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Rapport No.: R/2035-2

Date: 09/03/2016

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Food Contact Plastic

Test Report

Conformity with: Framework Regulation (EC) No. 1935/2004, Regulation (EU) No. 10/2011 and

its amendments, Israeli Standard 5113 and title 21 Code of Federal Regulations

section 175.300 table 2 condition E.

| ISPLRC Job No. | R2035-2 | | | | |
|--|---|--|--|--|--|
| Client: | Polyraz Industries ACS Ltd. | | | | |
| Client's Address: | Kibbutz Maoz Haim, 10845 Israel. | | | | |
| Item tested: 1) PVC mono film and thermoforming products of it, PVC is food containing products of it. | | | | | |
| | 2) MLPVC – multilayer film and thermoforming products of it, PE is food | | | | |
| | contact layer | | | | |
| Item designation: | Storage of fatty, acidic and aqueous foodstuff. | | | | |
| Use: | Room temperature filled and stored. | | | | |
| Arrival in Lab: | 28-Dec-2015 | | | | |
| Testing Period: | Until 09-Mar-2016 | | | | |

Summary of test results:

| | Responsemental contraction and antique antique antique and antique |
|--|--|
| Test Conducted | Result |
| | |
| Overall Migration Test - PVC mono film | PASS |
| | |
| Overall Migration Test - MLPVC | PASS |
| | |
| FDA Compliance - PVC mono film | PASS |
| | |
| FDA Compliance - MLPVC | PASS ! |
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Overall Migration test:

Test Requested:

To determine compliance with Framework Regulation (EC) No. 1935/2004, Regulation (EU) No. 10/2011 and its amendments, and Israeli Standard 5113 - for plastics materials and articles intended to come into contact with food.

To determine compliance with title 21 Code of Federal Regulations section 175.300 table 2 condition E (room temperature filled and stored, no thermal treatment in the container) and less severe conditions, for all type of foods as described in section 175.300 table 1.

1) Applied Test Method & Conditions EU regulations:

| *************************************** | Test Method | Principle | SECONDER N |
|---|-------------|---|--------------|
| Col Management Col | EN 1186 - 3 | Exposure to aqueous food simulants by total immersion | specialities |
| | | Overall migration into oil by cell | Seemen |
| CANDOW SELECT | EN 1186 - 5 | Exposure to aqueous food simulants by cell | Sections |

| 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. |

2) Applied Test Method & Conditions FDA regulations:

As outlined in 21 CFR 175.300, see section 3 of this report.









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3) Test Results

| Item | Simulant | Test method | Test conditions | Overall migration Results (mg/dm²) | Max. Permissible Limit (<i>mg/dm</i> ²) |
|---------------|----------|----------------|--------------------|---------------------------------------|---|
| PVC mono film | В | EN 1186-3 | 10 d at 40 °C | 2.93 | 10 |
| | D1 | EN 1186-3 | 10 d at 40 °C | 3.93 | 10 |
| | D2 | EN 1186-4 | 10 d at 40 °C | 6.10 | 10 |
| MLPVC film | В | EN 1186-5 | 10 d at 40 °C | 1.09 | 10 |
| | DĪ | EN 1186-5 | 10 d at 40 °C | 3.14 | 10 |
| | D2 | EN 1186-4 | 10 d at 40 °C | 6.60 | 10 |

Note:

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

Simulant D1: Ethanol 50% (v/v)

Simulant D2: Vegetable oil

mg/kg: milligram per kilogram of foodstuff mg/dm^2 : milligram per square decimeter

°C: degree Celsius

<: less than

| ltem | Extractant | Test Method Reference to: | Test conditions | OML Res. (mg/in²) | Max. Per. (mg/in ²) |
|---------------|----------------|------------------------------|--------------------|----------------------|------------------------------------|
| PVC | Water | 21 CFR 177.300 | 120 °F 24 hr. | < 0.1 | 0.5 |
| mono | Heptane | 21 CFR 177.300 | 120 °F 24 hr. | < 0.1 | 0.5 |
| film | 8% v/v Ethanol | 21 CFR 177.300 | 120 °F 24 hr. | < 0.1 | 0.5 |
| | Water | 21 CFR 175.300 | 150 °F 2 hr. | < 0.1 | 0.5 |
| MLPVC film | Heptane | 21 CFR 175.300 | 100 °F 30 min | < 0.1 | 0.5 |
| 111111 | 8% v/v Ethanol | 21 CFR 175.300 | 150 °F 2 hr. | < 0.3 | 0.5 |

Note:

OML Res.: Overall Migration Results

Max. Per.: Max. Permissible Limit

mg/in²: milligram per square inch

F: degree Fahrenheit

<: less than









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Conclusions:

The submitted sample complies with Framework Regulation (EC) No. 1935/2004 and overall migration limit for fatty, acidic and milk products, aqueous and alcoholic foodstuffs, as required in Regulation (EU) 10/2011 and Israeli Standard 5113. It covers long term storage at room temperature and less severe conditions (refrigerated and deep-frozen storage), including heating up to 70 °C for up to 2 hours or up to 100 °C for 15 min.

The submitted sample complies with title 21 Code of Federal Regulations section 175.300 table 2: "Procedures for determination the amount of extractives from resinous or polymeric coating", under condition E:" Room temperature filled and stored, no thermal treatment in the container ", as well for less severe conditions, for all type of foods as described in section 175.300 table 1.

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 ISPLRC 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. 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

Toby Levy Zimerman

Chemical Eng. - Polymer Chemist

End of Report