

**Testing Protocol sample No.: 2103 0194**



A – accredited test  
 N – non accredited test

Address of the customer: **MERCHYOU s.r.o.**  
**Presovska 45**  
**821 02 Bratislava**

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Place of laboratory activity: Bernolakovska 18/A, Ivanka pri Dunaji  
 Sampling place: MERCHYOU s.r.o., Teslova 10/B, Bratislava – outflow into the public sewer  
 Name of sample: water Subject of testing: waste water  
 Type of sample: point Date of sample receipt: 05.03.2021  
 Date of sample: 05.03.2021 Date of test beginning: 05.03.2021  
 Type of collection: accredited Date of test ending: 09.04.2021  
 The sampling done by: AQUASECO s.r.o. according to the sampling plan for 2021

**PHYSIOCHEMICAL ANALYSES OF WASTE WATER**

Parameter	Unit	Fixed value	Uncertainty of measurement U (k=2)	Limit value	Method of determining	A/SA/SN
<b>Alkylphenol</b>						
- para-tert-octylphenol = 4 OP (4-octylfenol)	mg/kg	0,01525	-	-	NRL/SO-SOP/16 Metóda VÚVH (HPLC/FLD)	SN
- octylfenoletoxylate 4-OPEO techn.	mg/kg	0,08032	-	-	NRL/SO-SOP/16 Metóda VÚVH (HPLC/FLD)	SN
- nonylfenoletoxylate 4-NPEO techn.	mg/kg	0,00797	-	-	NRL/SO-SOP/16 Metóda VÚVH (HPLC/FLD)	SN
- 4-(para)-nonylfenol(alkylfenol zmes) = 4-NP	mg/kg	0,00816	-	-	NRL/SO-SOP/16 Metóda VÚVH (HPLC/FLD)	SN
Sum parameter NP, OP, NPEO, OPEO	mg/kg	0,1117	-	< 20 mg/kg	NRL/SO-SOP/16 Metóda VÚVH (HPLC/FLD)	SN
Sum parameter NP, OP	mg/kg	0,0234	-	< 10 mg/kg	NRL/SO-SOP/16 Metóda VÚVH (HPLC/FLD)	SN
AOX	mg/kg	0,05000	25 %	< 5 mg/kg	IP 4.18 (STN EN ISO 9562)	SA
Formaldehyde	mg/kg	0,01000	-	< 16 mg/kg	IPP 406 EPA 8315A	SA
pH value	-	5,95	± 0,1	4,5 – 9,0	STN EN ISO 10 523 (SPP-14)	A

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<b>Chlorphenols</b>						
Pentachlorophenol (PCP)	mg/kg	< 0,0002	-	< 0,01 mg/kg	GC/MS	SN
Tetrachlorophenol (TeCP)	mg/kg	< 0,0002	-	< 0,01 mg/kg	GC/MS	SN
Trichlorophenol (TrCP)	mg/kg	< 0,0002	-	< 0,2 mg/kg	GC/MS	SN
Dichlorophenol (DCP)	mg/kg	< 0,0002	-	< 0,5 mg/kg	GC/MS	SN
Monochlorophenol (MCP)	mg/kg	< 0,0002	-	< 0,5 mg/kg	GC/MS	SN
<b>Total Heavy Metals</b>						
Cadmium Cd	mg/kg	0,0020	± 9%	< 0,45 mg/kg	SPP-N-9 AAS	SN
Lead Pb	mg/kg	0,0125	± 11%	< 50 mg/kg	SPP-N-9 AAS	SN
<b>Phthalates</b>						
Bis(2-ethylhexyl)phtalate	mg/kg	0,02000	-	-	IPP 312 STN EN 18856	SA
Dibutylphtalate	mg/kg	0,06000	-	-	IPP 312 STN EN 18856	SA
Sum parameter	mg/kg	0,08000	-	< 100 mg/kg	IPP 312 STN EN 18856	SA
<b>Polycyclic Aromatic Hydrocarbons</b>						
Sum parameter PAU	mg/kg	0,00522	15 %	< 5 mg/kg	IP 4.7 (STN EN ISO 17993)	SA
Chryzene	mg/kg	0,00004	15 %	< 0,5 mg/kg	IP 4.7 (STN EN ISO 17993)	SA
Benzo (a) antracene	mg/kg	0,00040	15 %	< 0,5 mg/kg	IP 4.7 (STN EN ISO 17993)	SA
Benzo (b) fluoranthene	mg/kg	0,00008	15 %	< 0,5 mg/kg	IP 4.7 (STN EN ISO 17993)	SA
Benzo (k) fluoranthene	mg/kg	< 0,00004	-	< 0,5 mg/kg	IP 4.7 (STN EN ISO 17993)	SA
Benzo (a) pyrene	mg/kg	0,00006	15 %	< 0,5 mg/kg	IP 4.7 (STN EN ISO 17993)	SA
Dibenzo (a,h) anthracene	mg/kg	< 0,00004	-	< 0,5 mg/kg	IP 4.7 (STN EN ISO 17993)	SA
Naftalene	mg/kg	0,00392	10 %	< 1,0 mg/kg	IP 4.7 (STN EN ISO 17993)	SA
Acenaftylene	mg/kg	< 0,00004	-	< 1,0 mg/kg	IP 4.7 (STN EN ISO 17993)	SA
Acenaftene	mg/kg	0,00010	15 %	< 1,0 mg/kg	IP 4.7 (STN EN ISO 17993)	SA

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The results of the tests can be claimed up to 14 days from take-over of the protocol.

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Fluorene	mg/kg	0,0001	15 %	< 1,0 mg/kg	IP 4.7 (STN EN ISO 17993)	SA
Phenantrene	mg/kg	0,0004	15 %	< 1,0 mg/kg	IP 4.7 (STN EN ISO 17993)	SA
Antracene	mg/kg	< 0,00004	-	< 1,0 mg/kg	IP 4.7 (STN EN ISO 17993)	SA
Fluoranthene	mg/kg	< 0,00004	-	< 1,0 mg/kg	IP 4.7 (STN EN ISO 17993)	SA
Pyrene	mg/kg	0,0001	15 %	< 1,0 mg/kg	IP 4.7 (STN EN ISO 17993)	SA
Indeno (1,2,3-cd) pyrene	mg/kg	< 0,00004	-	< 1,0 mg/kg	IP 4.7 (STN EN ISO 17993)	SA
Benzo (g,h,i) perylene	mg/kg	< 0,00004	-	< 1,0 mg/kg	IP 4.7 (STN EN ISO 17993)	SA
<b>Chlorinated Paraffins</b>						
Hydrocarbonic index (C10 – C40) – sum parameter	mg/kg	8,0	10 %	< 50 mg/kg	IP 4.17 (STN EN ISO 9377-2)	SA

Hydrocarbonic index C10-C40 includes chlorinated paraffins C10-C13 and C14 – C17.

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<b>Chlorinated Benzenes &amp; Toluenes</b>						
sum parameter	mg/kg	0,01269	9 %	< 1 mg/kg	IP 4.9	SA
Benzene	mg/kg	0,00057	9 %	-	IP 4.9	SA
Toluene	mg/kg	0,00001	-	-	IP 4.9	SA
Etylbenzene	mg/kg	0,00043	9 %	-	IP 4.9	SA
Xylenes (o,m,p)	mg/kg	0,01169	9 %	-	IP 4.9	SA

Note: In the case of accredited water sampling, the sampling uncertainty of max. 10%.

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Evaluation N:

The protocol does not include analysis of the following substances: Carcinogenic arylamines, disperse dyes, Glyoxal and other groups of aldehydes, Pesticides (found in wool), Extractable heavy metals (in textiles), Organotin compounds, Polyfluorinated compounds, Cyclic xyloxanes, Other chemical residues (Azodicarboxamide, Azodicarbonamide / Diazen-1,2-dicarboxamide (ADCA)). Analysis of these substances have not been carried on the basis of the safety data sheets supplied and on the basis of the suppliers' declaration that the products do not contain the above groups of substances.

Analyzes of the above groups of substances have not been performed because the supplied safety data sheets do not contain the products.

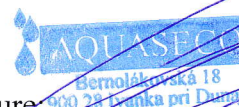
The laboratory is accredited by the Slovak National Accreditation Service and performs tests in accordance with STN EN ISO / IEC 17025.

Date of preparing of the protocol: 12.04.2021

Checked by: Ing. Jaroslav Galba, PhD., Head of Laboratory

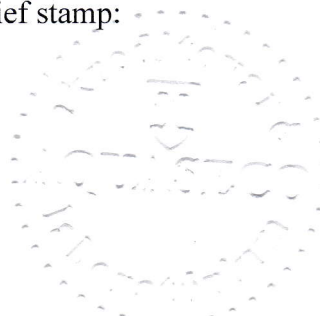
Endorsed by: Ing. Katarína Saif Chupíková, Manager of Quality

Stamp and signature:



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Relief stamp:



## Notes:

SA – accredited test performed by an external supplier

N/SN – non-accredited activity / non-accredited test performed by an external supplier

IP -Internal regulation

Coulom – Microcoulometric titration

GC/FID – Gas chromatography with flame ionization detector

HPLC/DAD – High performance liquid chromatography with diode array detector

HPLC/FD – High performance liquid chromatography with fluorescence detector

HPLC/FLD - High performance liquid chromatography with fluorescence detector

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