





SGS (Thailand) Limited

**Test Report No.** 4246870 Date: 23-May-2019 Page 1 of 6

Client: Thai PET Resin Co., Ltd.

18, Eastern Industrial Estate, Soi G-2 Prakornsongkroraj Road.

**Muang Rayong 21150 Thailand** 

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

Sample Name : InnoPlus SA135T Sample Description : PET Resin Bottle

Color : Clear

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

SGS Sample No. : 4394415

Sample Condition : Sample is contained in a plastic bag.

Quantity Submitted : 1 pack

Sample Receiving Date : 16-May-2019

**Testing Period** : 16-May-2019 to 23-May-2019

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

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### Test Report No. 4246870 **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.295) B.E. 2548 (2005):

Qualities or standard for container made from plastic

a) Polyethylene terephtalate (PET)

1. Lead content	PASS
2. Cadmium content	PASS
3. Antimony in 4% concentrated acetic acid extraction	PASS
4. Germanium in 4% concentrated acetic acid extraction	PASS
5. Heavy metal (as lead) in 4% concentrated acetic acid extraction	PASS
Quantity of potassium Permanganate Consumed	PASS
7. Residue after Evaporation Test	PASS
8. Migration of color extraction	PASS

Remark: Test results in this report are applicable for the item tested and reflects the tested sample as received.

Signed for and on behalf of SGS (Thailand) Limited



**Rutchuporn Moungsom** Laboratory manager - Toy and Hardgood

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Notification of the Ministry of Public Health (No.295) B.E. 2548 (2005): Qualities or standard for container made from plastic.

## a) Polyethylene terephtalate (PET)

# Qualities and standard of plastic

Method: With reference to TIS 656: 2556. Analysis was performed by ICP-OES.

Details	Result (1) (mg/kg)	Limit of Quantitative (mg/kg)	Permissible Limit (mg/kg)
Lead content	<2	2.0	100
Cadmium content	<2	2.0	100

Sample Description:

1. Clear plastic

Note:

1. mg/kg = miligram per kilogram

2. < = Less than

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**Test Report No.** 4246870 **TEST RESULTS** 

### Qualities and standard of dissemination

Method: With reference to TIS 656: 2556

Details	Test Condition	Result (1) (mg/dm3)	Limit of Quantitative (mg/dm3)	Permissible Limit (mg/dm3)
Antimony	30 minute at 60 degree C	<0.02	0.02	0.05
Germanium	30 minute at 60 degree C	<0.02	0.02	0.10
Heavy metal (calculated as lead) in 4% concentrated acetic acid extraction	30 minute at 60 degree C	<1		1
Potassium permanganate used for reaction in water extraction	30 minute at 60 degree C	<1	1.0	10
Residue substances which is evaporate in water	30 minute at 60 degree C	<3	3.0	30
Residue substances which is evaporate in 4% concentrated acetic acid	30 minute at 60 degree C	<3	3.0	30
Residue substances which is evaporate in 20% concentrated alcohol	30 minute at 60 degree C	<3	3.0	30
Residue substances from volatile matters in normal heptane	Room temperature (1 hr. at 25 degree C)	<3	3.0	30

## Sample Description:

1. Clear plastic

- 1. mg/dm3 = milligram per cubic decimeter
- 2. Degree C = degree Celsius
- 3. < = Less than

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**TEST RESULTS** 

### Qualities and standard of dissemination

Test Method: With reference to TIS 655 -1: 2553

Details	Test Condition	Result (1)	Permissible Limit
Migration of color extract by water	30 minute at 60 degree C	Negative (See Note 2)	Negative
Migration of color extract by 4% concentrated acetic acid	30 minute at 60 degree C	Negative (See Note 2)	Negative
Migration of color extract by 20% concentrated alcohol	30 minute at 60 degree C	Negative (See Note 2)	Negative
Migration of color extract by normal heptanes	Room temperature (1 hr. at 25 degree C)	Negative (See Note 2)	Negative

# Sample Description:

1. Clear plastic

### Note:

1. Degree C = degree Celsius

2. "Negative" mean it's not presence of color migration/ "Positive" mean it's presence of color migration

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## SAMPLE/ATTACHMENT PICTURE



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