



SGS (Thailand) Limited

Test Report No. 4129981

Date : 21-Jan-2019

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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

Notification of the Ministry of Public Health (No.295) B.E. 2548 (2005) :

Qualities or standard for container made from plastic

a) Polyethylene (PE)

Conclusion

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

PASS
PASS
PASS
PASS
PASS
PASS

Remark: Test results in this report are applicable for the item tested

Signed for and on behalf of
SGS (Thailand) Limited

Rutchuporn Moungsom
Laboratory manager - Toy and Hardgood

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TEST RESULTS

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

a) Polyethylene (PE)

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. Translucent plastic

Note :

1. mg/kg = milligram per kilogram
2. < = Less than

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NSC-TISI-TIS 17025
Testing 0013

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TEST RESULTS

Qualities and standard of dissemination

Method : With reference to TIS 656: 2556.

Details	Test Condition	Result (1) (mg/dm ³)	Limit of Quantitative (mg/dm ³)	Permissible Limit (mg/dm ³)
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	150

Sample Description :

1. Translucent plastic

Note :

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. Translucent 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



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

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Client : Thai Hong Plastic Industry Co.,Ltd.
30/9 Moo 8, Suksawat Road.,
Nai Khlong Bang Pla Kot, Phra Samut Chedi, Samutprakarn 10290 Thailand

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

Sample Name : HDPE Bag
Manufacturer/Vendor : Thai Hong Plastic Industry Co.,Ltd.
Country of Origin : Thailand

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

SGS Sample No. : 4268920
Sample Condition : Sample is contained in a plastic bag.
Quantity Submitted : 1 pack

Sample Receiving Date : 15-Jan-2019
Testing Period : 15-Jan-2019 to 21-Jan-2019

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

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