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Rapport No.: R/2237

Date: 19/12/2016

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#### **Food Contact Plastic**

### **Test Report**

Conformity with: Overall migration limit according to: Regulation (EU) No. 10/2011 as amended. Title 21 Code of Federal Regulations section 175.320, Title 21 Code of Federal Regulations section 176.170 and Israeli Standard 5113.

IPRC Job No.	R/2237
Client:	Dolev Plastic Products Coperative Society LTD
Contact person:	Hagit On
Client's Address:	Kibbuz Dvir, D.N Negev 8533000.
Item tested:	HDPE containers, pallets and lids (A)
Item designation:	All food types
Use:	Temperature range -40 to +60 Celsius degrees
Arrival in Lab:	1-Nov-2016
Testing Period:	Until 18-Dec-2016

#### Summary of test results:

	Properties and the contract of	
Test Conducted	Result	
Overall Migration Test – HDPE containers, pallets and lids (B)	PASS	









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#### **Overall Migration test:**

#### **Test Requested:**

- 1. 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.
- 2. To determine compliance with title 21 Code of Federal Regulations section 175.320 which refers to title 21 Code of Federal Regulations section 176.170 condition d.

#### 1) Applied Test Method:

Test Method	Principle	ě				
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EN 1186 - 3	Test methods for overall migration into aqueous food simulants by total immersion	Š				
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#### 2) Standardized Testing Conditions:

Test Number	Contact time in days [d] or hours [h] at Contact temperature in [°C]	Intended food contact conditions
OM2	10 d at 40 °C	Any long term storage at room temperature or below, including heating up to 70 °C for up to 2 hours, or heating up to 100 °C for up to 15 minutes









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#### 3) Test Results

#### **Overall Migration Results**

ltem	Simulant	Test method	Test conditions	Overall Migration Results (mg/dm²)	Max. Per. Limit ( <i>mg/dm</i> ²)
	Α	EN 1186-3	10 d at 40 °C	5.93	10
HDPE container.	В	EN 1186-3	10 d at 40 °C	7.60	10
pallets and	D1	EN 1186-3	10 d at 40 °C	3.17	10
lids (A)	D2(*)	EN 1186-3	10 d at 40 °C	7.50	10
	Е	EN 1186-3	10 d at 40 °C	0.50	10

Note:

Simulant A: 10% Ethanol (v/v)

Simulant B: Acetic Acid 3% (w/v)

Simulant D1: Ethanol 50% (v/v)

Simulant D2: Fatty simulant

Simulant E: poly(2,6-diphenyl-p-phenylene oxide)

mg/dm<sup>2</sup>: milligram per square decimeter

ND = Not Detected; d=day; hr=hour; °C: degree Celsius

<sup>&</sup>lt;sup>\*)</sup> Due to technical challenges in the conditioning procedure of the cap & spout, as the cap & spout have a complex structure. A change in mass between two consecutive weighing, of less than 5 mg/dm², could not be achieved. Therefore, alternative test method for the assessment was employed, as described in EN 1186-15: "Alternative test methods to migration into fatty food simulants by rapid extraction into iso-octane and 95% ethanol". That is, the higher migration result is presented in the report.

ltem	Extractant	Test Method Reference to:	Test conditions	OML Res. (mg/in²)	Max. Per. (mg/in²)
HDPE	Water	21 CFR 176.170	150 °F for 2 hr.	0.22	0.5
containers,	Heptan	21 CFR 176.170	100 °F 30 min.	< 0.05	0.5
pallets and	8% Alcohol	21 CFR 176.170	150 °F for 2 hr.	0.21	0.5
lids (B)	50% Alcohol	21 CFR 176.170	150 °F for 2 hr.	0.22	0.5

Note:

OML Res.: Overall Migration Results

°F: degree Fahrenheit

Max. Per.: Max. Permissible Limit

<: less than

mg/in2: milligram per square inch









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#### **Conclusions:**

- 1. For Overall Migration: The submitted samples complies with the overall migration requirements of Regulation (EU) 10/2011 as amended and Israeli Standard 5113 for use with all food types: aqueous, acidic, fatty and dry foodstuffs including foods with alcoholic food and milk products. It covers long term storage at room temperature, less severe conditions (refrigerated and deep-frozen storage) and high temperatures.
- 2. For Overall Migration: The submitted PE colorful tanks (A), meets the requirements in title 21 Code of Federal Regulations section 175.320, as it stands in the requirments when exposed to the solvents, at temperatures and times, indicated in title 21 Code of Federal Regulations section 176.170, for use in contact with all types of foods except those filled or pasteurized at temperatures above 150°F.

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 ISRAC symbol relates to tests which are included in the organization scope of accreditation and preformed according to the accreditation rules as detailed in the accreditation certificate. The fatty simulants are being tested at accredited laboratory. 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. ISRAC 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.

Approved By:

Tehila Feiglin

Head of Department

Noga Steiner Gelman

Polymer Eng. - Chemical Eng.

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