BURBERRY
LONDON ENGLAND

EFFLUENT TESTING TREND ANALYSIS
NOVEMBER 2018

CONTENT

EXECUTIVE SUMMARY

This report discloses effluent quality results over 3 cycles of analysis conducted in October 2017, April 2018 and October 2018, when the Zero Discharge of Hazardous Chemicals Wastewater Guidelines (ZDHC WWG) have been implemented in Burberry's supply chain.

Overall, an improvement trend in the effluent is observed for the Zero Discharge of Hazardous Chemicals Manufacturing Restricted Substances List (ZDHC MRSL) parameters, reflecting the progress made on the elimination of unwanted chemicals from being used in the production processes. Some opportunities for improvement were observed for conventional parameters & anions that are not in the scope of Burberry's elimination commitment[1].

Burberry will continue to work closely with its partners to set action plans for continuous improvement, as well as with ZDHC and testing laboratories to improve the ZDHC WWG implementation and continuously extend the scope of our efforts..

INTRODUCTION

In October 2017, after an initial pilot with 6 facilities, Burberry adopted the ZDHC WWG, a unified set of expectations on effluent quality that go beyond regulatory compliance. Prior to adopting the ZDHC WWG, Burberry had already established an effluent testing program which follow an internally defined methodology, as detailed in the September 2017 report, (Effluent Testing Trend Analysis[3]).

The ZDHC WWG introduced a broader scope of analysis, particularly regarding the inclusion of conventional parameters & anions[4] and heavy metals, along with MRSL parameters.

To expand Burberry's sphere of influence, Tier 1 partners (who do not have their own wet-processes) were involved to engage more facilities to adopt the ZDHC WWG. This also contributed to the spread of knowledge around this specific matter amongst the community of Chemical Managers.

---

[1] https://www.burberryplc.com/content/burberry/corporate/en/responsibility/policies-and-commitments/environment/chemical-management.html

[3] Reference: Effluent Testing Trend Analysis, September 2017 https://www.burberryplc.com/content/dam/burberry/corporate/Responsibility/Responsibility_docs/Policies_statements/Chemical_Management/2017/Effluent%20testing%20Trend%20analysis_Final.pdf

[4] Reference: ZDHC wastewater guidelines, Pg. 9 - Definitions

With the vision of expanding the scope of the WWG to leather processing, a number of tanneries were included in the effluent analysis; this provided valuable data for the development of a specific standard for the leather sector, prior to its release in 2019.
The new WWG will be then applicable to a much broader population of Supply Chain Partners.

All testing data gathered are publicly available at www.burberryplc.com.

Additionally, to stimulate transparency within the supply chain, Burberry has invited partners to publish their results on the ZDHC Gateway Wastewater Module, a global online platform to register and share verified effluent testing data for the textile industry.

METHODOLOGY

In accordance with the ZDHC WWG, effluent testing was conducted twice a year; this report includes data from 3 cycles: October 2017, April 2018 and October 2018. The number of wet-processing facilities involved were 41, 44 and 43 respectively, representing 55%, 45% and the 52% of Burberry's Raw Material Procurement value.

Additionally, 6 tanneries were included for the 3 cycles of testing (October 2018 data is not included in this report).

The number and the type of wet-processing facilities performing effluent testing in the 3 cycles are reported in *Table 1*[5].

Facilities involved	Oct-17	Apr-18	Oct-18
Indirect discharge facilities	29	35	35
Direct discharge facilities	12	9	8
Total	**41**	**44**	**43**

Table 1 - Number and type of facilities performing wastewater testing in October 2017 and April, October 2018

Sampling and testing were performed only by ZDHC Provisionally Accepted labs[6], in accordance with the requirements set in the WWG[7].

Conventional parameters in Raw wastewater for indirect discharge facilities, were compared to the facility's discharge permit; whereas for direct discharge facilities Burberry applied the

[5] Reference: Glossary, definition of direct and indirect discharge facility
[6] Reference: ZDHC wastewater guidelines, Pg. 7
[7] Reference: ZDHC wastewater guidelines, Pg. 18

three-level approach as defined in the guidelines (Foundational, Progressive, Aspirational limits)[8].

TREND ANALYSIS

ZDHC MRSL parameters[9]

Figure 1 represents the overall level of adherence to the ZDHC MRSL parameters across the 3 cycles of analysis. Data is expressed in percentage considering the number of analytes detected in raw wastewater, against the total number of analytes tested.

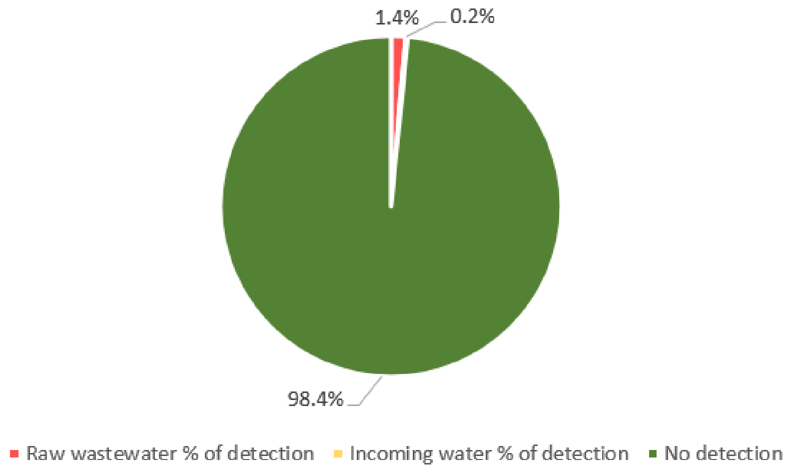

Figure 1 – Overall % of adherence to ZDHC MRSL Parameters

Amongst the 0.2% detections in the incoming water, the analytes most frequently detected were tetrachloroethylene (Halogenated Solvents), PFOA (Perfluorinated and Polyfluorinated Compounds) and NPEO (Nonylphenol ethoxylates). All of these findings were well below legal requirements. Findings in raw wastewater are better detailed in *Figure 2*. The data includes only detections in raw wastewater when there was no detection of the same substance in the incoming water to exclude the influence of such contaminants.

[8] Reference: ZDHC wastewater guidelines, Pg. 16

[9] Appendix 2 reports MRSL Parameters tested, with reporting limits and test methods applied

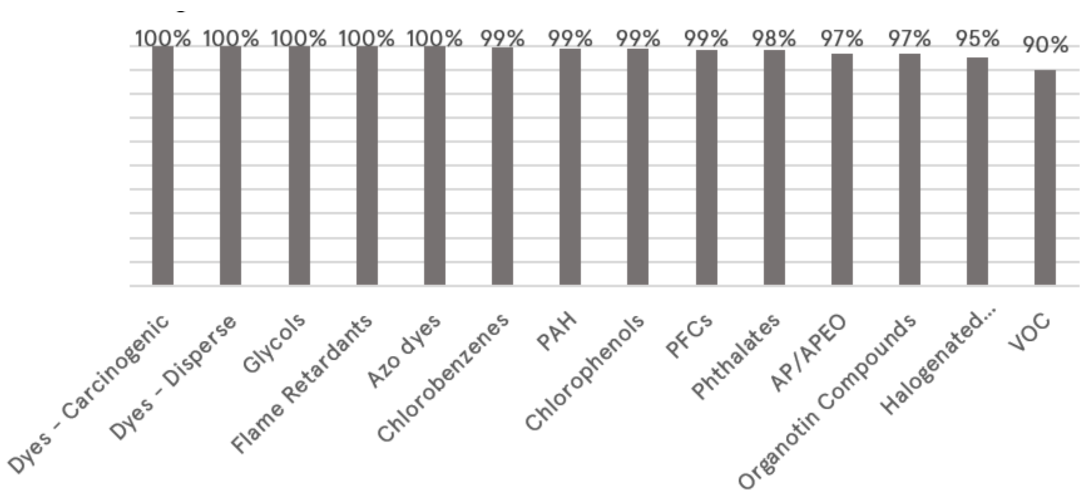

Figure 2 – % of adherence to ZDHC MRSL Parameters in Raw wastewater per chemical group

- All samples were tested for the 14 chemical groups of Table 2A-N, expanding the scope of analysis of previous effluent testing
- Dyes (Carcinogenic or Equivalent Concern), Dyes-Disperse (Sensitizing), Glycols, Flame Retardants and Azo-dyes were not detected across the 3 testing cycles.
  The 2 chemical groups most frequently detected were Halogenated Solvents and Volatile Organic compounds (VOC's)
- Significant improvement trends for some groups such as APEOs, PFCs and Phthalates and PAH (Polycyclic Aromatic Hydrocarbons) were observed (*Figure 3)* from the previous reporting cycle (September 2015 – March 2017)[11], reflecting the effectiveness of the input chemical management efforts through the implementation of the MRSL
- No changes were observed for Glycols, Flame retardant, Azo dyes, Chlorobenzenes and Chlorophenols, while Halogenated Solvents and VOCs are more frequently detected

As shown in Figure 3, some groups of substances were not analysed in the previous reporting cycle (single bars):

[11] Reference: Effluent Testing Trend Analysis, September 2017 https://www.burberryplc.com/content/dam/burberry/corporate/Responsibility/Responsibility_docs/Policies_statements/Chemical_Management/2017/Effluent%20testing%20Trend%20analysis_Final.pdf

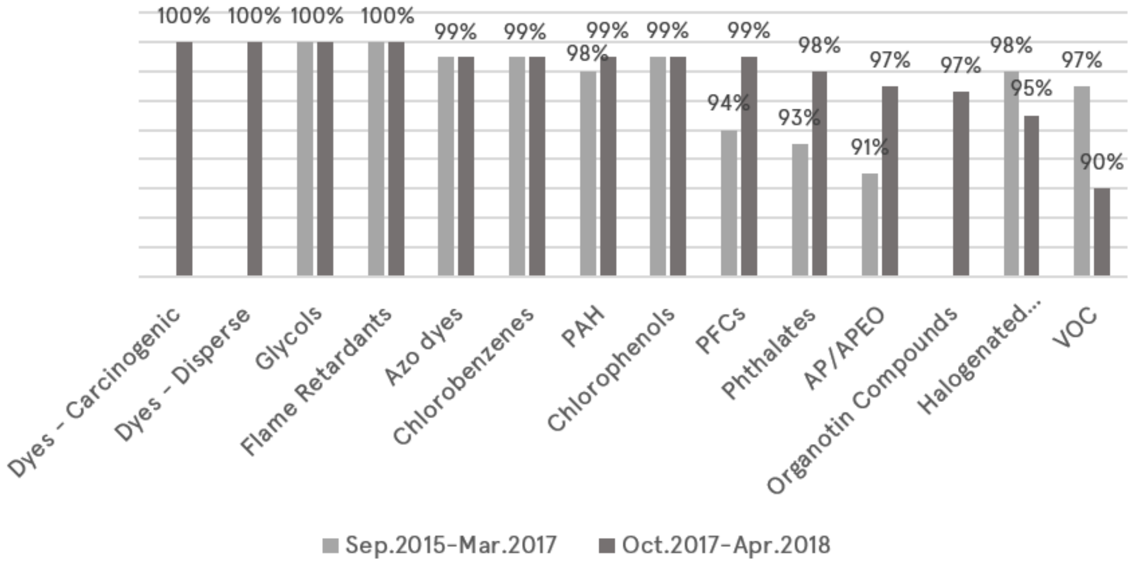

Figure 3 - % of adherence to ZDHC MRSL Parameters in the 2 reporting cycles

Conventional Parameters, anions and Heavy Metals (HM)[13]

The scope of analysis of the ZDHC WWG expanded to include conventional parameters beyond regulatory requirements. *Figure 4* shows the overall level (Foundational, Progressive and Aspirational as per the WWG criteria) achieved for Conventional Parameters, anions and Heavy Metals (HM), as combined data between the 3 testing cycles.

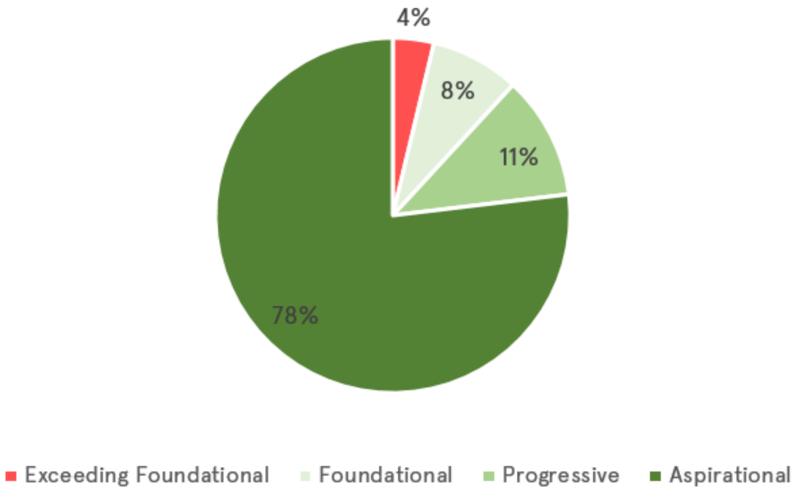

Figure 4 – Overall % of foundational, Progressive and Aspirational level achieved of Conventional, anions and Heavy Metals Parameters

[13] Appendix 1 reports Conventional parameters & HM tested, with reporting limits and test methods applied

The distribution of adherence to the Foundational, Progressive and Aspirational levels for conventional parameters & anions and HM, in percentage, is further detailed in *Figure 5* and *6* below, for each parameter analysed. The graph includes only direct discharge facilities, as defined in the WWG.

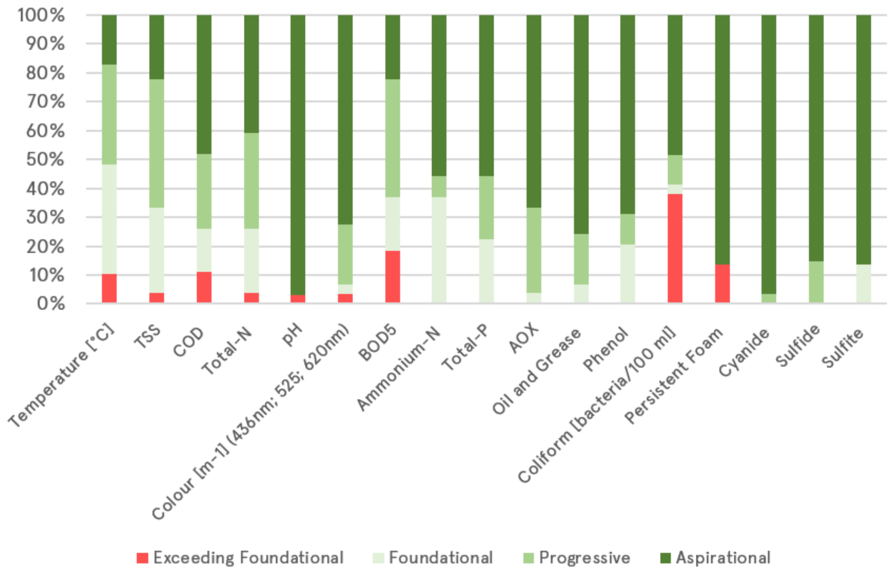

Figure 5 - Conformity level to Conventional & anions parameters per chemical group

- As reported in *Figure 5*, in a few instances some parameters (Temperature, TSS, COD, Total N, pH, Colour, BOD, Coliform and Persistent Foam) exceeded the Foundational level. In such circumstances each facility's discharge permit was examined and all findings confirmed in accordance to the applicable regulatory limit
- An action plan to improve results is being developed, with priority given to facilities which have exceeded foundational limits

- *Figure 6* shows the % of adherence to the WWG of heavy metals, across the 3 cycles of analysis
- Overall, 97% of the Heavy Metals achieved the Aspirational level of the WWG across the 3 cycles of testing.

Figure 6 - Conformity level to Heavy Metals Parameters per chemical group

CONCLUSION

- There is a clear decreasing trend in some of the MRSL parameter detections, indicating the effectiveness of the multiple measures put in place to eliminate unwanted substances
- Further improvement is needed for chemical groups such as Halogenated Solvents and VOC's
- Some chemical formulations containing VOCs were identified in use at facilities and are currently in the substitution process to be replaced with alternatives, the root cause of the remaining group of substances is not yet clearly identified; semi-processed raw materials are likely to be the cause of contamination, requiring further efforts to deepen the reach in the lower tiers of the supply chain of the chemical management programme
- The WWG results for conventional parameters & anions highlighted the need to prioritise improvements in these areas to be able to achieve the "Aspirational" level
- It is worth noting that although Burberry promotes the Clean Factory Approach, a facility's effluent is not indicative of only Burberry production, but of all customers' production
- It is important that Burberry continues to stimulate the adoption of the MRSL and WWG with a greater number of brands to better influence the supply chain

LIMITATIONS

- The WWG have only recently been released, and as expected with any new standard, there have been challenges in adoption, understanding and correct application of the guidelines
- Supply chain partners need to increase their confidence with the application of the guidelines. Suppliers are supported by members of the Burberry team in understanding this new process
- ZDHC provisionally-accepted laboratories have incorrectly performed testing, which Burberry has escalated to ZDHC
- The current guidelines are not applicable for tanneries, reducing the scope of adoption for Burberry

NEXT STEPS

- Burberry will continue to set targets for our supply chain related to the adoption of WWG, disclosure on the ZDHC Gateway, Wastewater Module, and minimum requirements that must be achieved in light of the 2020 target
- Burberry promotes training resources such as ZDHC and 3rd Party laboratories on-line webinars and organised an in-person training with 50 attendees at a 3rd party laboratory in July 2017 in Italy
- Additionally, at every Burberry-organised supply chain workshop, Burberry promotes the ZDHC WWG, and internal teams have been informed about the adoption and performance of partners; effluent quality performance has now been reflected in partner scorecards as a KPI (key performance indicator), and contributes to Burberry's 5 year Responsibility strategy of Products containing at least one "Positive Attribute"
- Follow up calls and visits are being organised to support facilities with corrective actions, external experts such as ETP engineers and consultant companies have been involved
- Burberry is participating in a pilot coordinated by ZDHC, with the technical support of the Tanneries' Italian Association (UNIC – Unione Nazionale Industria Conciaria) and supported by 2 other ZDHC brands. The study aims to develop wastewater guidelines specific for the leather sector, due for release in 2019, 13 tanneries are involved, 7 of which are Burberry's tanneries

GLOSSARY

- **Tier 1:** Refers to a final or finished product manufacturing and assembling business entity that makes a final or finished product for selling to the consumer marketplace through a brand or retailer
- **Direct discharge**: A point source that discharges waste water to streams, lakes, or oceans. Municipal and industrial facilities that introduce pollution through a defined conveyance or system such as outlet pipes are direct dischargers
- **Indirect discharge**: The discharge of wastewater to a treatment facility not owned and operated by the facility discharging the pollutants, for example a municipal wastewater treatment plant or industrial treatment park
- **Incoming Water (IW)**: Water that is supplied to a manufacturing process, usually withdrawn from surface water bodies, groundwater, or collected from rainfall. This includes water supplied by municipalities, and condensate obtained from external sources of process steam
- **Raw Waste Water (Raw WW)**: Wastewater that has not yet been treated prior to direct or indirect discharge from the facility, or prior to water recycling efforts
- **Pre-treated Waste Water (Pre-treated WW)**: Wastewater that has been pre-treated prior to indirect discharge from the facility to a Centralised Effluent Treatment Plant (CETP)
- **Treated Waste Water (Treated WW)**: Wastewater that has been fully treated with an on-site ETP, prior to the direct discharge to the environment.

- **APPENDIX 1**

Tables below report parameters tested, their reporting limits, and the test method applied.

Table 1:

Conventional parameters showing foundational, progressive, and aspirational limits; and the standard test methods for measurement.

It is expected that suppliers will use the standard methods that best apply to their region. When reporting data, state the standard test methods used to obtain the data.

Sum parameters + metals (mg/L unless otherwise noted)	Limits			Standard Test Method			
	Foundational	Progressive	Aspirational	ISO	European Union	United States	China
Temperature [°C] *	Δ15 / max. 35	Δ10 or 30	Δ5 or 25	No standard		USEPA 170.1	GB/T 13195
TSS	50	15	5	ISO 11923		USEPA 160.2, APHA 2540D	GB/T 11901
COD	150	80	40	ISO 6060**		USEPA 410.4. APHA 5220D**	GB/T 11914**
Total-N	20	10	5	ISO 5663, ISO 29441		USEPA 351.2. APHA 4500P-J. APHA 4500N-C	HJ 636. GB 11891
pH	6-9			ISO 10523	EN ISO 10523	USEPA 150.1	GB/T 6920
Colour [m^{-1}] (436nm; 525; 620nm)	7; 5; 3	5; 3; 2	2; 1; 1	ISO 7887-B	-	-	-
BOD_5	30	15	5	ISO 5815-1, -2 (5 days)	EN 1899-1 (5days)	USEPA 405.1 (5 days), APHA 5210B (5 days)	HJ 505
Ammonium-N	10	1	0.5	ISO 11732. ISO 7150	EN ISO 11732	USEPA 350.1, APHA 4500 NH_3-N	HJ 535. HJ 536
Total-P	3	0.5	0.1	ISO 11885, ISO 6878	EN ISO 11885	USEPA 365.4, APHA 4500P-J	GB/T 11893
AOX	5	1	0.1	ISO 9562	EN ISO 9563	USEPA 1650	HJ/T 83-2001
Oil and Grease	10	2	0.5	ISO 9377-2	EN ISO 9377-2	USEPA 1664	HJ 637
Phenol	0.5	0.01	0.001	ISO 14402	EN ISO 14402	APHA 5530 B, C&D	HJ 503
Coliform [bacteria/100 ml]	400	100	25	ISO 9308-1	EN ISO 9308-1	USEPA 9132	GB/T 5750.12
Persistent Foam	Not visible			N/A			
Anions							
Cyanide	0.2	0.1	0.05	ISO 6703-1,2,-3. ISO 14403-1,-2		USEPA 335.2, APHA 4500-CN	HJ 484
Sulfide	0.5	0.05	0.01	ISO 10530		APHA 4500-S2-D	GB/T 16489
Sulfite	2	0.5	0.2	ISO 10304-3	EN ISO 10304-3	USEPA 377.1	**
Metals							
Antimony***	0.1	0.05	0.01	ISO 11885	EN ISO 11885	USEPA 200.7. USEPA 200.8. USEPA 6010c. USEPA 6020a	GB7475. HJ700
Chromium, total	0.2	0.1	0.05				GB 7466. HJ700
Cobalt	0.05	0.02	0.01				HJ700
Copper	1	0.5	0.25				GB7475. HJ700
Nickel	0.2	0.1	0.05				GB 11907. HJ700
Silver	0.1	0.05	0.005				GB11907.HJ700
Zinc	5.0	1.0	0.5				GB 7472. GB 7475. HJ 700
Arsenic	0.05	0.01	0.005	ISO 11885	EN ISO 11885	USEPA 200.7. USEPA 200.8. USEPA 6010c. USEPA 6020a	GB7475. HJ700
Cadmium	0.1	0.05	0.01	ISO 11885	EN ISO 11885	USEPA 200.7. USEPA 200.8. USEPA 6010c. USEPA 6020a	GB7475. HJ700
Chromium (VI)	0.05	0.005	0.001	ISO 18412	EN ISO 18412	USEPA 218.6	GB 7467
Lead	0.1	0.05	0.01	ISO 11885	EN ISO 11885	USEPA 200.7. USEPA 200.8. USEPA 6010c. USEPA 6020a	GB7475. HJ700
Mercury	0.01	0.005	0.001	ISO 12846 or ISO 17852	EN ISO 18412 or ISO 17852	USEPA 200.7. USEPA 200.8. USEPA 6010c. USEPA 6020a	HJ 597

*Degrees above ambient temperature of receiving water body.

** validated cuvette methods can be used alternatively

*** we aknowledge that for polyester production it will take time to reach this limit.

Table 2A:

Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): Including All Isomers

Reporting limits mentioned in the following tables apply to each single chemical substance of the respective substance group

Substance or Substance Group	CAS	Reporting Limit (µg/L)	Standard Test Method
Nonylphenol (NP), mixed isomers	104-40-5 11066-49-2 25154-52-3 84852-15-3	5	NP/OP: ISO 18857 -2 (modified dichloromethane extraction) or ASTM D7065 (GC/MS or LC/MS(-MS) OPEO/NPEO (n>2): ISO 18254-1 OPEO/NPEO (n=1,2): ISO 18857-2 or ASTM D7065
Octylphenol (OP), mixed isomers	140-66-9 1806-26-4 27193-28-8		
Octylphenol ethoxylates (OPEO)	9002-93-1 9036-19-5 68987-90-6		
Nonylphenol ethoxylates (NPEO)	9016-45-9 26027-38-3 37205-87-1 68412-54-4 127087-87-0		

Table 2B:

Chlorobenzenes and Chlorotoluenes

Substance or Substance Group	CAS	Reporting Limit (µg/L)	Standard Test Method
Monochlorobenzene	108-90-7	0,2	USEPA 8260B, 8270D. Dichloromethane extraction followed by GC/MS
1,2-Dichlorobenzene	95-50-1		
1,3-Dichlorobenzene	541-73-1		
1,4-Dichlorobenzene	106-46-7		
1,2,3-Trichlorobenzene	87-61-6		
1,2,4-Trichlorobenzene	120-82-1		
1,3,5-Trichlorobenzene	108-70-3		
1,2,3,4-Tetrachlorobenzene	634-66-2		
1,2,3,5-Tetrachlorobenzene	634-90-2		
1,2,4,5-Tetrachlorobenzene	95-94-3		
Pentachlorobenzene	608-93-5		
Hexachlorobenzene	118-74-1		
2-Chlorotoluene	95-49-8		
3-Chlorotoluene	108-41-8		
4-Chlorotoluene	106-43-4		
2,3-Dichlorotoluene	32768-54-0		
2,4-Dichlorotoluene	95-73-8		
2,5-Dichlorotoluene	19398-61-9		
2,6-Dichlorotoluene	118-69-4		
3,4-Dichlorotoluene	95-75-0		
3,5-Dichlorotoluene	25186-47-4		
2,3,4-Trichlorotoluene	7359-72-0		
2,3,6-Trichlorotoluene	2077-46-5		
2,4,5-Trichlorotoluene	6639-30-1		
2,4,6-Trichlorotoluene	23749-65-7		
3,4,5-Trichlorotoluene	21472-86-6		
2,3,4,5-Tetrachlorotoluene	76057-12-0		
2,3,5,6-Tetrachlorotoluene	29733-70-8		
2,3,4,6-Tetrachlorotoluene	875-40-1		
Pentachlorotoluene	877-11-2		

Table 2E:

Dyes – Carcinogenic or Equivalent Concern

Substance or Substance Group	CAS	Reporting Limit (µg/L)	Standard Test Method
C.I. Direct Black 38	1937-37-7	500	Liquid extraction, LC/MS
C.I. Direct Blue 6	2602-46-2		
C.I. Acid Red 26	3761-53-3		
C.I. Basic Red 9	569-61-9		
C.I. Direct Red 28	573-58-0		
C.I. Basic Violet 14	632-99-5		
C.I. Disperse Blue 1	2475-45-8		
C.I. Disperse Blue 3	2475-46-9		
C.I. Basic Blue 26 (with Michler's Ketone > 0.1%)	2580-56-5		
C.I. Basic Green 4 (malachite green chloride)	569-64-2		
C.I. Basic Green 4 (malachite green oxalate)	2437-29-8		
C.I. Basic Green 4 (malachite green)	10309-95-2		
Disperse Orange 11	82-28-0		

Table 2F:

Dyes – Disperse (Sensitizing)

Substance or Substance Group	CAS	Reporting Limit (µg/L)	Standard Test Method
Disperse Yellow 1	119-15-3	50	Liquid extraction, LC/MS
Disperse Blue 102	12222-97-8		
Disperse Blue 106	12223-01-7		
Disperse Yellow 39	12236-29-2		
Disperse Orange 37/59/76	13301-61-6		
Disperse Brown 1	23355-64-8		
Disperse Orange 1	2581-69-3		
Disperse Yellow 3	2832-40-8		
Disperse Red 11	2872-48-2		
Disperse Red 1	2872-52-8		
Disperse Red 17	3179-89-3		
Disperse Blue 7	3179-90-6		
Disperse Blue 26	3860-63-7		
Disperse Yellow 49	54824-37-2		
Disperse Blue 35	12222-75-2		
Disperse Blue 124	61951-51-7		
Disperse Yellow 9	6373-73-5		
Disperse Orange 3	730-40-5		
Disperse Blue 35	56524-77-7		

3,4,5-trichlorophenol	609-19-8		
2,3,4,5-tetrachlorophenol	4901-51-3		

4-chloro-o-toluidine	95-69-2		
4-methyl-m-phenylene-diamine	95-80-7		

Table 2G:

Flame Retardants

Substance or Substance Group	CAS	Reporting Limit (µg/L)	Standard Test Method
Tris(2-chloroethyl)phosphate (TCEP)	115-96-8	5	US EPA 8270 ISO 22032, USEPA 527 and USEPA 8321B. Dichloromethane extraction GC/MS or LC/MS(-MS)
Decabromodiphenyl ether (DecaBDE)	1163-19-5		
Tris(2,3,-dibromopropyl)-phosphate (TRIS)	126-72-7		
Pentabromodiphenyl ether (PentaBDE)	32534-81-9		
Octabromodiphenyl ether (OctaBDE)	32536-52-0		
Bis(2,3-dibromopropyl)phosphate (BIS)	5412-25-9		
Tris(1-aziridinyl)phosphine oxide) (TEPA)	545-55-1		
Polybromobiphenyls (PBB)	59536-65-1		
Tetrabromobisphenol A (TBBPA)	79-94-7		
Hexabromocyclododecane (HBCDD)	3194-55-6		
2,2-bis(bromomethyl)-1,3-propane-diol (BBMP)	3296-90-0		
Tris(1,3-dichloro-isopropyl) phosphate (TDCP)	13674-87-8		
Short-chain chlorinated Paraffins (SCCP) (C10-C13)	85535-84-8		

Table 2H:

Glycols

Substance or Substance Group	CAS	Reporting Limit (µg/L)	Standard Test Method
Bis(2-methoxyethyl)-ether	111-96-6	50	US EPA 8270 Liquid extraction, LC/MS GC-MS
2-ethoxyethanol	110-80-5		
2-ethoxyethyl acetate	111-15-9		
Ethylene glycol dimethyl ether	110-71-4		
2-methoxyethanol	109-86-4		
2-methoxyethylacetate	110-49-6		
2-methoxypropylacetate	70657-70-4		
Triethylene glycol dimethyl ether	112-49-2		

Table 2I:

Halogenated Solvents

Substance or Substance Group	CAS	Reporting Limit (µg/L)	Standard Test Method
1,2-dichloroethane	107-06-2	1	USEPA 8260B Headspace GC/MS or Purge-and-Trap-GC/MS
Methylene chloride	75-09-2		
Trichloroethylene	79-01-6		
Tetrachloroethylene 127-18-4			

Table 2J:

Organotin Compounds

Substance or Substance Group	CAS	Reporting Limit (µg/L)	Standard Test Method
Mono-, di- and tri-methyltin derivatives		0.01	ISO 17353 Derivatisation with NaB(C2H5) GC/MS
Mono-, di- and tri-butyltin derivatives	Multiple		
Mono-, di- and tri-phenyltin derivatives	Multiple		
Mono-, di- and tri-octyltin derivatives	Multiple		

Table 2K:

Perfluorinated and Polyfluorinated Chemicals (PFCs)

Substance or Substance Group	CAS	Reporting Limit (µg/L)	Standard Test Method
PFOS	355.46-4. 432-50-7	0.01	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
PFOA	335-67-1		
PFBS	29420-49-3. 29420-43-3		
PFHxA	307-24-4		
8:2 FTOH	678-39-7	1	
6:2 FTOH	647-42-7		

Table 2L:

Otho-Phthalates – Including all ortho esters of phthalic acid

Substance or Substance Group	CAS	Reporting Limit (µg/L)	Standard Test Method
Di(ethylhexyl) phthalate (DEHP)	117-81-7	10	US EPA 8270D, ISO 18856 Dichloromethane extraction GC/MS
Bis(2-methoxyethyl) phthalate (DMEP)	117-82-8		
Di-n-octyl phthalate (DNOP)	117-84-0		
Di-iso-decyl phthalate (DIDP)	26761-40-0		
Di-isononyl phthalate (DINP)	28553-12-0		
Di-n-hexyl phthalate (DnHP)	84-75-3		
Dibutyl phthalate (DBP)	84-74-2		
Butyl benzyl phthalate (BBP)	85-68-7		
Dinonyl phthalate (DNP)	84-76-4		
Diethyl phthalate (DEP)	84-66-2		
Di-n-propyl phthalate (DPRP)	131-16-8		
Di-isobutyl phthalate (DIBP)	84-69-5		
Di-cyclohexyl phthalate (DCHP)	84-61-7		
Di-iso-octyl phthalate (DIOP)	27554-26-3		
1,2-benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	68515-42-4		
1,2-benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6		

Table 2M:

Polycyclic Aromatic Hydrocarbons (PAHs)

Substance or Substance Group	CAS	Reporting Limit (µg/L)	Standard Test Method
Benzo[a]pyrene (BaP)	50-32-8	1	US EPA 8270 DIN 38407-39 Solvent extraction GC/MS
Anthracene	120-12-7		
Pyrene	129-00-0		
Benzo[ghi]perylene	191-24-2		
Benzo[e]pyrene	192-97-2		
Indeno[1,2,3-cd]pyrene	193-39-5		
Benzo[j]fluoranthene	205-82-3		
Benzo[b]fluoranthene	205-99-2		
Fluoranthene	206-44-0		
Benzo[k]fluoranthene	207-08-9		
Acenaphthylene	208-96-8		
Chrysene	218-01-9		
Dibenz[a,h]anthracene	53-70-3		
Benzo[a]anthracene	56-55-3		
Acenaphthene	83-32-9		
Phenanthrene	85-01-8		
Fluorene	86-73-7		
Naphthalene	91-20-3		

Table 2N:

Volatile Organic Compounds (VOC)

Substance or Substance Group	CAS	Reporting Limit (µg/L)	Standard Test Method
Benzene	71-43-2	1	ISO 11423-1 Headspace- or Purge-and-Trap-GC/MS US EPA 8260
Xylene	1330-20-7		
o-cresol	95-48-7		
p-cresol	106-44-5		
m-cresol	108-39-4		