

PPI	Process: Purchasing	Process 2	Rev.	Page
QM - Management	Declaration of Conformity PAPER/PLASTIC	1.11	4	1 / 2

Declaration of conformity with the European legislation  
for materials and articles in plastic  
intended to come in contact with foodstuffs

Enter the relevant item (product name/group and identity):

Enter product/raw material of the relevant items:

- 1-K0008, 1-K360N
- 1-B1100 WITH PRINT
- Single wall coffee cups

- DUBLE WALL COFFEE CUP PE COATED
- GREEN STANDARD CUP "ENJOY FRESH" 292gsm; White; WITH PE-coated
- white paper PE coated (all customized cups)

We declare that the above-mentioned product/group(s) supplied by

is/are in compliance with:

- ☒ Regulation 1935/2004 (EC). Regulation of the European Parliament and of the Council 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. Including food contact logo as mentioned in Article 15 ~~2~~1. Including traceability as mentioned in Article 17.
- ☒ Regulation 2023/2006 (EC). Commission Regulation of 22 December 2006 on good manufacturing practice for materials and articles intended to come into contact with food.
- ☒ Directive 10/2011 (EC). Commission regulation dated 14 January 2011 on plastic materials and articles to come into contact with food.
- ☒ BfR XXXVI: Recommendations for products made of paper or paperboard intended to be used in contact with foodstuff

The products are suitable for following foodstuff:

- ☒ Dry
- ☒ Wet
- ☒ Alcoholic
- ☒ Fatty
- ☒ Acidic

The products can be used in temperatures for Hot-fill (heating up to 70°C for up to 2 h or up to 100°C for 15 minutes)

The products are not suitable for following foodstuff:

☒ We confirm that the products do not contain any substances from the list of substances of very high concern (SVHC) in the REACH Regulation 1907/2006/EC as amended.

☒ We confirm that substances such as 4-methylbenzophenone, benzophenone and Bisphenol A are not added or used in the manufacturing of the products

In the case of recycled plastic, the product/group(s) is/are in compliance with:

- ☐ Regulation 282/2008. Commission Regulation of 27 March 2008 on recycled plastic materials and articles intended to come into contact with foods.

Additional National/Local legislations:

- ☐ Commodity Act Regulation Packaging and Food Utensils

We commit ourselves to inform AB Tingstad Papper if this declaration is no longer valid.

PPI	Process: Purchasing	Process 2	Rev.	Page
QM - Management	Declaration of Conformity PAPER/PLASTIC	1.11	4	2 / 2

Company Name

Name, position and Email

Kalais, Sales

Kalais@

Company Address

Signature, company stamp and date

.....  
*Kalais Wang 2016.10.24*  
 .....  
 Authorized

**Important Notice: Please attach original company declaration of all marked complied regulations.**

**Prüfbericht - Nr.: 10045793 002**

Test Report No.:

Seite 1 von 8

Page 1 of 8

**Auftraggeber:**

Client:

**Gegenstand der Prüfung:** 1 paper bowl with printing, multicolor  
Test Item: 1 paper cup with printing, multicolor

**Bezeichnung:** 750S 紙碗(TOKA UV VECTA)  
Identification: 16oz SD-X (DIC UV Dai Cure)

**Anlieferungszustand:** apparent good  
Delivery condition:

**Eingangsdatum:** 2014-01-14  
Date of Receipt:

**Prüfart:** Laboratories of TÜV Rheinland Greater China  
Testing location:

**Prüfgrundlage:** Testing according to customers specification for the following parameters:  
Test specification: Sensorial examination, Global migration, Specific migration of metals, Diisopropylanthraline (DIPN), 1,3-Dichlor-2-propanol/3-Monochlor-1,2-propanediol Content, Glyoxal, Hemmhoftest, Colourfastness, Migration of Optical Brighteners, Pentachlorophenol/Trichlorophenol/Tetrachlorophenol, Extractable Formaldehyde, Migration of Metal from Paper

**Prüfresultat:** The test result are the measurements, stated in the test report.  
Test result:

**geprüft: tested by:**

**kontrolliert: checked by:**

2014-02-14 Anne Chen  
/Coordinator

2014-02-14 Carl Chang  
/Department Manager

Datum Name/Stellung Unterschrift  
Date Name/Position Signature

Datum Name/Stellung Unterschrift  
Date Name/Position Signature

**Sonstiges/ Other Aspects:**

Test period: 2014-01-14 – 2014-02-07

**Abkürzungen:** ok / P = entspricht Prüfgrundlage  
fail / F = entspricht nicht Prüfgrundlage  
n.a. / N = nicht anwendbar

**Abbreviations:** ok / P = passed  
fail / F = failed  
n.a. / N = not applicable

Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.  
This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.





Test Report No. : 10045793 002  
Customer :

2014-02-14

#### Sample list:

Test Sample: 750S紙碗(TOKA UV VECTA), 16oz SD-X (DIC UV Dai Cure)  
Lab.-No.: TCL140114-02,03

Mat. No.	Material	Color	Location
1	Paper + coating	White	Interior of paper bowl, TCL140114-02
2	Paper + printing	Multicolor	Printing part, TCL140114-02
3	Paper + coating	White	Interior of paper cup, TCL140114-03
4	Paper + printing	Multicolor	Printing part, TCL140114-03

## Test Results

### 1. Sensorial examination

It is examined to what extent drinking water, which comes into contact with the specimen during designated utilisation, is sensorially influenced. The specimen was brought into contact with water for 2 hours at 70°C. After this treatment the drinking water was examined by 5 tasters with regard to any divergence in smell and taste

The examination is carried out on the basis of §64 LFGB L 0090-7 in connection with DIN 10955.

Evaluation table for the transfer of taste and smell - evaluation scheme

- 0 = no discernible deviation
- 1 = barely discernible deviation
- 2 = weak deviation
- 3 = clear deviation
- 4 = strong deviation

Limit: 2.5

#### 1.1 Examination of the transfer of taste and smell

Sample	Mat.1	Mat.3
Lab.-No.	TCL140114-02	TCL140114-03
taste, water	1	1
smell, water	1	1

The product submitted is inconspicuous with regard to the transfer of taste and smell-bearing substances to the test food.



Test Report No. : 10045793 002  
Customer :

2014-02-14

## 2. Global migration

The overall migratory behaviour is examined based on EC-Directive 2002/72/EC and corresponding regulations. Deviating to the regulations the following tests were performed as orientating single tests. The following simulation solvents and test conditions were stipulated:

Migration solution	test duration/temperature
3% Acetic acid	2 hr / 70°C
50% Ethanol	2 hr / 70°C
95% Ethanol	2 hr / 40°C
Isooctane	30mins 40°C

Sample Lab.-No.		Mat.1 TCL140114-02	Mat.3 TCL140114-03
3% Acetic acid	mg/dm <sup>2</sup>	<10	<10
50% Ethanol	mg/dm <sup>2</sup>	--	<10
95% Ethanol	mg/dm <sup>2</sup>	<10	--
Isooctane	mg/dm <sup>2</sup>	<10	--

According to (EU) No.10/2011, the material with contact to food may not submit more than 10 mg/dm<sup>2</sup> of substances (global migration).

The tested samples do keep this limit.

## 3. Specific migration of metals according to (EU) No. 10/2011

The concentration of migratory elements is determined from a migration solution. The concentration of the following elements is examined by means of ICP/OES.

Migration solution	test duration/temperature
3% Acetic acid	2 hr / 70°C

Sample Lab.-No.		Mat.1 TCL140114-02	Mat.3 TCL140114-03
Barium, Ba	mg/kg	<1	<1
Cobalt, Co	mg/kg	<0.05	<0.05
Copper, Cu	mg/kg	<5	<5
Iron, Fe	mg/kg	<48	<48
Lithium, Li	mg/kg	<0.6	<0.6
Manganese, Mn	mg/kg	<0.6	<0.6
Zinc, Zn	mg/kg	<25	<25

The examined samples meet these limits.





Test Report No. : 10045793 002  
Customer :

2014-02-14

#### 4. Diisopropylnaphthalene (DIPN)

Sample Lab.-No.	Mat.1 TCL140114-02	Mat.3 TCL140114-03
Diisopropylnaphthalene mg/kg	<1	<1

The recommendation of the BfR (German Institute for Risk Assessment) XXXVI. "Paper and board for food contact" serves as basis for the evaluation of the test results. Paper and board may contain Diisopropylnaphthalene (DIPN) as a consequence of the use of recycled fibers as raw material. DIPN is used as a solvent in carbonless copy paper. Such paper may be contained in recovered paper. A transfer of DIPN to foodstuffs may take place by direct contact or via the gas phase. The DIPN content in paper and board must be as low as technologically possible in order to minimize its transfer to foodstuffs.

#### 5. 1,3-Dichlor-2-propanol and 3-Monochlor-1,2-propanediol Content

Examination of commodities - Determination of 1,3-dichlor-2-propanol and 3-monochlor-1,2-propanediol in an aqueous extract of paper, carton, board; BVL B 80.56-2

Sample Lab.-No.	Mat.1 TCL140114-02	Mat.3 TCL140114-03
1-3-Dichlor-2-propanol µg/L	<2	<2
3-Chloro-1,2-propanediol µg/L	<10	<10

According to BfR-Recommendation XXXVI. "Paper and board for food contact" 1,3-Dichloro-2-propanol must not be detectable in water extract of the finished product (detection limit 2 µg/l). The transfer of 3-monochloro-1,2-propanediol into the water extract of the finished products must be as low as technically achievable, a limit of 12 µg/l must not be exceeded in any case.

#### 6. Glyoxal

Extraction acc. to EN 645:1994 / EN 647:1994; Determination according to DIN 54603.

Sample Lab.-No.	Mat.1 TCL140114-02	Mat.3 TCL140114-03
Glyoxal mg/dm <sup>2</sup>	<0.2	<0.2

According to The recommendation of the BfR, Part XXXVI "Paper and board for food contact", serves as a basis for the evaluation of these results. In this publication it is stated that the extract of finished product must contain no more than 1.5 mg glyoxal per dm<sup>2</sup>.



Test Report No. : 10045793 002  
Customer :

2014-02-14

## 7. Hemmhofstest

Paper and board intended to come into contact with foodstuffs - Determination of transfer of antimicrobial constituents; DIN EN 1104

Sample Lab.-No.		Mat.1 TCL140114-02	Mat.3 TCL140114-03
Parameter	Unit	Result	Result
Antimicrobial transfer	-	no	no
Aspergillus niger, DSM 1957	-	x	x
Growth	-	++	++
Growth inhibition zone	mm	0	0
Bacillus subtilis, ATCC 6633/ATCC6051	-	x	x
Growth	-	++	++
Growth inhibition zone	mm	0	0

Samples which do not show an inhibition zone, contain no water soluble antimicrobial constituents. An inhibition zone is proven if no growth or observable reduction of the growth (env. 20% less than in the surrounding area) is observed.

- = no growth  
+ = growth  
++ = strong growth

## 8. Colourfastness

Test method: Paper and board intended to come into contact with foodstuffs – Determination of colourfastness of dyed paper and board; DIN EN 646

Requirement: BfR Recommendations on Food Contact Materials (formerly "Plastics Recommendations") Part XXXVI, 2009 "Paper and board for food contact".

Sample Lab.-No.		Mat.1 TCL140114-02 Method A	Mat.3 TCL140114-03 Method A
Colour fastness to water	Grade	5	5
Colour fastness to 3% acetic acid	Grade	5	5
Colour fastness to saliva solution	Grade	5	5
Colour fastness to oil	Grade	5	5

The BfR Recommendation on Food Contact Materials (formerly "Plastics Recommendations") Part XXXVI, 2009 "Paper and board for food contact" serves as basis for the evaluation of the test results. There must be no migration of colorants to the foodstuff. Testing is conducted according to DIN EN 646, where by grade 5 on the so-called grey scale must be reached  
The examined items do meet the requirement





Test Report No. : 10045793 002  
Customer :

2014-02-14

## 9. Migration of Optical Brighteners

Test method: With reference to EN 648 "paper and board" intended to come into contact with food – Determination of the fastness of fluorescent whitened paper and board.

Limit: Recommendation of Plastics Intended to Come into Contact with Food in BfR, "Kunststoffempfehlungen", Part XXXVI, 2009 (Paper and board for food contact)

Sample Lab.-No.		Mat.1 TCL140114-02	Mat.3 TCL140114-03
Colour fastness to water	Grade	5	5
Colour fastness to 3% acetic acid	Grade	5	5
Colour fastness to saliva solution	Grade	5	5
Colour fastness to olive oil	Grade	5	5

The Recommendation of the BfR, Part XXXVI "paper and board for food contact" serves as basis for the evaluation of the test results. There must be no migration of brighteners to the foodstuff. testing is conducted according to DIN EN 648, whereby grade 5 on the so-called grey scale must be reached. The examined items meet the requirement.

## 10. Pentachlorophenol, Trichlorophenol and Tetrachlorophenol

Sample Lab.-No.		Mat.2 TCL140114-02	Mat.4 TCL140114-03
Pentachlorophenol (PCP)	mg/kg	<0.15	<0.15
Trichlorophenol (TriCP)	mg/kg	<0.15	<0.15
Tetrachlorophenol (TeCP)	mg/kg	<0.15	<0.15

## 11. Formaldehyde, extractable from paper

Sample prepared according to BS EN 645:1994 / BS EN 647:1994; detected and quantified by BS EN 1541:2001. The following simulation solvents and test conditions were stipulated:

food simulant	test duration/temperature
3% Acetic Acid	2 hr / 70°C

Sample Lab.-No.		Mat.1 TCL140114-02	Mat.3 TCL140114-03
Formaldehyde	mg/dm <sup>2</sup>	<1	<1

According to *The Recommendations of the Federal Institute for Risk Assessment on Plastics Intended to Come into Contact with Food - XXXVI Paper and Cardboard in Food Contact*

No more than 1.0 mg formaldehyde/ dm<sup>2</sup> must be detectable in the extract of the finished product. The tested samples keep this limit.



Test Report No. : 10045793 002  
Customer :

2014-02-14

## 12. Migration of Metal from Paper

Test method: Extraction acc. to DIN EN 645:1994 / DIN EN 647:1994; Determination of heavy metals by ICP-OES. Determination of Chromium VI by UV-Vis spectrophotometer.

Limit: BfR Recommendations on Food Contact Materials (formerly "Plastics Recommendations") Part XXXVI, 2009 (Paper and board for food contact)

Sample Lab.-No.		Mat.1 TCL140114-02	Mat.3 TCL140114-03	Limit
Cadmium	mg/kg	< 0.3	< 0.3	0.5
Lead	mg/kg	< 0.3	< 0.3	3.0
Mercury	mg/kg	< 0.3	< 0.3	0.3
Chromium III	mg/dm <sup>2</sup>	< 0.001	< 0.001	0.004
Chromium VI	µg/g	n.d.	n.d.	n.d. (<0.25)

The examined item does meet the requirement

## Test Methods

Smell, Taste	§ 64 LFGB L 0090-7 in connection with DIN 10955
Global migration	§ 64 LFGB 80.30 1-3(EG) (2002/72/EC)
Specific migration of metals	with reference to § 64 LFGB 80.30 1-3(EG) (2002/72/EC)
Extractive Formaldehyde	EN 645:1994 / EN 647:1994; EN 1541:2001.
PCP / TeCP / TriCP	Ref. to 64 LFGB B82.02-8:2001
Diisopropylnaphthalene (DIPN)	solvent extraction; DIN EN 14719
Hemmhofstest	DIN EN 1104
1,3-Dichlor-2-propanol and 3-Monochlor-1,2-propanediol	§ 64 LFGB B 80.56.2:2002
Glyoxal	EN 645:1994 / EN 647:1994; DIN 54603
Colorfastness	DIN EN 646
Migration of Optical Brighteners	EN 648

