THE NATIONAL INSTITUTE OF PUBLIC HEALTH
Šrobárova 49/48 Praha 10
100 00

VÁŠ DOPIS ZN.:	RP/2019/156
ZE DNE	25.6.2019
NAŠE ZN.:	SZÚ 2807/2019 EX 191031
VYŘIZUJE:	Ing. Votavová
TEL./FAX .:	267082389
E-MAIL:	lenka.votavova@szu.cz
DATUM:	16.9.2019

BARVY A LAKY TELURIA, s.r.o.
č.p. 1
679 61 Skrchov

Subject: **EXPERT OPINION** to assess the safety of the material composition of Telpur T330 HS polyurethane coating intended for direct contact with food

SUBJECT OF THE APPLICATION:
To your application for assessment of the safety of the material composition of Telpur T330 HS coating intended for direct contact with food according to the requirements of Regulation (EC) No. 1935/2004 of the European Parliament and of the Council as amended and § 26 of the Act of the Ministry of Health of the Czech Republic No. 258/2000 Coll. on the protection of public health and on the amendment of some related laws, as amended, we inform you:

SAMPLE SUBMITTED:
1) Telpur T330 HS coating – white coating on glass plate (10x10 cm)

DOCUMENTATION SUBMITTED:
1) BARVY A LAKY TELURIA, s.r.o. – Product data sheet Telpur T 330 HS – Single-layer high-dry polyurethane two-component anti-corrosion coating
2) BARVY A LAKY TELURIA, s.r.o. – Product safety data sheet Telpur T 330 HS (date of creation 21 November 2018, date of revision 10 September 2019)
3) BARVY A LAKY TELURIA, s.r.o. – Manufacturer's declaration for the Telpur T 330 HS recipe, dated 10 September 2019
3) BARVY A LAKY TELURIA, s.r.o. – Product data sheet Telhard PUR HS – hardener for Telpur polyurethane coatings
4) BARVY A LAKY TELURIA, s.r.o. – Product safety data sheet for Telhard PUR HS
5) Pigments used in polyurethane coatings of the company BARVY A LAKY TELURIA, s.r.o. (Attachment No. 1)

TESTS PERFORMED:
The test results are stated in the NIPH laboratory reports – Test report 182-2807/19, Sensory test report S 2807/19

EXPERT OPINION:
The results of the determination of the specific migration of primary aromatic amines, formaldehyde and phenolic compounds from the submitted material into food simulants meet the requirements of Annex 11 of the Decree of the Ministry of Health of the Czech Republic No. 38/2001 Coll. as amended by the following regulations.

The determination of the specific migration of phthalic acid esters from the submitted sample is in accordance with the requirements of Annex 11 of the Decree of the Ministry of Health of the Czech Republic No. 38/2001 Coll. as amended by the following regulations.

The specific migration of zinc and chrome from the submitted material complies with the requirements of Annex II. paragraph 1 of Commission Regulation (EU) No. 10/2011 as amended by the following regulations.
The results of the determination of risk elements in the submitted material are in accordance with the requirements of § 6 of the Decree of the Ministry of Health of the Czech Republic No. 38/2001 Coll. as amended by the following regulations.

The determination of the content of volatile organic compounds in the submitted material complies with the requirements of Regulation (EC) No. 1907/2006 of the European Parliament and of the Council as amended and Framework Resolution ResAP (2004) 1 on coatings intended to come into contact with foodstuffs.

The sensory evaluation of the submitted coating sample complies with the requirement of Article 3 of Regulation (EC) No. 1935/2004 of the European Parliament and of the Council, as amended.

In the submitted documentation, the conformity of the composition and purity of pigments used in polyurethane coatings of the company BARVY A LAKY TELURIA, s.r.o. with relevant legislative requirements of Regulation (EU) No. 1935/2004, BfR Empfehlung IX, Resolution AP (89), Decree of the Ministry of Health of the Czech Republic No. 38/2001 Coll., Commission Regulation (EU) No. 10/2011 was declared.

CONCLUSION:

The material composition of Telpur T330 HS coating, to which the given Safety Data Sheet applies, in colour variants using pigments listed in Attachment No. 1, intended for applications in which the coating comes into direct contact with food, in the evaluated parameters complies for the given use with the requirements of Regulation (EC) No. 1935/2004 of the European Parliament and of the Council as amended, Decree of the Ministry of Health of the Czech Republic No. 38/2001 Coll. as amended by the following regulations and Act No. 258/2000 Coll. on the Protection of Public Health and on the Amendment of Certain Related Acts, as amended.
This opinion applies only to the products specified in this opinion, and the conclusions reached can be applied to other products of the same type, composition and properties.

National Institute of Public Health
Centre of Toxicology and Health Safety
Šrobárova 49/48, 100 00 Praha 10
Czech Republic

MUDr. Dagmar Jírová, CSc.
Head of the Centre for Toxicology and Health Safety

Attachments: Attachment No. 1: Pigments used in polyurethane coatings of the company BARVY A LAKY TELURIA, s.r.o. (Attachment No. 1 to this opinion)
Test report 182-2807/19
Sensory test report S 2807/19

Attachment No. 1: to Expert Opinion SZÚ 2807/2019

Pigments used in polyurethane coatings of the company BARVY A LAKY TELURIA, s.r.o.

Bayferrox® 3920	P.Y.42	LANXESS (RADKA)
Bayferrox 920	P.Y.42	LANXESS (RADKA)
Feoren® TD 202	P.R.101	PRECHEZA
Pretiox® titanium white		PRECHEZA
Paliotol® Orange L 2930 HD	P.O.67	BASF
Sicotan® Yellow L 1012	P.Y.53	BASF
Hosta perm Violet RL	P.V.23	CLARIANT
Fastogen Blue CA 5380	P.B.15:3	SUN CHEMICAL
Fanchon Yellow 151	P.Y.74	SUN CHEMICAL
Monolite Green 600734	P.G.7	HEUBACH
Monolite Blue 515303	P.B.15:3	HEUBACH
Monolite Red 325401	P.R.254	HEUBACH
Vanadur Yellow 2108	P.Y.184	HEUBACH
Heucodur Yellow 150	P.Y.53	HEUBACH
Suda prem pink 2997	P.R.122	SUDARSHAN
Sudafast Yellow 127	P.Y.74	SUDARSHAN
DP3G Versal red	P.R.254	SYNTHESIA
DCC Yellow 7574	P.Y.74	DCC Colors (SWISCOLOR)
Cinilex DPP Red SR2P	P.R.254	CINIC (PORO)
Sun Tone Yellow 3221	P.Y.74	ADICHEM

NATIONAL INSTITUTE OF PUBLIC HEALTH
National Reference Laboratory
for Food Contact Materials

In Prague on 14 August 2019
For BAL TELURIA, s.r.o.:

Ing. Štěpánka Nováková Research and Development

THE NATIONAL INSTITUTE OF PUBLIC HEALTH
National Reference Laboratory for Food Contact Materials
Prague 10, Šrobárova 49/48
Czech Republic
Tel.: +420 267082389 E–mail: lenka.votavova@szu.cz

Test Report No. 182-2807/19

Customer
Name of the contracting authority: BARVY A LAKY TELURIA, s.r.o.
Address: No. 1, 679 61 Skrchov

Product	Telpur T330 HS polyurethane coating intended for direct contact with food
Sample No.	**Sample description**
1	white coating on glass plate (10x10 cm)
Determination of specific migration of formaldehyde, primary aromatic amines, phenolic compounds, phthalic acid esters, determination of volatile organic compounds (VOC), determination of the content of risk elements	

Statement of the laboratory
The results of measuring and tests presented in this report pertain solely to the sample tested, and do not supplant any other documents (e.g. of administrative character) that are specifically requested by the authorities of state expert supervision. Without written permission of the testing laboratory the test report cannot be reproduced otherwise than as a whole.

Report completed by: Ing. Kristýna Hanušová	Head of the NRL for Food Contact Materials
In Prague on 10 September 2019	Ing. Jitka Sosnovcová

Stamp:

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National Reference Laboratory
for Food Contact Materials

Basic data

Delivery date to NIPH	25 June 2019
Test methods in compliance with Annex III Regulation (EC) No 882/2004 and Regulation (EU) 2017/625 of the European Parliament and of the Council	Spectrophotometric determination of primary aromatic amines (SOP No. 14/21) Spectrophotometric determination of formaldehyde (SOP 11/21) Spectrophotometric determination of phenolic compounds (SOP 9/21) GC-MS determination of phthalic acid esters (SOP No. 6/21) Head space GC-MS determination of volatile organic compounds XRF analysis – content of risk elements in the material AAS determination of the content of monitored elements (SOP No. 8/21)
Date of testing	23 August – 10 September 2019
Instrumentation implemented	SPECORD 200 Plus, GC 7890A + MS 5975C by Agilent, XRF NITON XL3tS Goldd, AAS SpectrAA 55B

Results

Tested character		**Unit**	**Sample No. 1**	**Estimation of uncertainty**	**Limit of determination**	**Limit*)**
formaldehyde	Distilled wate 10 days 40°C	mg/dm^2	0,015	± 10% rel.	0,001	0,1
primary aromatic amines		mg anilin.HCl/dm^2	pms	-	0,001	0,005
phenolic compounds		mg phenol/dm^2	pms	-	0,01	0,05

Tested character		**Unit**	**Sample No. 1**	**Estimation of uncertainty**	**Limit of determination**	**Limit*)**
formaldehyde	3% acetic acid 10 days 40°C	mg/dm^2	0,015	± 10% rel.	0,001	0,1
primary aromatic amines		mg anilin.HCl/dm^2	pms	-	0,001	0,005
phenolic compounds		mg phenol/dm^2	pms	-	0,01	0,05

Tested character		**Unit**	**Sample No. 1**	**Limit of determination**	**Limit*)**
total phthalic acid esters	95% ethanol 10 days, 40°C	mg/dm^2	pms	0,02	0,20

*) Decree of the Ministry of Health of the Czech Republic No. 38/2001 Coll. as amended by the following regulations

pms = below the limit of determination

leaching ratio 1 dm^2:100 ml

Tested character*)	Element	Sample No. 1	Estimation of detection limit [mg/kg]
determination of monitored risk elements in matter XRF analysis [mg/kg]	cadmium	pmd	16
	lead	pmd	12
	mercury	pmd	13
	chrome	pmd	223
	arsenic	pmd	9

*) Decree of the Ministry of Health of the Czech Republic No. 38/2001 Coll. as amended by the following regulations
pmd = below the detection limit

Tested character		Unit	Sample No. 1	Limit of determination	Limit#)
zinc	3% acetic acid 10 days 40°C	mg/kg	pms	0,04	5
chrome			pms	0,01	0,25

#) Commission Regulation (EU) No. 10/2011 as amended by the following regulations
leaching ratio 1 dm^2:100 ml

Tested character – Volatile organic compounds (VOC)†)		Unit	Sample No. 1	Limit of determination
sum of xylenes	head-space GC-MS 40°C/5 min	µg/g nátěru	pms	0,1
toluene			pms	0,1
benzene			pms	0,1
ethylbenzene			pms	0,1
trichlorethylene			pms	0,1
tetrachloethylene			pms	0,1

†) Regulation (EC) No. 1907/2006 of the European Parliament and of the Council as amended and Framework Resolution ResAP (2004) 1 on coatings intended to come into contact with foodstuffs

Laboratory analyses were performed in an specialized laboratory of chemical analyses in the Center for Laboratory Testing of the National Institute of Public Health in Prague, accredited by Standard ČSN EN ISO/IEC 17025:2018, with a Certificate of Accreditation No. 80/2019.

Data on deviations and supplements or exceptions to test regulations
X

NATIONAL INSTITUTE OF PUBLIC HEALTH
National Reference Laboratory for Food Contact Materials
Prague 10, Šrobárova 48
Czech Republic
Tel.: +420 267082389 E–mail: lenka.votavova@szu.cz

SENSORY ANALYSIS REPORT No. S 2807/19

with reference to ČSN 77 0226, ČSN ISO 8586, ČSN ISO 8589, ISO 13 302, ČSN EN 1230-1, ČSN EN 1230-2, DIN 10955:2004, Regulation (EC) No 1935/2004 of the European Parliament and of the Council, Law No. 258/2000 Dig. and Decree of the Ministry of Health of the Czech Republic No. 38/2001 Dig. as amended

Customer: BARVY A LAKY TELURIA, s.r.o., No. 1, 679 61 Skrchov

Evaluated product: 1) Telpur T330 HS coating – white coating on glass plate

- **Evaluation of the odour of the sample:**

Test conditions	Sample stored in a glass container for 24 hours at 23 ± 2 °C, the odour of air in the container
Sample No.	**Evaluation of foreign odour intensity*)**
1	0

*) 0 - no perceptible odour, 1 - the odour is just detectable, 2 - slight odour, 3 - slightly strong odour, 4 - strong odour

- **Evaluation of the foreign taste of the model food after contact with the sample:**

Model food and test conditions	Distilled water 48 h, 23 ± 2 °C	Icing sugar 10 days, 23 ± 2 °C	0.2% acetic acid 48 h, 23 ± 2 °C
Sample No.	**Rating - average**)**		
1	1.4	1.3	1.0

**) The test evaluation procedure is given by the methodical regulation AHEM 13/1982:
Scale evaluation ≤ 1,8 without affecting sensory properties of food
1,9 – 2,3 possibility of causing slight changes of sensory properties of food
≥ 2,4 adversely affecting sensory properties of food

Analyses were performed by selected evaluator in sensory laboratory of Centre of Toxicology and Health Safety of NIPH Prague.

Test Report prepared by: Ing. Lenka Votavová	Head of the NRL for Food Contact Materials
In Prague on: 9 September 2019	Ing. Jitka Sosnovcová

Stamp:

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