

## Test Report

No. : CT/2018/61112C

Date : 2019/08/26

Page: 1 of 4

PANDOO GMBH  
BLARERSTR. 56-78462 KONSTANZ GERMANY

The following sample(s) was/were submitted and identified by/on behalf of the applicant as :

Sample Submitted By : PANDOO GMBH  
Sample Description : BIODEGRADABLE BAMBOO FIBER STRAW  
Sample Material : BAMBOO FIBER+STARCH  
Sample Receiving Date : 2018/06/27  
Testing Period : 2018/06/27 TO 2018/07/12

=====  
**Test Requested** : As specified by client, the sample(s) was/were tested with reference to German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 & 31 with amendments. Please refer to the result table for testing item(s).

**Test Result(s)** : Please refer to following pages.

*Singh Hsiao*

Singh Hsiao / Sr. Supervisor  
Signed for and behalf of  
SGS TAIWAN LTD.  
Chemical Laboratory - Taipei



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BLARERSTR. 56-78462 KONSTANZ GERMANY

## Test Result(s)

PART NAME No.1 : LT. BROWN STRAW

**PASS**

Test Item(s)	Unit	Method	MDL	Result	Limit
				No.1	
Arsenic content (As)	mg/kg	Microwave Digestion. Analysis was performed by ICP-OES.	2	n.d.	Absent
PCP (Pentachlorophenol) (CAS No.: 87-86-5)	mg/kg	With reference to LFGB §64 BVL B 82.02.8 (2001). Analysis was performed by GC/MS.	0.05	n.d.	0.15
Specific Migration of Formaldehyde	mg/kg	With reference to EN 13130-1 (2004). Analysis was performed by UV-VIS. (3% acetic acid, 100°C, 1 hr)	0.1	0.304	15 (□ 1)
Pesticides	mg/kg	With reference to US EPA Method 8081B, 3620B, 3630C. Analysis was performed by GC/MS, GC/ECD, GC/NPD & HPLC/DAD/MSD.	-	n.d.	Absent (▲)
Sensorial examination taste (Point scale)	-	With reference to DIN 10955 (2004).	-	1.0	2.5
Sensorial examination odour (Point scale)	-		-	1.0	2.5

## Remark :

- (□ 1) : Limit is according to Commission Regulation (EU) No 10/2011 of 14 January 2011 with amendments.
- Test condition for Sensorial examination 【40°C, 2 hr, Cucumber】
  - 0 - no perceptible difference
  - 1 - Just perceptible difference
  - 2 - Slight difference
  - 3 - Marked difference
  - 4 - Strong difference

## Note :

1. mg/kg = ppm
2. MDL = Method Detection Limit
3. n.d. = Not Detected = below MDL
4. - = Not Regulated
5. °C = degree Celsius
6. Test condition & simulant were specified by client.

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PANDOO GMBH  
BLARERSTR. 56-78462 KONSTANZ GERMANY

## (▲) List of Pesticides with Detection Limits.

Annex I: List of Pesticides with Detection Limits					
Pesticide	CAS No.	Detection Limit (mg/kg)	Pesticide	CAS No.	Detection Limit (mg/kg)
Azinophosmethyl	86-50-0	0.05	Hexachlorobenzene	118-74-1	0.05
Azinophosethyl	2642-71-9	0.05	a-Hexachlorcyclohexane	319-84-6	0.05
Aldrine	309-00-2	0.05	β-Hexachlorcyclohexane	319-85-7	0.05
Bromophos-ethyl	4824-78-6	0.05	δ-Hexachlorcyclohexane	319-86-8	0.05
Carbaryl	63-25-2	0.2	Lindane (g-HCH)	58-89-9	0.05
Chlordane	57-74-9	0.2	Malathion	121-75-5	0.2
Chlordimeform	6164-98-3	0.5	Metamidophos	10265-92-6	0.2
Coumaphos	56-72-4	0.05	Methoxychlor	72-43-5	0.05
Cyfluthrin	68359-37-5	0.2	Mirex	2385-85-5	0.05
Cyhalothrin	91465-08-6	0.05	Monocrotophos	6923-22-4	0.2
Cypermethrin	52315-07-8	0.05	Parathion	56-38-2	0.05
DEF	78-48-8	0.2	Parathion-methyl	298-00-0	0.2
Deltamethrin	52918-63-5	0.05	Propethamphos	31218-83-4	0.5
2,4'-DDD	53-19-0	0.05	Profenophos	41198-08-7	0.05
4,4'-DDD	72-54-8	0.05	Quinalphos	13593-03-8	0.2
2,4'-DDE	3424-82-6	0.05	Toxaphen (Camphechlor)	8001-35-2	0.2
4,4'-DDE	72-55-9	0.05	Trifluralin	1582-09-8	0.2
4,4'-DDT	50-29-3	0.05	2,4,5-T	93-76-5	0.5
2,4'-DDT	789-02-6	0.05	2,4-D	94-75-7	0.5
Diazinon	333-41-5	0.2	Captafol	2425-06-1	0.05
Dicrotophos	141-66-2	0.2	Chlorfenvinphos	470-90-6	0.05
Dieldrine	60-57-1	0.05	Dichlorprop	120-36-5	0.5
Dimethoate	60-51-5	0.05	Dinoseb and salts	88-85-7	0.5
a-Endosulfan	959-98-8	0.05	MCPA	94-74-6	0.5
β-Endosulfan	33213-65-9	0.05	MCPB	94-81-5	0.5
Endrine	72-20-8	0.05	Mecoprop	93-65-2	0.5
Esfenvalerat	66230-04-4	0.05	Phosdrin / Mevinphos	7786-34-7	0.5
Fenvalerate	51630-58-1	0.05	Perthane	72-56-0	0.2
Heptachlor	76-44-8	0.05	Strobane	8001-50-1	0.2
Heptachlorepoxyde	1024-57-3	0.05	Telodrine	297-78-9	0.2
Isodrine	465-73-6	0.2	TeCP	935-95-5	0.05
Kelevane	4234-79-1	0.2			
Kepone	143-50-0	0.2			

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BLARERSTR. 56-78462 KONSTANZ GERMANY

\* The tested sample / part is marked by an arrow if it's shown on the photo. \*

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\*\* End of Report \*\*

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PANDOO GMBH  
BLARERSTR. 56-78462 KONSTANZ GERMANY

\* The tested sample / part is marked by an arrow if it's shown on the photo. \*

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\*\* End of Report \*\*

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**Report No.:** 158111911a 001

**Client:** PANDOO GMBH

**Contact Information:** Blarerstraße 56, Konstanz

**Manufacturer's name:**

**Buyer's name:** PANDOO GMBH

**Test item(s):** Disposable Straws

**Identification/ Model No(s):** Disposable Straws

**Sample Receiving date:** 2019-06-18

**Testing Period:** 2019-06-27 to 2019-07-02

**Test result:**

**Test Specification:**

Customer's requirement:

1. Total Arsenic Content	PASS
2. Total Mercury Content	PASS

**Other information:**

Other information provided by client:  
Country of Destination: Europe

For and on behalf of  
TÜV Rheinland Hong Kong Ltd.



2019-07-05

Kenny Wong / Senior Project Coordinator

*Date*

*Name/Position*

*Test result is drawn according to the kind and extent of tests performed.  
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.*

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**Material List:**

Item: Disposable Straws

Material No.	Material	Color	Location
A001	70% Bamboo fiber + 30% natural plant starch	Brown	Refer to photo

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**1.Total Arsenic Content**

Test Method: Acid digestion, ICP-OES

**Test result**

Test No.	Material No.	Test Parameter	Unit	RL	Test Result
T001	A001	Arsenic	mg/kg	10	n.d.

**Abbreviation:** n.d. = Not Detected (< RL)  
RL = Reporting Limit  
mg/kg denotes milligram per kilogram

**Remark:**

- \*1 The requirement is following REACH regulation (EC) No. 1907/2006 & Amendment 552/2009 Annex XVII (2003/2/EC)

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**2.Total Mercury Content**

Test Method: Acid digestion, analyzed by ICP-OES

**Test result**

Test No.	Material No.	Test Parameter	Unit	RL	Test Result
T001	A001	Mercury content	mg/kg	8	n.d.

**Abbreviation:** n.d. = Not Detected (< RL)  
 RL = Reporting Limit  
 mg/kg = milligram per kilogram

**Remark:**

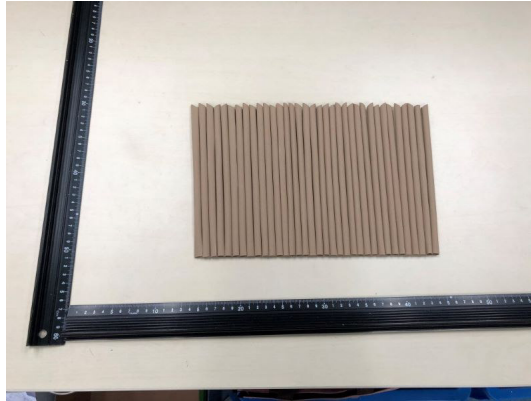
\* Regulations on Mercury

Country	Legislation	Maximum Permissible Limit
Sweden	"Mercury- containing Products (Certain) Ordinance (SFS 1991:1290)"	n.d.
Norway	"Regulations relating to restrictions on the manufacture, import, export, sale and use of chemicals and other products hazardous to health and the environment (Products Regulations)"	10mg/kg
Denmark	Statutory Order no. 627 of 1 July 2003 prohibits the import, sale and export of mercury and mercury-containing products (Original title: Bekendtgørelse om forbud mod import, salg og eksport af kviksølv og kviksølvholdige produkter)	< 100mg/kg
Swiss	SR. 814.81 Ordinance on the Reduction of Risks relating to the Use of Certain Particularly Dangerous Substances, Preparations and Articles (Chemical Risk Reduction Ordinance, ORRChem), Annex 1.7	n.d.

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Sample Photos



- END -

