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REGIONÁLNY ÚRAD VEREJNÉHO ZDRAVOTNÍCTVA  
**REGIONAL PUBLIC HEALTH OFFICE**  
 SO SÍDLOM V POPRADE / **POPRAD HEADQUARTERS**  
 Zdravotnícka 3525/3, 058 97 Poprad

LABORATÓRIÁ RÚVZ SO SÍDLOM V POPRADE  
**THE POPRAD REGIONAL PUBLIC HEALTH OFFICE**  
Národné referenčné laboratórium pre materiály prichádzajúce do kontaktu s potravinami  
**NATIONAL REFERENCE LABORATORY FOR MATERIALS IN CONTACT WITH FOOD**

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*(Logo reads:)* EU Network of National Reference Laboratories NRL Food Contact Materials

*(Logo reads:)* ilac – MRA

A – Accredited Tests  
 N – Non-Accredited Tests

*(Slovak State*

*Symbol)*

SNAS

Reg.No. 126/S-096

## TEST REPORT

### Results of Laboratory Tests and Product Safety Assessment No. 7420 -7421/2019

Customer's name and address: Print Cup s.r.o.  
 Puškinova 499/11  
 085 01 Bardejov

Sample received on: 18 September 2019  
 Samples taken by: customer (N)  
 Tests completion date: 1 October 2019  
 Test report issued on: 3 October 2019

Name of samples: **paper straws of different sizes**

Purpose of use: for direct contact with cold and hot non-alcoholic drinks and alcoholic drinks up to 14% alcohol content

Producer: Print Cup s.r.o., Puškinova 499/11, 085 01 Bardejov

### Chemical Tests

#### I. Determination of Specific Migration of Substances in the Hot Water Extract of the Sample

Test conditions: 2 hours, 80 ° C

I.  
a)

<b>Formaldehyde Content</b>
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<b>Food simulator</b>	<b>Test result (mg.dm<sup>-2</sup>)</b>
<b>Deionized water</b>	<b>&lt; 0.50</b>

Test method, principle of the method	STN P CEN/TS 13130-23 spectrophotometry (NRL FCM)	N
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Results of Laboratory Tests and Product Safety Assessment 7420 -7421/2019

b)

<b>Content of Primary Aromatized Amines</b>
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<b>Food simulator</b>	<b>Test result (mg.dm<sup>-2</sup>)</b>
<b>Deionized water</b>	<b>≤ 0.00042</b>

Test method, principle of the method	ŠPP-N6/A spectrophotometry (NRL FCM)	N
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c)

<b>Fenol Content</b>
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<b>Food simulator</b>	<b>Test result (mg.dm<sup>-2</sup>)</b>
<b>Deionized water</b>	<b>≤ 1.03</b>

Test method, principle of the method	ŠPP-N4 spectrophotometry (NRL FCM)	N
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d)

<b>Content of Bisphenol A</b>
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<b>Food simulator</b>	<b>Test result (mg.dm<sup>-2</sup>)</b>
<b>Bisphenol A</b>	<b>≤ 0.0012</b>

Test method, principle of the method	STN EN 15136 HPLC/DAD/FLD (ŠLIČHA)	A
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- Mg

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V/N

e) **Content of Cd, Pb, Cr, As, Hg**

<b>Food Simulator Deionized water</b>	<b>Test results (mg.kg<sup>-1</sup> of the simulator)</b>
<b>Cd</b>	<b>≤ 0.00003</b>
<b>Pb</b>	<b>≤ 0.0001</b>
<b>Cr</b>	<b>≤ 0.0002</b>
<b>As</b>	<b>≤ 0.0002</b>
<b>Hg</b>	<b>&lt; 0.001</b>

**Test Method, Principle of the Method**

ŠPP-ŠA2 AAS/ETA (ŠLICHKA)	A
ŠPP-ŠA1, AMA (ŠLICHKA)	N

*Test result stated in form of “ ≤ number ” means ≤ limit of provability (LOD) of the method used.*

*Test result stated in form of “ < number ” means < limit of quantification (LOQ) of the method used.*

*Test results relate to the submitted test item after being accepted by the laboratory. Without the laboratory's written permission, the test report may be reproduced only in its entirety.*

Persons responsible for the professional portion of the tests:

- Mgr. Ing. Milada Syčová, MPH, Head of National Reference Laboratories, Food Contact Materials (NRL FCM)
- Mgr. Rastislav Rosipal, Head of the Chemical Analysis Specialized Laboratory 1 (ŠLICHKA)

**VALIDITY:**

**Within the meaning of the EP and Council Regulation No. 1935/2004, the laboratory test results and product safety assessment need to be updated if some changes occur in the manufacturing process which may cause changes in migration of substances into food simulators used, or if there are changes in the current legislation.**

## Product Safety Assessment

Paper cups of various sizes were laboratory tested in the accredited testing laboratory of RÚVZ in Poprad. The Ministry of Health of the Slovak Republic, in its letter no.15654-3 / 2007-ŠT, designated the Poprad RÚVZ Laboratory as the National Reference Laboratory for Food Contact Materials pursuant to (EC) Regulation No. 882/2004 of the European Parliament and of the Council on official controls performed to ensure the verification of compliance with food and feed law, animal health rules and animal welfare.

Paper straws of different sizes were laboratory-tested in accordance with the following legal regulations:

- Regulation of the European Parliament and of the Council Commission Regulation (EC) No. 1935/2004 of 27 October 2004 on materials and articles intended to come into contact with food, and repealing Directives 80/590 / EEC and 89/109 / EEC
- Decree of the Ministry of Agriculture of the Slovak Republic and the Ministry of Health of the Slovak Republic of 9 June 2003, no. 1799 / 2003-100, issuing the fifth title of the Food Code of the Slovak Republic regulating materials and articles intended to come into contact with foodstuffs, as amended.

### Tested samples - paper straws of different sizes in the parameter:

- formaldehyde content in the sample extract into deionized water
- content of primary aromatic amines in extract of sample into deionized water
- content of phenols in extract of sample into deionized water
- content of bisphenol A in the extract of the sample into deionized water
- content of Cd, Pb, Cr, As, Hg in the sample extract into deionized water

### meet the requirements of test 1 :

- of the Decree of the Ministry of Agriculture of the Slovak Republic and the Ministry of Health of the Slovak Republic of 9 June 2003, no. 1799 / 2003-100, issuing the fifth title of the Food Code of the Slovak Republic regulating materials and articles intended to come into contact with foodstuffs, as amended,
- and Article 3 of European Parliament and Council (EC) Regulation No. 1935/2004

The results of the laboratory tests and the documentation provided show that, from the point of view of health protection it is possible to recommend paper straws of different sizes of your production for direct contact with cold and hot non-alcoholic drinks and alcoholic drinks up to 14% of alcohol content.

The product safety assessment and the report were prepared by:

*(illegible signature)*

Mgr. Ing. Milada Syčová, MPH, Head of the National Reference Laboratory for Materials in Contact with Food

*(Rectangular stamp reads:)*

**REGIONAL PUBLIC HEALTH OFFICE  
POPRAD HEADQUARTERS**

Zdravotnícka 3525/3, 058 97 Poprad

**NATIONAL REFERENCE LABORATORIES, FOOD CONTACT MATERIALS**

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The Protocol approved by:

RNDR. Denisa Pilková

Head of the Poprad RÚVZ Laboratories

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This is to confirm that this document literally agrees with the submitted original consisting of 3 pages. This is a complete 3-page copy. There have no changes or additions been made to the document.

In Bardejov on 9 January 2020 1

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*(Round stamp reads:)* JUDr. Marta Val'ková, Notary, Slovak State Symbol, 1, Bardejov

*(Tricolor ribbon carries the same round stamp)*

*(End of translation)*



### Translator's Statement

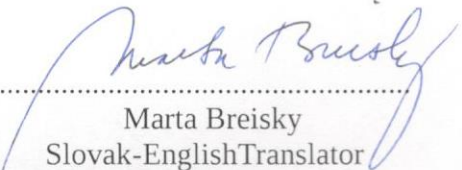
I did this translation in my capacity as a Slovak-English translator, registered on the list of experts, interpreters and translators maintained by the Ministry of Justice of the Slovak Republic, under number 970194.

This translation coincides with the text of the attached document and is registered under number 02/ 2020 of the translator's journal no. 01/ 2020.

For translating and translating- related services, I am charging the amount stated on the enclosed bill.

In Bardejov, 16 January 2020



  
Marta Breisky  
Slovak-English Translator  
Bardejov, The Slovak Republic

**( The text of the translator's stamp reads:)**

Marta Breisky, translator, state symbol, languages: Slovak - English

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