221)256-0505**

October 19<sup>th</sup>, 2021

Page 6 of 22







Others Priority Chemical Groups

	<b>I001 (ug/L)</b>	<b>I002a (ug/L)</b>	<b>I002b (ug/L)</b>
2A) APs and APEOs	NR	ND	ND
2B) Chlorobenzenes and Chlorotoluenes	NR	ND	ND
2C) Chlorophenols	NR	ND	ND
2D) Azo Dyes	NR	ND	ND
2E) Carcinogenic Dyes	NR	ND	ND
2F) Disperse Dyes	NR	ND	ND
2G) Flame Retardants	NR	ND	ND
2H) Glycols	NR	ND	ND
2I) Halogenated Solvents	NR	ND	ND
2J) Organotin Compounds	NR	ND	ND
2K) Perfluorinated and Polyfluorinated Chemicals	NR	ND	ND
2L) Phthalates	NR	ND	ND
2M) Poly Aromatic Hydrocarbons	NR	ND	ND
2N) Volatile Organic Compounds	NR	ND	ND

Remark :

- Test method, reporting limit and list of chemical are summarized in tables of Appendix A.
- ND = Not detected (Please refer to reporting limit shown in Appendix A.).
- All results are in ppb as unit.
- ppm = part(s) per million; ppb = part(s) per billion.
- NR-Not Requested

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

<p>I001) Sampling Point N/S 38° 36' 56.48" E/W 27° 21' 54.38"</p> 	<p>I001) Sampling Point Surrounding Environment N/S 38° 36' 56.48" E/W 27° 21' 54.38"</p> 
<p>I001) All sampled bottles with label</p> 	<p>I001) pH value</p> 
<p>I001) Sample for Phthalate Testing</p> 	<p>I001) Packaging</p> 



I002a) Sampling Point  
N/S 38° 36' 56.48"  
E/W 27° 21' 54.38"



I002a) Sampling Point Surrounding Environment  
N/S 38° 36' 56.48"  
E/W 27° 21' 54.38"



I002a) All sampled bottles with label



I002a) pH value



I002a) Sample for Phthalate Testing



I002a) Packaging





I002b) Sampling Point  
N/S 38° 36' 56.48"  
E/W 27° 21' 54.38"



I002b) Sampling Point Surrounding Environment  
N/S 38° 36' 56.48"  
E/W 27° 21' 54.38"



I002b) All sampled bottles with label



I002b) pH value



I002b) Sample for Phthalate Testing



I002b) Packaging





**APPENDIX B**

Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)/(ppb)	Sludge (mg/kg)/(ppm)	
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))
	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	OPEO/NPEO: ISO18857-2 or ASTM D7065(LC/MS; GC/MS or LC/MSMS for n=1,2)  APEO 1-18
	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	



Technical Report:

(7221)256-0505

October 19<sup>th</sup>, 2021

Page 11 of 22

Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)/(ppb)	Sludge (mg/kg)/(ppm)	
	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	
	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-Xylidine	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-Xylidine	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	569-64-2	500	10	



Technical Report:

(7221)256-0505

October 19<sup>th</sup>, 2021

Page 12 of 22

Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)/(ppb)	Sludge (mg/kg)/(ppm)	
	(malachite green chloride)				
	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	
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



Technical Report:

(7221)256-0505

October 19<sup>th</sup>, 2021

Page 13 of 22

Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)/(ppb)	Sludge (mg/kg)/(ppm)	
	2-ethoxyethanol	110-80-5	50	10	Liquid Extraction LC/MS
	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	
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 trimethyltin 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	
Dioctyltin	Multiple	0.01	0.2		
Trioctyltin	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 esthers 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	84-75-3	10	2	



Technical Report:

(7221)256-0505

October 19<sup>th</sup>, 2021

Page 14 of 22

Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)/(ppb)	Sludge (mg/kg)/(ppm)	
	(DnHP)				
	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	
	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. Poly 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	
1A. Conventional Parameters	m-cresol	108-39-4	1	2	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
	Temperature	—	N/A	N/A	
	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		





Technical Report:

(7221)256-0505

October 19<sup>th</sup>, 2021

Page 15 of 22

Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method	
			Wastewater (ug/L)/(ppb)	Sludge (mg/kg)/(ppm)		
	Ammonium-N	—	N/A	N/A	(Foundational, Progressive, and Aspirational).  Cyanide: With reference to APHA 4500 CN—B,C&E and followed by UV analysis	
	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		
	<b>ANIONS</b>					
	Cyanide( CN-)	Various (incl. 57-12-5)	0.02	1		
	Sulfide	—	N/A	N/A		
Sulfite	—	N/A	N/A			
Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method	
			Wastewater (mg/L) / (ppm)	Sludge (mg/kg) / (ppm)		
1B. Conventional Parameters - <b>METALS</b>	Antimony( Sb )	7440-36-0	0.001	N/A	Various Acid Digestion with 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	
	Chromium( Cr ), total	7440-47-3	0.001	N/A		
	Cobalt( Co )	7440-48-4	0.001	N/A		
	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 :

ppm = part(s) per million; ppb = part(s) per billion  
 U. S. EPA = United States Environmental Protection Agency  
 APHA = American Public Health Association



Technical Report:

(7221)256-0505

October 19<sup>th</sup>, 2021

Page 16 of 22

APPENDIX C – Onsite Field Data Record Sheet

	<b>FIELD DATA RECORD ON ZERO DISCHARGE SAMPLE (COMPOSITE / INDIVIDUAL SAMPLING)</b>	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td colspan="2">CPSD-AN-00613-DATA 04</td> </tr> <tr> <td>Issue Date:</td> <td></td> </tr> <tr> <td>Version No.: 14</td> <td></td> </tr> <tr> <td>Business Line: Analytical</td> <td></td> </tr> </table>	CPSD-AN-00613-DATA 04		Issue Date:		Version No.: 14		Business Line: Analytical	
CPSD-AN-00613-DATA 04										
Issue Date:										
Version No.: 14										
Business Line: Analytical										
<b>General Data</b>										
Laboratory Sample Number:	T2212560505									
Client Name:	MAYTEKS ORME SANAYI VE TICARET A.Ş.									
Field Contact Person:	Merve Kaya Phone No: +90 (236) 235 1630									
Project (Facility Name and Address):	M.O.S.B. Alayık Caddesi No : 1 45000 Manisa -Türkiye									
Sampling Location / Description:	#SCOMP3									
Sample Identification:	Zero discharge with sampling point									
Sample Type:	Grab Sample									
Name of Sample:	Ahmet Hilmi Boz									
Discharge mode:	Direct discharge to environment (liquid, dust, steam, ... ) <input checked="" type="checkbox"/> Discharge to sewage treatment plant									
Date of collection:	23.09.21									
Factory Type:	Dyeing / Printing / Washing / Finishing / Others (please specify)									
*Note: It could be selected more than one										
<b>Field Data for Wastewater</b>										
Arrival Time:	Departure Time:									
Field Parameters:	pH: 7.59	Temp: 24.7 °C								
Control No. of field equipment:		Color: colorless								
Factory with effluent treatment plant:	Yes <input checked="" type="checkbox"/>									
Sample matrix:	<input checked="" type="checkbox"/> incoming water (if required) <input type="checkbox"/> Wastewater before treatment <input type="checkbox"/> Wastewater after treatment – water at discharge point									
Sampler container number:	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td> </tr> </table>		1	2	3	4	5	6	7	8
1	2	3	4	5	6	7	8			
Recording time:	ID	Time								
		13:00								
pH:		7.59								
Temp (°C):		22.0								
Color (visual estimation):		colorless								
Flow rate (volumetric):										
Volume collected, mL:										
Total volume collected:	Remark: Total volume collected must be greater than total of sample size required									
<b>Analysis Required and Preservation Method</b>										
Tests (ZDHC MRSL Parameters)	Test required (Y)	Total of sample size	Type of container	Preservation method						
Combined test or individual test (Remark 4)	1. Phthalate	√	1000 mL 1000 mL or 1000 mL each	Amber Glass washed with nitric acid.	Without adding acid. Store sample at 2-8°C					
	2. Chlorobenzenes, Chlorotoluene & PAH	√								
	3. SOCPs	√								
	4. APS	√								
5. APEOs	√	100 mL								
6. Chlorophenols & Cresols	√	100 mL								
7. Flame retardant	√	500 mL								
8. Dyes	√	10 mL								
9. Glycol	√	50 mL								
10. *Pesticides	√	1000 mL								
11. Nitrosamine	√	10 mL								
12. Banned Azodyes	√	2000 mL								
13. *Free primary aromatic amines	√	500 mL								
14. Organotin Compounds	√	500 mL								
15. VOC & Halogenated Solvents (Remark 6)	√	10 mL								
16. PFCA (Remark 6)	√	2 mL	PE, washed with peroxide grade Acetone	Without adding acid. Store sample at 2-8°C						




Technical Report:

(7221)256-0505

October 19<sup>th</sup>, 2021

Page 17 of 22

	<b>FIELD DATA RECORD ON ZERO DISCHARGE SAMPLE (COMPOSITE / INDIVIDUAL SAMPLING)</b>	<b>CPSD-AN-00613-DATA 04</b> Issue Date: _____ Version No.: 14 Business Line: Analytical
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Tests (Conventional Parameters)	Test required (Y)	Total of sample size	Type of container	Preservation method
Continued test or Individual test (Remark 4) 17. Total suspended solids (TSS) 18. Total dissolved solids (TDS)		2000 mL total or 2000 mL each	Amber Glass, washed with nitric acid	Without adding acid Store sample at 2-8°C
19. 5-day Biochemical Oxygen Demand (BOD <sub>5</sub> )		1000 mL		
20. Colour		100 mL		
21. Heavy Metals except Cr(VI) & Total-P (Remark 6)	✓	6 mL	PE, washed with nitric acid	Adjust 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>5</sub> and store sample at 2-8°C
23. Cr(VI)	✓	95 mL		Filter by 0.45µm filter in field, fill to full container without air gaps, adjust pH to 10.0-11 by adding ammonium buffer. Store sample at 2-8°C
24. Chemical oxygen demand (COD)		150 mL		
25. Phenols		500 mL	Amber Glass, washed with nitric acid	Adjust to pH 2 with H <sub>2</sub> SO <sub>4</sub> , store sample at 2-8°C
26. Oil and Grease & Total Hydrocarbon		1000 mL		
27. *Formaldehyde		25 mL		Fill to full container without air gaps, adjust 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 gaps, add 2 drops of 10M zinc acetate, adjust pH to 9 with 10M NaOH. Store sample at 2-8°C
29. Total Coliform (Remark 8)		120 mL		
30. Faecal Coliform (Remark 8)		120 mL	PE, clean, sterilized, non-reactive	Add 0.55 ml of 10% Na <sub>2</sub> S <sub>2</sub> O <sub>5</sub> , Store sample at 2-8°C
31. Persistent foam		N.A.	Foam higher than 40 cm (visual estimation): ... 30g / 30 ...	
32. Sulfite		100 mL	Amber Glass, washed with pesticide grade acetone	Add 1mL of 2.5% EDTA, 5 µg zinc acetate. Store sample at 2-8°C
33. Total-N		100 mL		
34. Ammonium-N		500 mL		
35. Adsorbable organically bound halogens (AOX)		100 mL		Adjust to pH 2 with H <sub>2</sub> SO <sub>4</sub> , Store sample at 2-8°C
36. Acute aquatic toxicity: Luminescent Bacteria; Fish Egg; Daphnia; Algae		1000 mL	Amber Glass, washed with nitric acid	
37. Sulfate		100 mL		Without adding acid Store sample at 2-8°C
38. Chloride		100 mL		
39. Others:				

**\*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 1-8, 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 MMCP: Parameter 5, 15, 17, 19-21, 23 - 26, 28, 33-36  
 Five primary anions: arsenite, arsenate, nitrosamine and formaldehyde are not in the scope of ZDHC Guideline. They are tested upon request.
- Refer to CPSD-AN-G00019-5TP01, facilities with those CPSD test capability inside TCD matrix can perform the combined test.
- Refer to CPSD-AN-00670-MTHD for additional pre-treatment 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: Abmet Hilmi Boz Date: 23.09.2021

Comment from factory: 

**Acknowledgment by factory**

I hereby confirmed that Bureau Veritas has completed the stated sampling activity at captured date, time and location. All sample(s) were collected in designated container(s) and without any obstruction in leakage. Sample(s) collected by Bureau Veritas is/are stored in portable freezer / fridge that is maintained in -18°C

Signature of Factory Representative: \_\_\_\_\_ Date: \_\_\_\_\_

 Full Name: Miyar Hap Date: 23.09.2021





Technical Report:

(7221)256-0505

October 19<sup>th</sup>, 2021

Page 18 of 22

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

Laboratory Sample Number: 72212560505-DYENK

Client Name: MAYTEKS ÖRME SANAYİ VE TİCARET A.Ş.

Field Contact Person: Mytilin Foyat Phone No: +90 (236) 226 1630

Project (Facility Name and Address): M.O.S.B. Ataköy Cadde No: 1 45030 Manisa -Turkey

Sampling Location / Description: BEFORE TREATMENT

Sample Identification: Zero discharge with sampling plan

Sample Type: Composite Sample

Name of Sampler: Ahmet Hilmi Boz

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

Date of collection: 23.09.21

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

\*Note: It would be selected more than one

Field Data for Wastewater		Departure Time		Flow (litre / (volume) / hr)				
Arrival Time	pH	Temp. °C	Color	Flow (litre / (volume) / hr)	(volume) / hr			
Control No. of field equipment	Yes							
Factory with effluent treatment plant	Yes							
Sample intake	Incoming water (if required)							
	Wastewater before treatment							
Sampler container number	Wastewater after treatment - water at discharge point							
	1	2	3	4	5	6	7	8
Recording time	11:00	12:00	13:00	14:00	15:00	16:00		
pH	10.30	10.06	9.72	10.19	9.70	9.06		
Temp (°C)	42.5	32.7	41.8	43.2	38.1	40.1		
Color (visual estimation)	black	black	black	black	black	black		
Flow rate (volume / time)								
Volume collected, ml								
Total volume collected	Remark: Total volume collected must be greater than total of sample size required.							

Tests (ZDHC MRSL Parameters)		Test required (Y)	Total of sample size	Type of container	Preservation method		
Combined test or Individual test (Remark 4)	1. Phthalate	✓	1000 ml, total or 1000 ml each	Amber Glass Jar with white acid.	Without adding acid Store sample at 2-8°C		
	2. Chlorobenzenes, Chlorobenzene & PAH	✓					
	3. SOCPs	✓					
	4. APS	✓					
5. APEOs	✓	100 mL					
6. Chlorophenols & Cresols	✓	500 mL					
7. Flame retardant	✓	500 mL					
8. Dyes	✓	10 mL					
9. Glycol	✓	50 mL					
10. *Phenols	✓	1000 mL					
11. *Nitrosamine	✓	10 mL					
12. Sulfonated Azodyes	✓	2000 mL					
13. *Free primary aromatic amine	✓	500 mL					
14. Organotin Compounds	✓	500 mL					
15. VOC & Halogenated Solvents (Remark 6)	✓	10 mL				PC, washed with pentane grade Acetone	Without adding acid Store sample at 2-8°C
16. PFCs (Remark 6)	✓	2 mL					






Technical Report:

(7221)256-0505

October 19<sup>th</sup>, 2021

Page 19 of 22

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

Tests (Conventional Parameters)	Test required (Y)	Total of sample size	Type of container	Preservation method
Confirmed test or individual test (Remark 4) 17. Total suspended solids (TSS) 18. Total dissolved solids (TDS)		2000 mL total or 2000 mL each	Amber Glass, washed with nitric acid	Without adding acid Store sample at 2-8°C
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 perchloric grade ascove	Adjust pH to 12 with 50% NaOH, add 0.05 mL of 10% Na <sub>2</sub> S <sub>2</sub> O <sub>5</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 filter, fill to full container without air gap, adjust pH to 0.5-0.8 by adding appropriate buffer. Store sample at 2-8°C
24. Chemical oxygen demand (COD)		150 mL		
25. Phenols		500 mL		
26. Oil and Grease & Total Hydrocarbon		1000 mL		
27. *Formaldehyde		25 mL		
28. Sulfide (Remark 5)		80 mL	PE, washed with perchloric grade Ascove	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
29. Total Coliform (Remark 8)		125 mL	PE, clean, sterile, non-reactive	Add 0.55 mL of 10% Na <sub>2</sub> S <sub>2</sub> O <sub>5</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 perchloric grade ascove	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: Luminescent Bacteria: Fish Egg, Daphnia, Algae		1000 mL		
37. Sulfate		100 mL		Without adding acid Store sample at 2-8°C
38. Chloride		100 mL		
39. Others:				

Observer's 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 1-6, 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  
 Five primary aromatic amine, peroxides, nitrosamine and formaldehyde are not in the scope of ZDHC Guideline, they are tested upon request.
- Refer to CPSD-AN-G00019-STP01, locations with those CPSD test capability inside TCD matrix can perform the combined test.
- Refer to CPSD-AN-000679-MTHD for additional pre-treatment of sulfide if only dissolved sulfide is required to be tested.
- Refer to CPSD-AN-00015-MTHD for preparation of field glass for specific parameters.

Recorded by:

*Abmet Hilmi Boz*  
Full name:

Date: 23.09.2021

Comment from factory:

Acknowledgment by factory:

I hereby confirm that Bureau Veritas has completed the stated sampling activity at captioned date, time and location. All sample(s) were collected in captioned 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 -16°C

Signature of Factory Representative:

*Miyar Hap*  
Full name: Miyar Hap

Date:

23.09.2021





Technical Report:

(7221)256-0505

October 19<sup>th</sup>, 2021

Page 20 of 22

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

**General Data**

Laboratory Sample Number: 72212600503-PRINTING  
 Client Name: MAYTEKS ÖRME SANAYİ VE TİCARET A.Ş.  
 Field Contact Person: Myraze Kaya Phone No: +90 (238) 236 1630  
 Project (Facility Name and Address): M.D.S.B ALAKUR Caddesi No: 1 45030 Mersin - Türkiye  
 Sampling Location / Description: BEFORE TREATMENT  
 Sample Identification: Zero discharge with sampling plan  
 Sample Type: Composite Sample  
 Name of Sampler: Ahmet Hilmi Boz  
 Discharge mode: Direct discharge to environment (Specify destination: River, Sea, Stream...) OR indirect discharge to sewage treatment plant  
 Date of collection: 23.09.21  
 Factory Type: Dyeing / Printing / Washing / Finishing / Others (please specify):

**Field Data for Wastewater**

Arrival Time:		Departure Time:							
Field Parameters:	pH:	Temp: °C:		Color:		Flow rate: (volume/time):			
Control No. of field equipment:						No			
Factory with effluent treatment plant:		Yes							
Sample matrix:		incoming water (if required)							
	x	Wastewater before treatment							
		Wastewater after treatment - water at discharge point							
Sampler container number:									
Recording time:	ID								
	Time	11.05	12.05	13.05	14.05	15.05	16.05		
pH:		9.07	8.40	7.51	8.60	8.25	10.13		
Temp (°C):		36.3	44.8	31.8	22.6	26.2	26.2		
Color (visual estimator):		grey	grey	black	black	grey	blue		
Flow rate (volume/time):									
Volume collected, mL:									
Total volume collected:		Remarks: Total volume collected must be greater than total of sample size required							

**Analysis Required and Preservation Method**

Tests (ZDHC MRSL Parameters)	Test required (H)	Total of sample size	Type of container	Preservation method		
Contained list or individual test (Remark 4) <ul style="list-style-type: none"> <li>1. Phthalate</li> <li>2. Chlorobenzenes, Chlorotoluene &amp; PAH</li> <li>3. SOCPs</li> <li>4. APS</li> </ul>	√	1000 mL total or 1000 mL each	Amber Glass, washed with nitric acid.	Without adding acid Store sample at 2-8°C		
	5. APEOs				√	100 mL
	6. Chlorophenols & Cresols				√	100 mL
	7. Flame retardant				√	500 mL
8. Dyes	√	10 mL				
9. Glycol	√	50 mL				
10. *Pesticides	√	1000 mL				
11. *Nitrosamine	√	10 mL				
12. Banned Azodyes	√	2000 mL				
13. *Free primary aromatic amines	√	500 mL				
14. Organotin Compounds	√	500 mL				
15. VOC & Halogenated Solvents (Remark 6)	√	10 mL				Fill to full container without air gap, acidity to pH 2 with HCl and store sample at 2-8°C
16. PFCA (Remark 6)	√	2 mL			PE, washed with pesticide grade Acetone	Without adding acid Store sample at 2-8°C



Tests (Conventional Parameters)		Test required (Y)	Total of sample size	Type of container	Preservation method
Confirmed test or individual test (Remark 4)	17. Total suspended solids (TSS) 18. Total dissolved solids (TDS)		2000 mL total or 2000 mL each	Amber Glass, washed with nitric acid	Without adding acid Store sample at 2-8°C
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 perchloric grade ascove	Adjust pH to 12 with 50% NaOH, add 0.05 mL of 10% Na <sub>2</sub> S <sub>2</sub> O <sub>5</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 filter, fill to full container without air gap, adjust pH to 0.5-0.8 by adding appropriate buffer. Store sample at 2-8°C
24. Chemical oxygen demand (COD)			150 mL		
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 perchloric grade Ascove	Fill to full container without air gap, add 2 drops of 1M zinc acetate, adjust pH to 9 with 6M NaOH. Store sample at 2-8°C
29. Total Coliform (Remark 8)			125 mL	PE, clean, sterile, non-reactive	Add 0.55 mL of 10% Na <sub>2</sub> S <sub>2</sub> O <sub>5</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 perchloric grade ascove	Add 1ML of 2.5% EDTA, 5 mg 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. Adult aquatic toxicity: Luminescent Bacteria: Fish Egg, Daphnia, Algae			1000 mL		
37. Sulfate			100 mL		Without adding acid Store sample at 2-8°C
38. Chloride			100 mL		
39. Others:					

Observer's 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 1-6, 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  
Five primary aromatic amine, peroxidase, nitrosamine and formaldehyde are not in the scope of ZDHC Guideline, they are tested upon request.
- Refer to CPSD-AN-G00019-STP01, facilities with those CPSD test capability inside TCD matrix can perform the combined test.
- Refer to CPSD-AN-000679-MTHD for additional pre-treatment of sulfide if only dissolved sulfide is required to be tested.
- Refer to CPSD-AN-00015-MTHD for preparation of field glass for specific parameters.

Recorded by:

Abmet Hilmi Boz  
Full name:

Date: 23.09.2021

Comment from factory:

Acknowledgment by factory:

I hereby confirm that Bureau Veritas has completed the stated sampling activity at captioned date, time and location. All sample(s) were collected in designated container(s) and without any obstruction in leakage. Sample(s) collected by Bureau Veritas is/are stored in portable freezer / fridge that is maintained in -16°C

Signature of Factory Representative:

Full name:

Date:

Miyar Hap  
**MAYTEKS**  
TUTUK SANAYİ VE TİCARET A.Ş.

23.09.2021

## APPENDIX D – Limitation Value of Legal Requirements

TABLO 25: ATIKSULARIN ATIKSU ALTYAPI TESISLERINE DEŞARJINDA ÖNGÖRÜLEN ATIKSU STANDARTLARI

PARAMETRE	KANALİZASYON SİSTEMLERİ TAM ARITMA İLE SONUÇLANAN ATIKSU ALTYAPI TESISLERİNDE	KANALİZASYON SİSTEMLERİ DERİN DENİZ DEŞARJI İLE SONUÇLANAN ATIKSU ALTYAPI TESISLERİNDE
Sıcaklık (°C)	40	40
pH	6.5-10.0	6.0-10.0
Askıda katı madde (mg/L)	500	350
Yağ ve gres (mg/L)	250	50
Katran ve petrol kökenli yağlar (mg/L)	50	10
Kimyasal oksijen ihtiyacı (KOİ) (mg/L)	4000	600
Biyokimyasal Oksijen İhtiyacı (BOİ <sub>5</sub> ) (mg/L)	-	400
Sülfat (SO <sub>4</sub> <sup>-</sup> ) (mg/L)	1700	1700
Toplam sülfür (S) (mg/L)	2	2
Fenol (mg/L)	20	10
Serbest klor (mg/L)	5	5
Toplam azot (N) (mg/L)	-(a)	40
Toplam fosfor (P) (mg/L)	-(a)	10
Arsenik (As) (mg/L)	3	10
Toplam siyanür (Toplam CN <sup>-</sup> ) (mg/L)	10	10
Toplam kurşun (Pb) (mg/L)	3	3
Toplam kadmiyum (Cd) (mg/L)	2	2
Toplam krom (Cr) (mg/L)	5	5
Toplam civa (Hg) (mg/L)	0.2	0.2
Toplam bakır (Cu) (mg/L)	2	2
Toplam nikel (Ni) (mg/L)	5	5
Toplam çinko (Zn) (mg/L)	10	10
Toplam kalay (Sn) (mg/L)	5	5
Toplam gümüş (Ag) (mg/L)	5	5
Cl <sup>-</sup> (Klorür) (mg/L)	10000	-
Metilen mavisi ile reaksiyon veren yüzey aktif maddeleri(MBAS) (mg/L)	Biyolojik olarak parçalanması Türk Standartları Enstitüsü standartlarına uygun olmayan maddelerin boşaltımı prensip olarak yasaktır.	

a) Bu parametrelere atıksu değerlendirilmesinde bakılmayacaktır.

b) Bünyesinde %2'den fazla inert KOİ içeren ve toplam KOİ değeri 5000 mg/L den fazla olan kuvvetli organik atıksular için KOİ yerine BOİ<sub>5</sub> değeri esas alınır.