









TEST REPORT NO 411402/24/GDY

Client CZP PREMIUM MARIUSZ Si 39A 87 -400 Białkowo	ZEFLER	Sample (according to declaration of Client) Sample description: Paper with recycled content intended for production hygiene products and bedding.
Sample reception date:	08.07.2024	Sample status: no objections
Start of analysis	15.07.2024	
End of analysis	31.07.2024	Sample received from the Client
Test report date	31.07.2024	

Test	Unit	Result	Criteria	Statement of	
Method				conformity	
* Primary aromatic amines content in the hot water extract ^{3) 4)} PB-413 ed. 3 of 17.01.2024					
4,4'-Diaminodiphenyl sulfone [CAS: 80-08-0]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	-	-	
2-Aminobenzamide, [CAS: 88-68-6]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	-	-	
1,3-Phenylenediamine, [CAS: 108-45-2]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	-	-	
4,4'-Methylenebis(3-chloro-2,6-diethylaniline), [CAS 106246-33-7]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	-	-	
4-Aminodifenyl, [CAS 92-67-1]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	≤ 2	Pass	
Benzidine, [CAS 92-87-5]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	≤ 2	Pass	
4-Chloro-o-toluidine, [CAS 95-69-2]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	≤ 2	Pass	
2-Naphthylamine, [CAS: 91-59-8]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	≤ 2	Pass	
o-Aminoazotoluene, [CAS 97-56-3]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	≤ 2	Pass	
2-Amino-4-nitrotoluene, [CAS: 99-55-8]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	-	-	
p-Chloroaniline, [CAS 106-47-8]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	≤ 2	Pass	
4,4'-Diaminodiphenylmethane, [CAS 101-77-9]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	≤ 2	Pass	
3,3'-Dichlorobenzidine, [CAS: 91-94-1]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	≤ 2	Pass	
3,3'-Dimethoxybenzidine, [CAS 119-90-4]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	≤ 2	Pass	
3,3'-Dimethylbenzidine, [CAS: 119-93-7]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	≤ 2	Pass	
4,4'-Diamino-3,3'-dimethyldiphenylmethane, [CAS 838-88-0]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	≤ 2	Pass	
p-Cresidine, [CAS 120-71-8]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	≤ 2	Pass	
4,4'-Methylene-bis(2-chloroaniline), [CAS 101-14-4]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	≤ 2	Pass	
4,4'-Oxydianiline, [CAS 101-80-4]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	≤ 2	Pass	











AB 079

TEST REPORT NO 411402/24/GDY

4,4'-Thiodianiline, [CAS 139-65-1]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	≤ 2	Pass
o-Toluidine, [CAS 95-53-4]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	≤ 2	Pass
2,4-Toluenediamine, [CAS: 95-80-7]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	≤2	Pass
2,4,5-Trimethylaniline, [CAS: 137-17-7]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	≤ 2	Pass
o-Anisidine, [CAS 90-04-0]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	≤ 2	Pass
4-Aminoazobenzene, [CAS 60-09-3]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	≤ 2	Pass
Anilin, [CAS: 62-53-3]	μg/kg of water extract	3,9 ± 1,4	-	-
2,4-Dimethylaniline, [CAS 95-68-1]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	-	-
2,6- Dimethylaniline, [CAS 87-62-7]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	-	-
1,5-Diaminonaphthalene, [CAS 2243-62-1]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	-	-
3-Chloroaniline, [CAS: 108-42-9]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	-	-
p-Toluidine, [CAS: 106-49-0]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	-	-
1,4-Phenylenediamine, [CAS: 106-50-3]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	-	-
2,6-Diaminotoluene, [CAS: 823-40-5]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	-	-
N,N-Dimethylaniline, [CAS: 121-69-7]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	-	-
2,4'-Methylenedianiline, [CAS: 1208-52-2]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	-	-
2,5-Dimethoxy-4-chloroaniline, [CAS: 6358-64-1]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	-	-
4-Aminobenzamide, [CAS: 2835-68-9]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	-	-
4-Aminotoluene-3-sulfonic acid, [CAS: 88-44-8]	μg/kg of water extract	15,8 ± 5,5	-	-
4-Methylaminosulfonyl-p-cresidine, [CAS: 49564-57-0]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	-	-
1,2-Phenylenediamine, [CAS: 95-54-5]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	-	-
5-Amino-6-methyl-2-benzimidazolone, [CAS: 67014-36-2]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	-	-
2,2'-Methylenedianiline, [CAS 6582-52-1]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	-	-
2-Methoxy-4-nitroaniline, [CAS 97-52-9]	μg/kg of water extract	< 5,0 (5,0 ± 1,8)	-	-
2-Amino-5-chloro-p-toluenesulfonic acid, [CAS 88-53 -9]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	-	-
2-Amino-1-naphthalenesulfonic acid [CAS: 81-16-3]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	-	-
6-Ethoxynaphthalen-2-amine, [CAS 293733-21-8]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	-	-
5-Amino-2-methylbenzenesulfonic acid, [CAS 118-88 -7]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	-	-
2,4-Diaminoanisole, [CAS: 615-05-4]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	≤ 2	Pass
4-Amino-3-fluorophenol [CAS: 399-95-1]	μg/kg of water extract	< 2,0 (2,0 ± 0,7)	≤ 2	Pass











AB 079

TEST REPORT NO 411402/24/GDY

Sum of primary aromatic amines	μg/kg of water extract	19,8 ± 6,9	≤ 10	Fail	
* Content of elements in hot water extract ^{1) 3) 4)} PN-EN 647:1998, PB-204 ed. 7 of 20.07.2023					
Aluminum (Al) ²⁾	mg/kg	0,606 ± 0,121	≤ 1	Pass	
Cadmium (Cd)	μg/l	< 2,5 (2,5 ± 0,5)	≤ 5	Pass	
Lead (Pb)	μg/l	< 10 (10 ± 2)	≤ 10	Pass	
Mercury (Hg)	μg/l	< 2,5 (2,5 ± 0,5)	-	-	

- 1) Result expressed as mg/kg of water extract. By convention, the result is considered equivalent to migration in mg/kg of food. This corresponds to 13.3 dm2/kg food if the mass of paper or board is 300g/m2 (BfR Rec. XXXVI; EDQM Paper and board used in food contact materials and articles, 1st Edition).
- 2) Aluminum result without accreditation.
- 3) The lower limit of the measuring range of the accredited method, which is also the limit of quantification set by the Laboratory.
- ⁴⁾ BfR Recommendation XXXVI, Paper and board for food contact of 01.02.2023.

Authorized by:

ID: 1037, Analyst, Non-Food and Packaging Laboratory

ID: 1409, Senior Analysis Specialist, Non-Food and Packaging Laboratory

The test report bears the certified electronic seal of J.S. Hamilton Poland Sp. z o.o.

Laboratory address:

Chwaszczyńska 180, 81-571 Gdynia

The results refer only to the samples received. When a measurement uncertainty is given, it is an expanded uncertainty estimated for a coverage factor k=2 at 95% confidence level and is not including sampling uncertainty, unless otherwise stated. When the conformity is stated J.S. Hamilton Poland Sp. z o.o. applies the simple acceptance decision rule in accordance with ILAC-G8:09/2019, unless otherwise reported. If the "result" column of the accredited method contains a record: "c" or ">", it means, that it is the test outcome directly related to the lower or upper limit of the measuring range of the accredited method, whereas the given expanded measurement uncertainty relates only to the lower or upper limit of the measuring range of the accredited method respectively. In such a case, the Laboratory presents the opinion and interpretation in the "statement of conformity" column, which is based on the obtained test outcome. This test report may not be copied in part without the prior written permission of J.S. Hamilton Poland Sp. z o.o. The responsibility of J.S. Hamilton Poland Sp. z o.o. Is limited solely to the data issued in its original. J.S. Hamilton Poland Sp. z o.o. does not permit the use of the PCA accreditation symbol AB 079 by customers, subcontractors, external service providers and other third parties. For further information please refer to the PCA document DA-02. The service confirmed by this report is subject to the General Terms and Conditions of Services of J.S. Hamilton Poland Sp. z o.o. published on www.hamilton.com.pl.

- * Test method accredited
- # Test performed by external provider











TEST REPORT NO 411402/24/GDY



THE END OF THE REPORT