

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	Article number
	Tray square	12857
	Tray rectangular	12858, 12859, 12860, 13049
	Tray rectangular, 2-compartments	12861
	Menu tray, 1-compartment	12895

Picture	Description	Article number
	Menu tray, 2-compartment	12896
	Menu tray, 3-compartment	12897
	Meal tray 1/2 with PBAT 325x265x65 mm, 3945 ml	20115
	Meal tray 1/4 with PBAT 265x162x65 mm, 1600 ml	21185

Material/composition

Plant fibers with PBAT lamination 50my

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

PRODUCT SPECIFICATION_00609/e

DECLARATION OF COMPLIANCE



Applications:

- Deep freezing -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.

Confirmations

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 2019/1338
- 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

Tested under the following conditions:

(laminated bowls test report SQTS 2021L20200, 2019L10873, 2017L49347, UEB 1828036):

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

PRODUCT SPECIFICATION_00609/e

DECLARATION OF COMPLIANCE



*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.

(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% (v/v) 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.

NIAS

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

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

PRODUCT SPECIFICATION_00609/e DECLARATION OF COMPLIANCE



Organoleptic test

The organoleptic test was carried out in accordance with Regulation (EC) No 1935/2004. Under normal or foreseeable conditions of use, the products do not affect the organoleptic properties of the food.

Production site: China

Customs duty number: 4823.7000

Certificates: DIN EN 13432, DIN CERTCO certificate No: 7Po456



Climate neutral

Packaging

ClimatePartner.com/14268-2004-1003




Disclaimer

This confirmation applies to the material supplied by us as described. The material then fulfills the requirements of these guidelines for contact with the specified filling goods, provided the specified food contact conditions are observed. The user must convince himself of the suitability of the material for the intended filling material beyond the requirements of the guidelines.

Reclamation

Deliveries, which differ from the listed specifications, will be withdrawn and replaced after review.

Date: 12.07.2021	Released by: MEI Andreas Meier (Head of purchasing) 	Version: 10
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