



# TEST REPORT

## Technical Report:

(6821)279-0203

October 19, 2021

Date Received:

October 05, 2021

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Factory Company Name :

Square Denims Ltd.

Factory Address:

Olipur, Shayestaganj, Habiganj, 3301, Bangladesh.

Client Reference No.:

Self

Sample Method:

I001) Raw Wastewater – 6 hours Time – weighted Composite

I002) Treated Wastewater – 6 hours Time – weighted Composite

Sample Pick Up Date:

October 05, 2021

Discharge Type:

Direct Discharge

On-Site Effluent Treatment Plant (ETP):

Yes

Wastewater Discharge to:

Local Canal

Off-site ETP name (if applicable):

Not Applicable

Off-site ETP address (if applicable):

Not Applicable

Test Period:

October 06, 2021 To October 19, 2021

Sample Description:

I001) Black color liquid - Raw Wastewater

I002) Brownish color liquid - Treated Wastewater

## REMARK

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

General enquiry

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Technical enquiry-Chemical

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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 (BANGLADESH) LTD.**

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**MANAGER, RSL OPERATIONS**

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### **Executive Summary**

<b>1A) Conventional Parameters</b>	<b>I001</b>	<b>I002</b>
Temperature	NR	<input type="checkbox"/>
TSS		<input type="checkbox"/>
COD		<input type="checkbox"/>
Total-N		<input type="checkbox"/>
pH Value		<input type="checkbox"/>
Color [m <sup>-1</sup> ] (436nm; 525nm; 620nm)		<input type="checkbox"/>
BOD <sub>5</sub>		<input type="checkbox"/>
Ammonium-N		<input type="checkbox"/>
Total-P		<input type="checkbox"/>
AOX		<input type="checkbox"/>
Oil and Grease		<input type="checkbox"/>
Phenol		<input type="checkbox"/>
Coliform		<input type="checkbox"/>
Persistent Foam		<input type="checkbox"/>
ANIONS – Cyanide		<input type="checkbox"/>
ANIONS - Sulfide		<input type="checkbox"/>
ANIONS - Sulfite		<input type="checkbox"/>
<b>1B) Conventional Parameters –METALS</b>	<input type="checkbox"/>	<input type="checkbox"/>

Note / Key:

- ☐ – Meet Foundational Limit / Meet discharge License Criteria
- ☒ – Exceeding Foundational Limit / Exceeding discharge License Criteria
- NR – Not Requested / Not required

<b>ZDHC MRSL Substances</b>	<b>I001</b>	<b>I002</b>
2A) APs and APEOs	o	o
2B) Chlorobenzenes and Chlorotoluenes	o	o
2C) Chlorophenols	o	o
2D) Azo Dyes	o	o
2E) Carcinogenic Dyes	o	o
2F) Disperse Dyes	o	o
2G) Flame Retardants	o	o
2H) Glycols	o	o
2I) Halogenated Solvents	o	o
2J) Organotin Compounds	o	o
2K) Perfluorinated and Polyfluorinated Chemicals	o	o
2L) Phthalates	o	o
2M) Poly Aromatic Hydrocarbons	o	o
2N) Volatile Organic Compounds	o	o

Note / Key :

- ● – Detected
- o – Not Detected
- NR – Not Requested / Not required



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## **Objective**

The environment samples were tested for below parameters.

- 1A) Conventional 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 Procedure**

Total number of sample collected is based on the actual factory facilities and manufacturing processes. Two environment samples were sampled per factory, 1) Raw Wastewater and 2) Treated Wastewater.

Method of sampling used is time-weighted composite samples based on the ZDHC Wastewater Guidelines. Composite sampling is performed for no less than six hours, with no more than one hour between discrete samples. Each discrete sample is of equal volume. Wastewater and freshwater samples is, as much as possible, collected simultaneously, during the time that PU is in normal operation. The sampling aims 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 on-site photos are attached in Appendix A and field data records are attached in Appendix C.



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## **Test Result**

### **1A) Conventional Parameters**

#### Temperature

**Test Method** : Measurement by thermometer

Tested Item(s)	Result	Unit	Conclusion
I002	35.3 (Treated Wastewater) 31.8 (receiving body) ▲ 3.5 (Aspirational)	deg. C	DATA

Note:

deg. C = degree Celsius (°C)

Foundational Limit: ▲ 15 / max. 35°C; Progressive Limit: ▲ 10 / max. 30°C; Aspirational Limit: ▲ 5 / max. 25°C

#### Total Suspended Solids (TSS)

**Test Method** : Reference to ALPA 2540D, GB 11901, ISO 11923

Tested Item(s)	Result	Unit	Conclusion
I002	10 (Progressive)	mg/L	DATA

Note:

mg/L = milligram per liter

Foundational Limit: 50 mg/L; Progressive Limit: 15 mg/L; Aspirational Limit: 5 mg/L

#### Chemical Oxygen Demand (COD)

**Test Method** : Reference to ALPA 5220B & EPA 410.3, HJ 828

Tested Item(s)	Result	Unit	Conclusion
I002	35 (Aspirational)	mg/L	DATA

Note:

mg/L = milligram per liter

Foundational Limit: 150 mg/L; Progressive Limit: 80 mg/L; Aspirational Limit: 40 mg/L

#### Total Nitrogen (Total-N)

**Test Method** : Reference to APHA 4500- N-C

Tested Item(s)	Result	Unit	Conclusion
I002	12.10 (Foundational)	mg/L	DATA

Note:

mg/L = milligram per liter

Foundational Limit: 20 mg/L; Progressive Limit: 10 mg/L; Aspirational Limit: 5 mg/L



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#### pH Value

**Test Method** : Reference to ISO 10523, EPA 150.2 and APHA 4500-H<sup>+</sup>

-	Unit	Result
<b>Test Item(s)</b>	-	I002
<b>Parameter</b>	-	-
Temp. of sample	deg. C	23.2
pH value of sample	-	8.1 (Comply with ZDHC WWG requirements)
<b>Conclusion</b>	-	DATA

Note:

Temp. = Temperature  
Limit: 6 - 9

deg. C = degree Celsius (°C)

#### Color [m<sup>-1</sup>] (436nm; 525nm; 620nm)

**Test Method** : ISO 7887: 2011(E), B

Tested Item(s)	Result	Unit	Conclusion
I002	6.6; 3.7; 2.6 (Foundational)	m <sup>-1</sup>	DATA

Note:

Foundational Limit: 7;5;3 m<sup>-1</sup>; Progressive Limit: 5;3;2 m<sup>-1</sup>; Aspirational Limit: 2;1;1 m<sup>-1</sup>

#### Biochemical Oxygen Demand (BOD<sub>5</sub>)

**Test Method** : Reference to APHA 5210B (5 days)

Tested Item(s)	Result	Unit	Conclusion
I002	10 (Progressive)	mg/L	DATA

Note:

mg/L = milligram per liter

Foundational Limit: 30 mg/L; Progressive Limit: 15 mg/L; Aspirational Limit: 5 mg/L

#### Ammonium Nitrogen

**Test Method** : Reference to APHA 4500-NH<sub>3</sub> – B & F 22<sup>nd</sup> Edition 2012

Tested Item(s)	Result	Unit	Conclusion
I002	0.35 (Aspirational)	mg/L	DATA

Note:

mg/L = milligram per liter

Foundational Limit: 10 mg/L; Progressive Limit: 1 mg/L; Aspirational Limit: 0.5 mg/L



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Total Phosphorus (Total-P)

**Test Method** : Reference to APHA 22<sup>nd</sup> Edition -4500-P.E (2012)

Tested Item(s)	Result	Unit	Conclusion
I002	0.15 (Progressive)	mg/L	DATA

Note:

mg/L = milligram per liter

Foundational Limit: 3 mg/L; Progressive Limit: 0.5 mg/L; Aspirational Limit: 0.1 mg/L

Adsorbable Organic Halogen (AOX)

**Test Method** : Reference to IHM - TTI/A-98 (Based on ISO 9562)

Tested Item(s)	Result	Unit	Conclusion
I002	0.40 (Progressive)	mg/L	DATA

Note:

mg/L = milligram per liter

Foundational Limit: 5 mg/L; Progressive Limit: 1 mg/L; Aspirational Limit: 0.1 mg/L

Oil and Grease

**Test Method** : Reference to EPA 1664B, APHA-5520 B and F

Tested Item(s)	Result	Unit	Conclusion
I002	1.2 (Progressive)	mg/L	DATA

Note:

mg/L = milligram per liter

Foundational Limit: 10 mg/L; Progressive Limit: 2 mg/L; Aspirational Limit: 0.5 mg/L

Phenol

**Test Method** : APHA 5530 C

Tested Item(s)	Result	Unit	Conclusion
I002	<0.001 (Aspirational)	mg/L	DATA

Note:

mg/L = milligram per liter

Foundational Limit: 0.5 mg/L; Progressive Limit: 0.01 mg/L; Aspirational Limit: 0.001 mg/L

Coliform

**Test Method** : Reference to ISO 9308-1: 2014

Tested Item(s)	Result	Unit	Conclusion
I002	128 (Foundational)	Bacteria / 100 mL	DATA

Note:

bacteria/100 mL = bacteria per 100 milliliters

Foundational Limit: 400 / 100 ml; Progressive Limit: 100 / 100 ml; Aspirational Limit: 25 / 100 ml;



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Persistent Foam

**Test Method** : Visual

Tested Item(s)	Result	Unit	Conclusion
I002	No Foam (Comply with ZDHC WWG requirements)	-	DATA

ANIONS - Cyanide

**Test Method** : Reference to APHA 22<sup>nd</sup> Edition-4500-CN. C&E (2012), EPA 9010C, 9013 & 9014

Tested Item(s)	Result	Unit	Conclusion
I002	ND (Aspirational)	mg/L	DATA

Note:

mg/L = milligram per liter

ND = Not Detected

Foundational Limit: 0.2 mg/L; Progressive Limit: 0.1 mg/L; Aspirational Limit: 0.05 mg/L

ANIONS - Sulfide

**Test Method** : Reference to APHA 4500-S<sup>2</sup>-D

Tested Item(s)	Result	Unit	Conclusion
I002	0.12 (Foundational)	mg/L	DATA

Note:

mg/L = milligram per liter

Foundational Limit: 0.5 mg/L; Progressive Limit: 0.05 mg/L; Aspirational Limit: 0.01 mg/L

ANIONS - Sulfite

**Test Method** : Reference to EPA 377.1, APHA 4500-SO<sub>3</sub><sup>2-</sup> (2012)

Tested Item(s)	Result	Unit	Conclusion
I002	1.0 (Foundational)	mg/L	DATA

Note:

mg/L = milligram per liter

Foundational Limit: 2 mg/L; Progressive Limit: 0.5 mg/L; Aspirational Limit: 0.2 mg/L



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**1B) Conventional Parameters – METALS**

<b>Heavy Metals</b>	<b>I001 (mg/L)</b>	<b>I002 (mg/L)</b>
Antimony( Sb ) <i>Foundational Limit: 0.1 mg/L; Progressive Limit: 0.05 mg/L; Aspirational Limit: 0.01 mg/L</i>	0.002 (Aspirational)	0.003 (Aspirational)
Chromium( Cr ), total <i>Foundational Limit: 0.2 mg/L; Progressive Limit: 0.1 mg/L; Aspirational Limit: 0.05 mg/L</i>	0.041 (Aspirational)	0.013 (Aspirational)
Cobalt( Co ) <i>Foundational Limit: 0.05 mg/L; Progressive Limit: 0.02 mg/L; Aspirational Limit: 0.01 mg/L</i>	ND (Aspirational)	ND (Aspirational)
Copper( Cu ) <i>Foundational Limit: 1 mg/L; Progressive Limit: 0.5 mg/L; Aspirational Limit: 0.25 mg/L</i>	ND (Aspirational)	0.008 (Aspirational)
Nickel( Ni ) <i>Foundational Limit: 0.2 mg/L; Progressive Limit: 0.1 mg/L; Aspirational Limit: 0.05 mg/L</i>	ND (Aspirational)	ND (Aspirational)
Silver( Ag ) <i>Foundational Limit: 0.1 mg/L; Progressive Limit: 0.05 mg/L; Aspirational Limit: 0.005 mg/L</i>	ND (Aspirational)	ND (Aspirational)
Zinc( Zn ) <i>Foundational Limit: 5 mg/L; Progressive Limit: 1 mg/L; Aspirational Limit: 0.5 mg/L</i>	0.366 (Aspirational)	ND (Aspirational)
Arsenic( As ) <i>Foundational Limit: 0.05 mg/L; Progressive Limit: 0.01 mg/L; Aspirational Limit: 0.005 mg/L</i>	0.002 (Aspirational)	0.002 (Aspirational)
Cadmium( Cd ) <i>Foundational Limit: 0.1 mg/L; Progressive Limit: 0.05 mg/L; Aspirational Limit: 0.01 mg/L</i>	ND (Aspirational)	ND (Aspirational)
Lead( Pb ) <i>Foundational Limit: 0.1 mg/L; Progressive Limit: 0.05 mg/L; Aspirational Limit: 0.01 mg/L</i>	0.004 (Aspirational)	ND (Aspirational)
Mercury( Hg ) <i>Foundational Limit: 0.01 mg/L; Progressive Limit: 0.005 mg/L; Aspirational Limit : 0.001 mg/L</i>	ND (Aspirational)	ND (Aspirational)
Chromium VI( CrVI ) <i>Foundational Limit: 0.05 mg/L; Progressive Limit: 0.005 mg/L; Aspirational Limit: 0.001 mg/L</i>	ND (Aspirational)	ND (Aspirational)





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Others Priority Chemical Groups

	<b>I001 (<math>\mu\text{g/L}</math>)</b>	<b>I002 (<math>\mu\text{g/L}</math>)</b>
2A) APs and APEOs	ND	ND
2B) Chlorobenzenes and Chlorotoluenes	ND	ND
2C) Chlorophenols	ND	ND
2D) Azo Dyes	ND	ND
2E) Carcinogenic Dyes	ND	ND
2F) Disperse Dyes	ND	ND
2G) Flame Retardants	ND	ND
2H) Glycols	ND	ND
2I) Halogenated Solvents	ND	ND
2J) Organotin Compounds	ND	ND
2K) Perfluorinated and Polyfluorinated Chemicals	ND	ND
2L) Phthalates	ND	ND
2M) Poly Aromatic Hydrocarbons	ND	ND
2N) Volatile Organic Compounds	ND	ND

Remark :

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

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

I001) Sampling Point  
(GPS Location: N 24° 22' 59.88"; E 91° 25' 0.12")



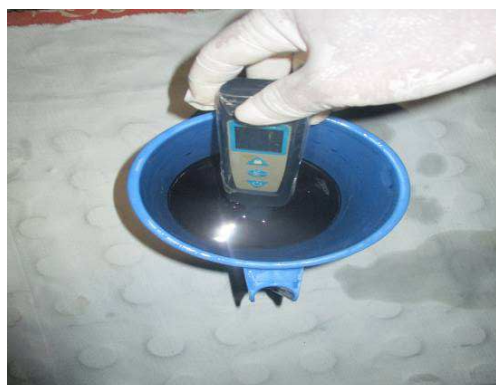
I001) Sampling Point Surrounding Environment  
(GPS Location: N 24° 22' 59.88"; E 91° 25' 0.12")



I001) All sampled bottles with label



I001) pH value



I001) Sample for Phthalate Testing



I001) Packaging



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

I002) Sampling Point  
(GPS Location: N 24° 22' 59.88"; E 91° 25' 0.12")



I002) Sampling Point Surrounding Environment  
(GPS Location: N 24° 22' 59.88"; E 91° 25' 0.12")



I002) All sampled bottles with label



I002) pH value



I002) Sample for Phthalate Testing



I002) Packaging







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## 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,
	3-Chlorophenol	108-43-0	0.5	0.05	



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Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)/(ppb)	Sludge (mg/kg)/(ppm)	
	4-Chlorophenol	106-48-9	0.5	0.05	derivatisation with KOH, acetic anhydride followed by GC/MS
	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	
	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	



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Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)/(ppb)	Sludge (mg/kg)/(ppm)	
	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	
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-dichloroisopropyl) phosphate (TDCP)	13674-87-8	5	1	



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



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Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)/(ppb)	Sludge (mg/kg)/(ppm)	
	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	
	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).  Cyanide: With reference to APHA 4500 CN—B,C&E and
	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	Not	





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Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)/(ppb)	Sludge (mg/kg)/(ppm)	
			visible	visible	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	
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
	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	please refer to ZDHC Wastewater Guidelines for more details on the testing method and the levels (Foundational, Progressive, and Aspirational).
	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	Cr(VI): Various Solvent extraction and derivatisation followed by UV analysis
	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

**Remark:** The report [(6821)279-0203] was sub-contracted to India (Testtex India Laboratories Pvt. Ltd) for Coliform, AOX & Total-N Tests.



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## 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.: 15		
Business Line: Analytical		

**General Data**

Laboratory Sample Number: (6821) 279-0203

Client Name: Engr. Kamrul Islam

Field Contact Person: Phone No 01711408373

Project (Facility Name and Address): Square Denims Ltd, Shayestaganj, Habiganj.

Sampling Location / Description: Inlet point

Sample Identification: Zero discharge with sampling plan

Sample Type: Composite Sample / Grab sample (Please delete as appropriate)

Name of Sampler: Amirul Islam

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

Date of collection: 05.10.2021

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

\*Note: It would be selected more than one

Field Data for Wastewater									
Arrival Time:		3:00 pm			Departure Time:		9:00 pm		
Field Parameters		pH		Temp: °C		Color:		Flow rate: (volume/min)	
Control No. of field equipment									
Factory with effluent treatment plant:		✓ Yes						No	
Sample matrix:									
		✓ Incoming water (If required)							
		Wastewater before treatment							
		Wastewater after treatment – water at discharge point							
Sampler container number		12							
		1	2	3	4	5	6	7	8
Recording time	ID								
	Time	3:30 pm	4:30 pm	5:30 pm	6:30 pm	7:30 pm	8:30 pm		
pH		8.9	10.3	9.7	9.6	10.7	10.2		
Temp (°C)		44.1	45.2	43.4	39.1	40.6	40.2		
Color (visual estimation)		Black	Black	Black	Black	Black	Black		
Flow rate (volume/time)		m <sup>3</sup> /h 120	110	140	101	92	111		
Volume collected, mL		167X12	167X12	167X12	167X12	167X12	167X12		
Total volume collected		Remark: Total volume collected must be greater than total of sample size required							
Analysis Required and Preservation Method									

### Analysis Required and Preservation Method

Tests (ZDHC MRSI Parameters)	Test required (V)	Total of sample size	Type of container	Preservation method
Combined test or individual test (Remark 4)	1. Phthalate	✓	Amber Glass, washed with nitric acid.	Without adding acid Store sample at 2-8°C
	2. Chlorobenzenes, Chlorotoluene & PAH	✓		
	3. SCCPs	✓		
	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. PFCs (Remark 6)	✓	2 mL		
			PE, washed with pesticide grade Acetone	Fill to full container without air gap; acidify to pH 2 with HCl and store sample at 2-8°C Without adding acid Store sample at 2-8°C

CPSD-AN-00613-DATA 04-FIELD DATA RECORD ZDHC SAMPLING-V15



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				Issue Date:	
				Version No.: 15	
				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) 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) & Lead (Remark 5)		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> B <sub>4</sub> O <sub>7</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 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	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	
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 0.1 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 Store sample at 2-8°C	
33. Total-N		100 mL			
34. Ammonium-N		500 mL		Acidify to pH 2 with H <sub>2</sub> SO <sub>4</sub> Store sample at 2-8°C	
35. Adsorbable organically bound halogens (AOX)		100 mL	Amber Glass, washed with nitric acid,	Acidify to pH 2 with HNO <sub>3</sub> and store at 2-8°C	
36. Acute aquatic toxicity Luminus Bacteria, Fish Egg, Daphne, Algae		1000 mL			
37. Sulphate		100 mL		Without adding acid Store sample at 2-8°C	
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-000019-ST/P01, 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:

Anifal Islam  
Full name:

Date: 05/10/2021

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:

Ramoul Islam  
Full Name:

Date: 05/10/2021



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	<b>FIELD DATA RECORD ON ZERO DISCHARGE SAMPLE (COMPOSITE / INDIVIDUAL SAMPLING)</b>	CPSD-AN-00613-DATA 04
	Issue Date:	
	Version No.: 15	
	Business Line: Analytical	

**General Data**

Laboratory Sample Number: (6821) 279-0203

Client Name: Engn. Kamrul Islam Phone No. 01711408373

Field Contact Person: Square Denims Limited, Shayestaganj,

Project (Facility Name and Address): Outlet

Sampling Location / Description: Zero discharge with sampling plan

Sample Identification: Composite Sample / Grab sample (Please delete as appropriate)

Sample Type: Grab sample

Name of Sampler: Amirul Islam

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

Date of collection: 05.10.2021

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

\*Note: It would be selected more than one

**Field Data for Wastewater**

Arrival Time:	3:00 pm	Departure Time:	3:00 pm
Field Parameters	pH:	Temp:	°C
Control No. of field equipment		Color:	
Factory with effluent treatment plant:	✓	Yes	No
Sample matrix:	<input type="checkbox"/> Incoming water (if required) <input checked="" type="checkbox"/> Wastewater before treatment <input checked="" type="checkbox"/> Wastewater after treatment - water at discharge point		
Sampler container number	24		
Recording time	ID	1	2
	Time	3:30 pm	4:30 pm
pH		8.0	7.8
Temp (°C)		36.2	35.8
Color (visual estimation)		brownish	brownish
Flow rate (volume/min)		118	116
Volume collected, mL		167X24	167X24
Total volume collected		24.048	24.048

Remark: Total volume collected must be greater than total of sample size required

Tests (ZDHC MRSL Parameters)	Test required (v)	Total of sample size	Type of container	Preservation method	
Combined test or Individual test (Remark 4)	1. Phthalate	✓	Amber Glass, washed with nitric acid,	Without adding acid Store sample at 2-8°C	
	2. Chlorobenzenes (Chlorotoluene & PAH)	✓			
	3. SCCPs	✓			
	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 5)	✓	10 mL			Fill to full container without air gap, acidify to pH 2 with HCl and store sample at 2-8°C
16. PFCs (Remark 5)	✓	2 mL			PE, washed with pesticide grade Acetone Without adding acid Store sample at 2-8°C





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				Issue Date:	
				Version No.: 15	
				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)	✓	2000 mL total or 2000 mL each	Amber Glass, washed with nitric acid.	Without adding acid Store sample at 2-8°C	
17 Total suspended solids (TSS)	✓				
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 5)	✓	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		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	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	
25 Phenols	✓	500 mL			
26 Oil and Grease & TotalHydrecarben-	✓	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 5)	✓	125 mL	PE, clean, sterile, non-reactive	Add 0.1 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 5)	✓	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 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		Acidify to pH 2 with HNO <sub>3</sub> and store at 2-8°C	
35 Adsorbable organically bound halogens (AOX)	✓	100 mL		Without adding acid Store sample at 2-8°C	
36 Acute aquatic toxicity Luminous Bacteria, Fish Egg, Daphne, Algae	✓	1000 mL			
37 Sulfate	✓	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-000019-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

Arifur Islam

Date: 05.10.2021

Full name:

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

Signature of Factory Representative

Arifur Islam

Date: 05/10/2021

Full Name:

**END**