

This specification describes articles of the material group

Plant fibers with PBAT lamination




Material description

The sugar extraction from sugar cane produces a large amount of fibers, a valuable biomass which, together with other plant fibers, such as bamboo, is ground to a fine pulp with the addition of water and additives, processed and pressed into shape. Subsequently the forms are laminated with a PBAT film.

PBAT (polybutyrate adipate terephthalate) is an EN13432 certified, 100% biodegradable polymer (plastic) that is synthetically manufactured on the basis of fossil and partially biobased raw materials. The PBAT film is characterized by its high extensibility (e.g. as a laminating film) and its heat resistance of up to 230°C.

Further material information can be found at: <http://www.materialarchiv.ch/detail/1794/Polybutyratadipat-Terephthalat#/detail/1794/polybutyratadipat-terephthalat>

Product description

Picture	Description	Dimensions (mm)	Article number
	Bowl sugar cane/PBAT, 500ml	170x170x40	18004
	Bowl sugar cane/PBAT, 750ml	170x170x55	18005
	Bowl sugar cane/PBAT, 600ml	195x170x40	18006
	Bowl sugar cane/PBAT, 900ml	195x170x56	18007
	Bowle Zuckerr./PBAT, 530/250ml, 2-comp.	195x170x56	18008
	Meal tray sug. cane/PBAT, 600ml	230x165x30	18009
	Meal tray sug. cane/PBAT, 950ml	230x165x47	18010

Material / composition

Plant fibers with PBAT lamination

PRODUCT-SPECIFICATION_01286/e

DECLARATION OF COMPLIANCE



Storage

Storage temperature: ambient
Relative humidity: dry
Storage conditions: keep away from direct sunlight

Purpose of use

The products are suitable for direct contact with food.

Types of food which should **NOT** come into contact with the material:

- Pure fat and oil, marinated products and oil
- Very sour pH<4.5

Applications:

- Freezer -20°C
- Hot filling, then keeping warm 70°C for up to 2 hours
- Single-use
- Heating 0.5h, 200°C
- Heating 1.5h, 120°C
- Any food contact at frozen and refrigerated conditions.

Declaration of compliance

These articles meet the following regulations:

- Regulation (EC) No 2023/2006** on good manufacturing practice for materials and articles intended to come into contact with food
- Regulation (EC) No 1935/2004** on materials and articles intended to come into contact with food and
- Regulation (EU) No 10/2011** on plastic materials and articles intended to come into contact with food. And subsequent amendments until the date of the test report.
- Directive 94/62/EC** on packaging and packaging waste
- SR 817.023.21** The Swiss Ordinance on Materials and Articles in Contact with Food

Overall migration

Bowls white with PBAT lamination tested under the following conditions (test report SQTS 2019L10873, 2017L49347, UEB 1828036):

PRODUCT-SPECIFICATION_01286/e

DECLARATION OF COMPLIANCE



Simulant	Time	Temperature
<input checked="" type="checkbox"/> E: Poly(2,6-diphenyl-p-phenylenoxid) or Tenax	10d	40°C
<input checked="" type="checkbox"/> E: Poly(2,6-diphenyl-p-phenylenoxid) or Tenax	30min	200°C
<input checked="" type="checkbox"/> Isooctane*	30min	40°C
<input checked="" type="checkbox"/> Alternative simulant ethanol 95 % (v/v)*	2h	60°C
<input checked="" type="checkbox"/> A: Ethanol 10 % (v/v)	10d	20°C
<input checked="" type="checkbox"/> Alternative simulant ethanol 95 % (v/v)	10d	20°C
<input checked="" type="checkbox"/> Isooctane	10d	20°C

*The test times and temperatures were taken from Table 4 "Conditions for Replacement Testing" of Directive 82/711/EEC or the "Guidelines on testing conditions for articles in contact with foodstuffs", CRL-NRL-FCM Publication 1st Edition [2009] , Instead of 2 hours at 70°C with D2, was tested for 30 minutes at 40°C with isooctane and 2 hours at 60°C with 95% (v/v) ethanol.

Bowls nature tested under the following conditions (test report SQTS 2017L04119):

Simulant	Time1	Temperature1	Time2	Temperature2
<input checked="" type="checkbox"/> E: Poly(2,6-diphenyl-p-phenylenoxid) or Tenax	0.5h	220°C	2h	70°C

(PBAT film test report SQTS 2019L05393):

Simulant	Time	Temperature
<input checked="" type="checkbox"/> E: Poly(2,6-diphenyl-p-phenylenoxid) or Tenax	0.5h	200°C
<input checked="" type="checkbox"/> Alternative simulant ethanol 95 % (v/v)	2h	70°C
<input checked="" type="checkbox"/> Alternative simulant ethanol 95 % (v/v)	3.5h	60°C

The global migration values are below the limit of 10 mg/dm². For the fat simulants, a correction factor of X/2 should be applied.

The test times and temperatures were taken from Table 4 "Conditions for Replacement Testing" of Directive 82/711/EEC or the "Guidelines on testing conditions for articles in contact with foodstuffs", CRL-NRL-FCM Publication 1st Edition [2009] , Instead of 2 hours at 100°C with D2, was tested for 3.5h at 60°C with 95% ethanol.

Specific migration

Compliance with the regulations cited above is based, on the one hand, on the information provided by our suppliers, who do not disclose all ingredients to us due to secrecy, and on the other hand on our own migration tests, which we commissioned in order to validate the plausibility. Based on both the subcontractor's documents and own results, compliance with the specific migration can be confirmed.

A screening was performed with Tenax and ethanol 95% by volume. NIAS found were subjected to a risk assessment, if appropriate.

PRODUCT-SPECIFICATION_01286/e DECLARATION OF COMPLIANCE



Calculation basis

Ratio of food contact surface area to volume used to establish the compliance of the material or article: 6 dm²/kg or 15.6 dm²/l

Production site: China

Bio-degradability: The products are completely bio-degradable

Certificates: tested according to DIN EN 13432, certificate No. 7P0456

Customs duty number: 4823.7000

Reclamation

Deliveries, which differ from the listed specifications, will be withdrawn and replaced after review.

Created by: STOL Date: 08.05.2019	Released by: MEI Andreas Meier (Head of Purchasing)		Version: 4
--	--	---	-------------------