

## Test Report

### Overall Migration

According to commission Regulation (EU) No. 10/2011 as amended till (EU) 2020/1245  
and Israeli Standard 5113

<b>IPRC Job No.</b>	R/3682.
<b>Client:</b>	<b>Mapal Plastics Ltd.</b>
<b>Contact person:</b>	Maor Segal.
<b>Client's Address:</b>	Mevo Hama 1293400, ISRAEL.
<b>Item tested:</b>	White colored polypropylene cutting board-Tray ,(1 mm thick).
<b>Item designation:</b>	Cutting board-Tray, for aqueous, acidic and fatty foodstuff.
<b>Use:</b>	Room temperature filled and stored and/or refrigerated and/or frozen conditions, including Hot-fill (up to 100°C/15 min) , for repeated use.
<b>Arrival in lab:</b>	21-Feb-2023.
<b>Testing period:</b>	23-Feb-2023 - 13-Mar-2023.
<b>Sample drawn by:</b>	Client
<b>Objectives of examination:</b>	To test Overall Migration according to Regulation (EU) No. 10/2011 of 14 <sup>th</sup> Jan 2011 on Plastic Materials and Articles Intended to come in contact with food and Israeli Standard 5113

**Table 1: Summary of test results**

Item tested:	Test Conducted	Result
White colored polypropylene cutting board-Tray ,(1 mm thick).	Overall Migration Test – EU 10/2011	PASS

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## Overall Migration test:

### Test Requested:

Overall migration of extractives from packaging, using solvents that are simulating types of foodstuffs for compliance with EU Regulation (EU) No. 10/2011 and its amendments: "Plastics materials and articles intended to come into contact with food", and overall migration according to Israeli standard 5113.

**Table 2: Applied test methods**

Test Method	Principle
EN 1186 - 3	Test methods for overall migration into aqueous food simulants by total immersion
EN 1186 - 14	Exposure into iso-octane and 95 % aqueous ethanol

**Table 3: Standardized testing conditions**

Test Number	Contact time in days [d] or hours [h] at Contact temperature in [°C]	Intended food contact conditions
OM3	2 h at 70 °C	Any food contact conditions that include hot-fill and/or heating up to a temperature T where $70\text{ °C} \leq T \leq 100\text{ °C}$ for a maximum of $t = 120/2^{((T-70)/10)}$ minutes, which are not followed by long term room temperature or refrigerated storage.

**Table 4: Test Results EU 10/2011**

Item	Units	Simulant	Test method	Test conditions	Overall Migration Results		Max. Limit
					Single results	Average	
White colored polypropylene cutting board-Tray ,(1 mm thick).	mg/dm <sup>2</sup>	A	EN 1186-3	2h/70 °C	0.30; 0.20; 0.20	0.23	10
	mg/dm <sup>2</sup>	B	EN 1186-3	2h/70 °C	0.40; 0.30; 0.40	0.40	10
	mg/dm <sup>2</sup>	D2 <sup>(*)</sup>	EN 1186-3	0.5h/40 °C	1.20; 1.40; 1.3	1.30	10

**Note:** Simulant A: 10% Ethanol (v/v)  
Simulant B: Acetic Acid 3% (w/v)  
Simulant D2: Fatty simulant-Isooctane.  
mg/dm<sup>2</sup>: milligram per square decimeter  
ND = Not Detected; d=day; hr=hour; °C: degree Celsius

(\*) Due to technical challenges in the conditioning procedure of the samples; a change in mass between two consecutive weighing, of less than 5 mg/dm<sup>2</sup>, could not be achieved. Therefore, alternative test method for the assessment was employed, as described in EN 1186-14: "Exposure into Iso-octane and 95 % ethanol". That is, the higher migration result is presented in the report as required in Commission Regulation 2016/1416 "Amending and correcting (EU) No 10/2011 on plastic materials and articles intended to come into contact with food". Therefore, in this case the highest results were received from migration in Iso-octane.

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### Conclusions:

The submitted samples comply with the overall migration requirements of Regulation (EU) 10/2011 as amended; according to table 3 of Annex III of the Regulation, testing the combination of simulants A, B and D2 allows to conclude on compliance for all types of food. According to Chapter 3 of Annex V of the Regulation, Overall Migration test condition OM3 covers any food contact condition that include, hot-fill conditions, and/or heating up to a temperature T where  $70\text{ }^{\circ}\text{C} \leq T \leq 100\text{ }^{\circ}\text{C}$  for a maximum of  $t = 120/2^{((T-70)/10)}$  minutes.

The submitted sample is shown in the following figure No. 1:



Fig. No. 1: White colored polypropylene cutting board-Tray ,(1 mm thick), R/3682 sample.

Note: This certificate is valid only with the rest of the test certificates for this product: R/3682-Metals.

The results reported herein, relate only to the sample tested and do not necessarily represent the lot from which they originate. Unless otherwise stated, the samples have been freely selected, indexed and provided by the client. Without written permission of IPRC this test report is not permitted to be duplicated. This test report does not entitle to carry any safety mark on this or similar products. The use of ISIRAC symbol relates to tests which are included in the organization scope of accreditation and performed according to the accreditation rules as detailed in the accreditation certificate. It is the responsibility of the manufacturer of the finished plastic food contact article to verify that the finished articles are in compliance with the defined SML. The manufacturers of the finished food contact material or article must verify that the finished material or article, manufactured according to good manufacturing practices and does not modify the organoleptic properties of the food. ISIRAC is not responsible for the results of the tests performed by the organization/research facility and accreditation/recognition does not constitute a certificate of approval of any item, system or process tested. The test report does not contain the uncertainty values. The tested sample is not cleared for contact with baby foods for infants and young children

Tested by:



Anya Bar  
Chemist



Approved by:



Hagit Ichye  
Chemist

\*\*\*End of Report\*\*\*