





**Test Report No.** 5803621 Date: 15-Feb-2024

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Client: Prepack Thailand Co., Ltd.

30/145,Moo1,

Khok Kham, Muang Samutsakhon, Samutsakorn 74000 Thailand

The following sample(s) was/were submitted and identified by client as:

Sample Name : PET/ALU/ONY/LLDPE

Sample Description : Plastic film

Manufacturer/Vendor : PREPACK THAILAND CO.,LTD.

Country of Origin : Thailand

The following sample(s) was/were identified by SGS as:

SGS Sample No. : 6088574

Sample Condition : Sample is contained in a plastic bag.

Quantity Submitted : 3 rolls

Sample Receiving Date : 25-Jan-2024

Testing Period : 25-Jan-2024 to 15-Feb-2024

Test Method & Results : Please refer to next page(s).

# Signed for and on behalf of SGS (Thailand) Ltd.



#### **Rutchuporn Moungsom**

# Laboratory manager - Toy and Hard goods

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# **Test Requested & Result Summary**

Test Requested: Please refer to the result summary (Test parameter(s) was/were selected by client).

Result Summary:

Test Requested Conclusion

Notification of the Ministry of Public Health (No.435) B.E. 2565 (2022) (List no.1): Qualities or standard for container made from plastic;

a) Overall migration

3% Acetic Acid (W/V)	PASS
10% Ethanol (V/V)	PASS
20% Ethanol (V/V)	PASS
50% Ethanol (V/V)	PASS
Rectified Olive Oil	PASS
b) Specific Migration of Heavy Metal	PASS
c) clause 4(5) Visible Color Migration	PASS

#### Remark:

- 1. Test results in this report are applicable for the item tested and reflects the tested sample as received.
- 2. The decision rules based on simple acceptance which the probability of false accept may be as high as 50% in case the results is exactly on the tolerance limit.

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**TEST RESULTS** 

Notification of the Ministry of Public Health (No.435) B.E. 2565 (2022) (List no.1): Qualities or standard for container made from plastic;

#### a) Overall migration limits

Method: With reference to Commission Regulation (EU) No 10/2011 of 14 January 2011 Annex III and Annex V for selection of condition and EN 1186-1:2002 for selection of test method (1st migration);

EN 1186-2:2022 Test methods for overall migration in vegetable oils

EN 1186-3:2022 Test methods for overall migration in evaporable simulants

Simulant Used	Test Condition	Result (1) (mg/dm2)	Reporting Limit (mg/dm2)	Permissible Limit (mg/dm2)
3% Acetic Acid (W/V)	10 days at 40 Degree C	ND	3.0	10
10% Ethanol (V/V)	10 days at 40 Degree C	ND	3.0	10
20% Ethanol (V/V)	10 days at 40 Degree C	ND	3.0	10
50% Ethanol (V/V)	10 days at 40 Degree C	ND	3.0	10
Rectified Olive Oil***	10 days at 40 Degree C	ND	3.0	10
Comment		PASS		

# Sample Description :

1. Aluminium foil / clear plastic film with multicolor printed (inside)

#### Note

- 1. mg/dm2 = milligram per square decimeter
- 2. Degree C = degree Celsius
- 3. ND = Not Detected

### Remark:

- 1. Test condition & simulant were specified by client.
- 2. The ratio of surface area to volume is 20 dm2 per 1 kg of foodstuff in contact with.
- 3. The test item(s) marked \*\*\* on test report is/are analyzed at SGS (Thailand) Limited, address: 10, 10/1 4 and 12 Soi Rama III S. 59, Chong Nonsi, Yan Nawa, Bangkok.
- 4. The test result have been extracted from report number 5803608

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**TEST RESULTS** 





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# b) Specific migration of heavy metal\*\*\*

Method: With reference to EN 13130-1:2004. Analysis was performed by ICP-MS / ICP-OES.

Simulant Used: 3% acetic acid (w/v)

Test Condition: 40 Degree C for 10 days (1st Migration)

Single-use article:

Test Item	Result (1) (mg/kg) (1 st migration)	Reporting Limit (mg/kg)	Permissible Limit (mg/kg)
Specific Migration of Aluminium	0.3	0.1	1
Specific Migration of Antimony	ND	0.01	0.04
Specific Migration of Arsenic	ND	0.01	ND
Specific Migration of Barium	ND	0.25	1
Specific Migration of Cadmium	ND	0.002	ND
Specific Migration of Chromium	ND	0.01	ND
Specific Migration of Cobalt	ND	0.01	0.05
Specific Migration of Copper	ND	0.25	5
Specific Migration of Iron	ND	5	48
Specific Migration of Lead	ND	0.01	ND
Specific Migration of Lithium	ND	0.1	0.6

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Test Item	Result (1) (mg/kg) (1 st migration)	Reporting Limit (mg/kg)	Permissible Limit (mg/kg)
Specific Migration of Manganese	ND	0.1	0.6
Specific Migration of Mercury	ND	0.01	ND
Specific Migration of Nickel	ND	0.01	0.02
Specific Migration of Zinc	ND	0.5	5
Specific Migration of Europium	ND	0.025	-
Specific Migration of Gadolinium	ND	0.025	-
Specific Migration of Lanthanum	ND	0.025	-
Specific Migration of Terbium	ND	0.025	-
Specific Migration of Europium + Gadolinium + Lanthanum + Terbium	ND		0.05
Comment	PASS		

# Sample Description:

1. Aluminium foil / clear plastic film with multicolor printed (inside)

5803621

- 1. mg/kg = milligram per kilogram of foodstuff in contact with
- 2. Degree C = degree Celsius
- 3. ND = Not Detected

# Remark:

- 1. Test condition & simulant were specified by client.
- 2. The ratio of surface area to volume is 6 dm2 per 1 kg of foodstuff in contact with.

  3. The test item(s) marked \*\*\* on test report is/are analyzed at SGS (Thailand) Limited, address: 10, 10/1 4 and 12 Soi Rama III S. 59, Chong Nonsi, Yan Nawa, Bangkok.
- 4. The test result have been extracted from report number 5803608

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**TEST RESULTS** 





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c) clause 4(5) Visible Color Migration\*

Method: With reference to Resolution AP (89) 1 and Kunststoffe im Lebensmittelverkehr, Part B II IX.

Simulant Used	Result (1)	Requirement	
3% Acetic Acid (W/V)	No color release observed	No colour release	
20% Ethanol (V/V)	No color release observed	No colour release	
Coconut Oil	No color release observed	No colour release	
Comment	PASS		

Sample Description:

1. Aluminium foil / clear plastic film with multicolor printed (inside)

Note: 1. Requirement is according to Notification of the Ministry of Public Health (No.435) B.E. 2565 (2022): Qualities or standard for container made from plastic; clause 4(5).

Remark:Test(s) marked \* on this report are not included in the NSC-ONSC accreditation scope.

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## **SAMPLE/ATTACHMENT PICTURE**



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 $Unless \ otherwise \ stated \ the \ results \ shown \ in \ this \ test \ report \ refer \ only \ to \ the \ sample(s) \ received \ and \ such \ sample(s) \ are \ retained \ for \ 30 \ days \ only.$