



Request No. 1476/670228

TPC. No. 1476/67

REPORT ON TESTING AND ANALYSIS

For

PREPACK THAILAND CO., LTD.

30/145 Moo 1, Khok Kham, Muang Samutsakhon, Samutsakhon 74000

Testing/analysis of:- Plastic film; code: PET/MCPP

Method of testing/analysis:- 1) ASTM F 1249-20 Water Vapor Transmission Rate Through Plastics Film and Sheeting Using a Modulated Infrared Sensor
2) ASTM D 3985-17 Oxygen Gas Transmission Rate Through Plastic Film and Sheeting Using a Coulometric Sensor

Condition of testing/analysis:- Temperature - °C Relative humidity - %

Date of request:- February 28, 2024

Date of testing:- March 19-22, 2024

Result of testing/analysis:-

Water vapor transmission rate at 37.8 °C , 90.0 % RH	0.173	g/m ² .day
Oxygen gas transmission rate at 23.0 °C , 0 % RH	5.23	cc/ m ² .day

Note: 1) Water vapor transmission rate test:

- Test equipment: Water vapor permeation tester; MOCON PERMATRAN-W[®]3/34(G)

2) Oxygen gas transmission rate test:

- Test equipment: Oxygen permeation tester; Illinois model 8101e

Tested/analysed by

Gansuda

(Miss Gansuda Wangchanachai)

Approved by

Wichit R.

(Mr. Wichit Rattanathawornkiti)

Director of Packaging Testing Laboratory

Date April 5, 2024

End of Report

Remark: The above results are valid exclusively for tested/analyzed samples as mentioned in this report.
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FS-PKL-SP-17025-04 Issue No.3

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REPORT ON TESTING AND ANALYSIS

For

PREPACK THAILAND CO., LTD.

30/145 Moo 1, Khok Kham, Muang Samutsakhon, Samutsakhon 74000

Testing/analysis of:- Plastic film; code: OPP/MCPP

Method of testing/analysis:- 1) ASTM F 1249-20 Water Vapor Transmission Rate Through Plastics Film and Sheeting Using a Modulated Infrared Sensor
2) ASTM D 3985-17 Oxygen Gas Transmission Rate Through Plastic Film and Sheeting Using a Coulometric Sensor

Condition of testing/analysis:- Temperature - °C Relative humidity - %

Date of request:- February 28, 2024

Date of testing:- March 18-27, 2024

Result of testing/analysis:-

Water vapor transmission rate at 37.8 °C , 90.0 % RH	0.133	g/m ² .day
Oxygen gas transmission rate at 23.0 °C , 0 % RH	5.44	cc/ m ² .day

- Note: 1) Water vapor transmission rate test:
- Test equipment: Water vapor permeation tester; MOCON PERMATRAN-W[®]3/34(G)
- 2) Oxygen gas transmission rate test:
- Test equipment: Oxygen permeation tester; Illinois model 8101e

Tested/analysed by

Gansuda

(Miss Gansuda Wangchanachai)

Approved by

Wichit R.

(Mr. Wichit Rattanathawornkiti)

Director of Packaging Testing Laboratory

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Request No. 1478/670228

TPC. No. 1478/67

REPORT ON TESTING AND ANALYSIS

For

PREPACK THAILAND CO., LTD.

30/145 Moo 1, Khok Kham, Muang Samutsakhon, Samutsakhon 74000

Testing/analysis of:- Plastic bag; code: OPP/PPP

Method of testing/analysis:- 1) ASTM F 1249-20 Water Vapor Transmission Rate Through Plastics Film and Sheeting Using a Modulated Infrared Sensor
2) ASTM D 3985-17 Oxygen Gas Transmission Rate Through Plastic Film and Sheeting Using a Coulometric Sensor

Condition of testing/analysis:- Temperature - °C Relative humidity - %

Date of request:- February 28, 2024

Date of testing:- March 18-22, 2024

Result of testing/analysis:-

Water vapor transmission rate at 37.8 °C , 90.0 % RH	1.42	g/m ² .day
Oxygen gas transmission rate at 23.0 °C , 0 % RH	642	cc/ m ² .day

Note: 1) Water vapor transmission rate test:

- Test equipment: Water vapor permeation tester; MOCON PERMATRAN-W[®] 3/34(G)

2) Oxygen gas transmission rate test:

- Test equipment: Oxygen permeation tester; Illinois model 8101e

Tested/analysed by

Gansuda

(Miss Gansuda Wangchanachai)

Approved by

Wichit R.

(Mr. Wichit Pattanathawornkiti)

Director of Packaging Testing Laboratory

Date April 5, 2024

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Request No. 1479/670228

TPC. No. 1479/67

REPORT ON TESTING AND ANALYSIS

For

PREPACK THAILAND CO., LTD.

30/145 Moo 1, Khok Kham, Muang Samutsakhon, Samutsakhon 74000

Testing/analysis of:- Plastic bag; code: OPP/ALU/LLDPE

Method of testing/analysis:- 1) ASTM F 1249-20 Water Vapor Transmission Rate Through Plastics Film and Sheeting Using a Modulated Infrared Sensor
2) ASTM D 3985-17 Oxygen Gas Transmission Rate Through Plastic Film and Sheeting Using a Coulometric Sensor

Condition of testing/analysis:- Temperature - °C Relative humidity - %

Date of request:- February 28, 2024

Date of testing:- March 27-29, 2024

Result of testing/analysis:-

Water vapor transmission rate at 37.8 °C , 90.0 % RH	0.0209	g/m ² .day
Oxygen gas transmission rate at 23.0 °C , 0 % RH	0.0409	cc/ m ² .day

Note: 1) Water vapor transmission rate test:

- Test equipment: Water vapor permeation tester; MOCON PERMATRAN-W[®]3/34(G)

2) Oxygen gas transmission rate test:

- Test equipment: Oxygen permeation tester; Illinois model 8101e

Tested/analysed by

Gansuda

(Miss Gansuda Wangchanachai)

Approved by

Wichit R

(Mr. Wichit Rattanathawornkiti)

Director of Packaging Testing Laboratory

Date April 5, 2024

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Request No. 1480/670228

TPC. No. 1480/67

REPORT ON TESTING AND ANALYSIS

For

PREPACK THAILAND CO., LTD.

30/145 Moo 1, Khok Kham, Muang Samutsakhon, Samutsakhon 74000

Testing/analysis of:- Plastic film; code: OPP/MPET/LLDPE

Method of testing/analysis:- 1) ASTM F 1249-20 Water Vapor Transmission Rate Through Plastics Film and Sheeting Using a Modulated Infrared Sensor
2) ASTM D 3985-17 Oxygen Gas Transmission Rate Through Plastic Film and Sheeting Using a Coulometric Sensor

Condition of testing/analysis:- Temperature - °C Relative humidity - %

Date of request:- February 28, 2024

Date of testing:- March 25-27, 2024

Result of testing/analysis:-

Water vapor transmission rate at 37.8 °C , 90.0 % RH	0.372	g/m ² .day
Oxygen gas transmission rate at 23.0 °C , 0 % RH	0.374	cc/ m ² .day

Note: 1) Water vapor transmission rate test:

- Test equipment: Water vapor permeation tester; MOCON PERMATRAN-W[®] 3/34(G)

2) Oxygen gas transmission rate test:

- Test equipment: Oxygen permeation tester; Illinois model 8101e

Tested/analysed by

Gansuda

(Miss Gansuda Wangchanachai)

Approved by

Wichit R

(Mr. Wichit Rattanathawornkiti)

Director of Packaging Testing Laboratory

Date April 5, 2024

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