

# Tubtrug





Hong Kong Government Recognized Service Supplier  
 Approved Laboratory of The Woolmark Company  
 Members of :  
 American National Standards Institute  
 American Society for Testing and Materials  
 British Standards Institute

Hong Kong Association for Testing, Inspection and Certification Limited  
 Hong Kong Toys Council

**Test Report**

Number: HKGH01488639

Applicant:

Date: Jun 11, 2013

Sample Description:

One (1) submitted sample said to be :  
 Item Name

- : **Flexible Tubs Assorted Colours :**  
 (1) Purple.  
 (2) Red.  
 (3) Light Blue.  
 (4) Yellow.  
 (5) Orange.  
 (6) Pink.  
 (7) Light Green.  
 (8) Green.  
 (9) Blue.

Material : PE.  
 Manufacturer

Country of Origin

Quantity

Additional Information

1. **0,37L Micro Tub Purple.**

Raw Material : Alcudia 1970M.

Supplier: Repsol.

Master Name: Violeta EH 40842.

Master Supplier: Colorsol Quimica SL.

Other References With Same Raw Material And Master:

- 35L Shallow Purple.
- 75L Extra Large Purple.
- 38L Large Purple.
- 26L Medium Purple.
- 15L Small Shallow Purple.
- 14L Small Purple.
- 5L X-Small Purple.

\*\*\*\*\*

To be continued

For and on behalf of :  
 Intertek Testing Services HK Ltd.

Angel Y.F. Cheung  
 Vice President





Hong Kong Government Recognized Service Supplier  
Approved Laboratory of The Woolmark Company

Members of :

American National Standards Institute  
American Society for Testing and Materials  
British Standards Institute

Hong Kong Association for Testing, Inspection and Certification Limited  
Hong Kong Toys Council

**Test Report**

Number: HKGH01488639

**2. 0,37L Micro Tub Red.**

Raw Material : Alcudia 1970M.

Supplier: Repsol.

Master Name: Rojo EU30724

Master Supplier: Colorsol Quimica SL.

Other References With Same Raw Material And Master:

- 35L Shallow Red.
- 75L Extra Large Red.
- 38L Large Red.
- 26L Medium Red
- 15L Small Shallow Red.
- 14L Small Red.
- 5L X-Small Red.

**3. 0,37L Micro Tub Sky Blue.**

Raw Material : Alcudia 1970M.

Supplier: Repsol.

Master Name: A-2453 Blue

Master Supplier: SP Berner Plastic Group SL.

Other References With Same Raw Material And Master:

- 35L Shallow Sky Blue.
- 75L Extra Large Sky Blue.
- 38L Large Sky Blue.
- 26L Medium Sky Blue.
- 15L Small Shallow Sky Blue.
- 14L Small Sky Blue.
- 5L X-Small Sky Blue.

\*\*\*\*\*

To be continued

For and on behalf of :  
Intertek Testing Services HK Ltd.

Angel Y.F. Cheung  
Vice President





Hong Kong Government Recognized Service Supplier  
 Approved Laboratory of The Woolmark Company  
 Members of :  
 American National Standards Institute  
 American Society for Testing and Materials  
 British Standards Institute

Hong Kong Association for Testing, Inspection and Certification Limited  
 Hong Kong Toys Council

**Test Report**

Number: HKGH01488639

**4. 0,37L Micro Tub Yellow**

- Raw Material : Alcudia 1970m
- Supplier: Repsol
- Master Name: Amarillo Pistacho Ep10861
- Master Supplier: Colorsol Quimica SI
- Other Referemces With Same Raw Material And Master:
  - 35L Shallow Yellow.
  - 75L Extra Large Yellow.
  - 38L Large Yellow.
  - 26L Medium Yellow.
  - 15L Small Shallow Yellow.
  - 14L Small Yellow.
  - 5K X -Small Yellow.
  - 14L Small Gorilla Yellow.
  - 15L Small Shallow Gorilla Yellow.
  - 39L Large Gorilla Yellow.
  - 26L Medium Gorilla Yellow.
  - 75L Extra Large Gorilla Yellow.
  - 35L Shallow Gorilla Yellow.

**5. 0,37L Micro Tub Orange.**

- Raw Material : Alcudia 1970M.
- Supplier: Repsol.
- Master Name: MB PE Naranja 2|084|1
- Master Supplier: Puromaster SL.
- Other References With Same Raw Material And Master:
  - 35L Shallow Orange.
  - 75L Extra Large Orange.
  - 38L Large Orange.
  - 26L Medium Orange.
  - 15L Small Shallow Orange.
  - 14L Small Orange.
  - 5L X - Small Orange.

\*\*\*\*\*

To be continued

For and on behalf of :  
 Intertek Testing Services HK Ltd.

Angel Y.F. Cheung  
 Vice President



Hong Kong Government Recognized Service Supplier  
Approved Laboratory of The Woolmark Company

Members of :

American National Standards Institute  
American Society for Testing and Materials  
British Standards Institute

Hong Kong Association for Testing, Inspection and Certification Limited  
Hong Kong Toys Council

**Test Report**

Number: HKGH01488639

**6. 0,37L Micro Tub Pink.**

Raw Material : Alcudia 1970M.

Supplier: Repsol

Master Name: RO-2392 Pink.

Master Supplier: SP Berner Plastic Group SL.

Other References With Same Raw Material And Master:

- 35L Shallow Pink.
- 75L Extra Large Pink.
- 38L Large Pink.
- 26L Medium Pink.
- 15L Small Shallow Pink.
- 14L Small Pink.
- 5L X-Small Pink.

**7. 0,37L Micro Tub Pistachio**

Raw Material : Alcudia 1970M.

Supplier: Repsol.

Master Name: V-2452 Green

Master Supplier: SP Berner Plastic Group SL.

Other References With Same Raw Material And Master:

- 35L Shallow Pistachio.
- 75L Extra Large Pistachio.
- 38L Large Pistachio.
- 26L Medium Pistachio.
- 15L Small Shallow Pistachio.
- 14L Small Pistachio.
- 5L X-Small Pistachio.

\*\*\*\*\*

To be continued

For and on behalf of :  
Intertek Testing Services HK Ltd.

Angel Y.F. Cheung  
Vice President





Hong Kong Government Recognized Service Supplier  
Approved Laboratory of The Woolmark Company

Members of :

American National Standards Institute  
American Society for Testing and Materials  
British Standards Institute

Hong Kong Association for Testing, Inspection and Certification Limited  
Hong Kong Toys Council

**Test Report**

Number: HKGH01488639

**8. 0,37L Micro Tub Green**

Raw Material : Alcudia 1970M.  
Supplier: Repsol.  
Master Name: Verde EP60723  
Master Supplier: Colorsol Quimica SL.  
Other References With Same Raw Material And Master:  
- 35L Shallow Green.  
- 75L Extra Large Green.  
- 38L Large Green.  
- 26L Medium Green.  
- 15L Small Shallow Green.  
- 14L Small Green.  
- 5L X-Small Green.

**9. 0,37L Micro Tub Blue**

Raw Material : Alcudia 1970M.  
Supplier: Repsol  
Master Name: MB PE Azul 4|112|1- 2129.  
Master Supplier: Puromaster SL.  
Other References With Same Raw Material And Master:  
- 35L Shallow Blue.  
- 75L Extra Large Blue.  
- 38L Large Blue.  
- 26L Medium Blue.  
- 15L Small Shallow Blue.  
- 14L Small Blue.  
- 5L X-Small Blue.

\*\*\*\*\*

Tests conducted:

As requested by the applicant, refer to attached page(s) for details.

\*\*\*\*\*

To be continued

For and on behalf of :  
Intertek Testing Services HK Ltd.

Angel Y.F. Cheung  
Vice President





Hong Kong Government Recognized Service Supplier  
 Approved Laboratory of The Woolmark Company  
 Members of :  
 American National Standards Institute  
 American Society for Testing and Materials  
 British Standards Institute

Hong Kong Association for Testing, Inspection and Certification Limited  
 Hong Kong Toys Council

**Test Report**

Number: HKGH01488639

**Conclusion:**

<u>Tested samples</u> Tested components of submitted sample	<u>Standard</u>	<u>Result</u>
	European Commission Regulation No. 10/2011 Annex II and Regulation No. 1935/2004 on Specific Migration of Heavy Metal Content	Pass (see remark #)
	U.S. F.D.A. Regulation 21 CFR Part 177.1520 Clauses (c)(2.1) on Polyethylene	Pass
	European Commission Regulation No. 10/2011 Annex II and Regulation No. 1935/2004 on Specific Migration of Primary Aromatic Amines	Pass (see remark #)
	Italian Ministerial Decree 21/3/1973 Title II, Heading I - Articles Made of Plastic on Dye Migration	Pass (see remark #)
	European Commission Regulation No. 10/2011 and Regulation No. 1935/2004 on Overall Migration	Pass (see remark #)

\*\*\*\*\*

**Labelling recommendation :**

Food type : All aqueous and acidic foods and alcoholic foods and fatty foods and milk products.

**Use Condition :**

Temperature between 70°C and 100°C for less than 15 minutes and room temperature or below storage for unspecified period.

\*\*\*\*\*

For and on behalf of :  
 Intertek Testing Services HK Ltd.

Angel Y.F. Cheung  
 Vice President



**Test Report**

Number: HKGH01488639

Tests Conducted

1 Overall Migration Test

As per Commission Regulation (EU) No. 10/2011, selection of test condition & food simulants by 82/711/EEC, 85/572/EEC and its amendment.

I. Condition of contact in actual use :

Temperature between 70°C and 100°C for less than 15 minutes and room temperature or below storage for unspecified period.

II. Test Results :

<u>Food Simulant</u>	<u>Result (mg/dm<sup>2</sup>)</u>					<u>Limit (mg/dm<sup>2</sup>)</u>
	<u>(1)</u>	<u>(2)</u>	<u>(3)</u>	<u>(4)</u>	<u>(5)</u>	
Distilled water	<1	<1	<1	<1	1	10
3% (w/v) acetic acid	<1	4	<1	1	2	10
50% (v/v) ethanol	<1	<1	<1	<1	1	10
Fatty food simulant	8	5	7	8	6	10

  

<u>Food Simulant</u>	<u>Result (mg/dm<sup>2</sup>)</u>				<u>Limit (mg/dm<sup>2</sup>)</u>
	<u>(6)</u>	<u>(7)</u>	<u>(8)</u>	<u>(9)</u>	
Distilled water	<1	1	<1	<1	10
3% (w/v) acetic acid	2	2	1	<1	10
50% (v/v) ethanol	<1	<1	2	<1	10
Fatty food simulant	5	4	5	4	10

Tested components : See component list in the last section of this report.

Remark : # As per client's request, the above food simulants were used for migration test and use condition was provide by the client.

Date sample received : May 14, 2013

Testing period : May 14, 2013 to Jun 07, 2013

\*\*\*\*\*





**Test Report**

Number: HKGH01488639

Tests Conducted

2 Specific Migration of Heavy Metal Test

As per Commission Regulation (EU) No. 10/2011, selection of test condition & food simulants by 82/711/EEC, 85/572/EEC and its amendment and EN13130-1.

I. Condition of contact in actual use :

Temperature between 70°C and 100°C for less than 15 minutes and room temperature or below storage for unspecified period.

II. Test results :

<u>Food Simulant</u>	<u>Element</u>	<u>Result (mg/kg)</u>					<u>Limit (mg/kg)</u>
		<u>(1)</u>	<u>(2)</u>	<u>(3)</u>	<u>(4)</u>	<u>(5)</u>	
3% (w/v) acetic acid	Barium	0.2	<0.1	<0.1	<0.1	<0.1	1 (max.)
	Cobalt	<0.03	<0.03	<0.03	<0.03	<0.03	0.05 (max.)
	Copper	<1	<1	<1	<1	<1	5 (max.)
	Iron	<5	<5	<5	<5	<5	48 (max.)
	Lithium	<0.1	<0.1	<0.1	<0.1	<0.1	0.6 (max.)
	Manganese	<0.1	<0.1	<0.1	<0.1	<0.1	0.6 (max.)
	Zinc	<5	<5	<5	<5	<5	25 (max.)

<u>Food Simulant</u>	<u>Element</u>	<u>Result (mg/kg)</u>				<u>Limit (mg/kg)</u>
		<u>(6)</u>	<u>(7)</u>	<u>(8)</u>	<u>(9)</u>	
3% (w/v) acetic acid	Barium	<0.1	<0.1	<0.1	<0.1	1 (max.)
	Cobalt	<0.03	<0.03	<0.03	<0.03	0.05 (max.)
	Copper	<1	<1	<1	<1	5 (max.)
	Iron	<5	<5	<5	<5	48 (max.)
	Lithium	<0.1	<0.1	<0.1	<0.1	0.6 (max.)
	Manganese	<0.1	<0.1	<0.1	<0.1	0.6 (max.)
	Zinc	<5	<5	<5	<5	25 (max.)

Remark : # = use condition was provide by the client.

Tested components : See component list in the last section of this report.

Date sample received : May 14, 2013

Testing period : May 14, 2013 to Jun 07, 2013

\*\*\*\*\*



**Test Report**

Number: HKGH01488639

Tests Conducted

3 Test for F.D.A. Regulation on Polyethylene

As per the U.S. Food and Drug Administration 21 CFR Part 177.1520 Clauses (c)(2.1) and (d) with modification on density.

<u>Test item</u>	<u>(1)</u>	<u>Result</u> <u>(2)</u>	<u>(3)</u>	<u>Limit</u>
Density (By sink-float method)	Complied	Complied	Complied	0.85 - 1.00
Maximum extractable fraction in n-hexane, % (w/w)	3.6	1.1	1.9	5.5
Maximum extractable fraction in xylene, % (w/w)	3.0	<1.0	3.2	11.3

<u>Test item</u>	<u>(4)</u>	<u>Result</u> <u>(5)</u>	<u>(6)</u>	<u>Limit</u>
Density (By sink-float method)	Complied	Complied	Complied	0.85 - 1.00
Maximum extractable fraction in n-hexane, % (w/w)	3.4	<1.0	<1.0	5.5
Maximum extractable fraction in xylene, % (w/w)	3.7	3.0	2.0	11.3

<u>Test item</u>	<u>(7)</u>	<u>Result</u> <u>(8)</u>	<u>(9)</u>	<u>Limit</u>
Density (By sink-float method)	Complied	Complied	Complied	0.85 - 1.00
Maximum extractable fraction in n-hexane, % (w/w)	<1.0	<1.0	<1.0	5.5
Maximum extractable fraction in xylene, % (w/w)	1.3	1.1	2.7	11.3

Tested components : See component list in the last section of this report.

Date sample received : May 14, 2013

Testing period : May 14, 2013 to Jun 07, 2013

\*\*\*\*\*



**Test Report**

Number: HKGH01488639

Tests Conducted

4 Specific Migration of Primary Aromatic Amines

As per Commission Regulation (EU) No. 10/2011, selection of test condition & food simulants by 82/711/EEC, 85/572/EEC and its amendment and EN13130-1.

I. Condition of contact in actual use :

Temperature between 70°C and 100°C for less than 15 minutes and room temperature or below storage for unspecified period.

II. Test result :

<u>Food Simulant</u>	(1)	<u>Result</u>		<u>Limit</u>
3% (w/v) Acetic acid	Not detected	(2) Not detected	(3) Not detected	Not detected
<u>Food Simulant</u>	(4)	<u>Result</u>		<u>Limit</u>
3% (w/v) Acetic acid	Not detected	(5) Not detected	(6) Not detected	Not detected
<u>Food Simulant</u>	(7)	<u>Result</u>		<u>Limit</u>
3% (w/v) Acetic acid	Not detected	(8) Not detected	(9) Not detected	Not detected

Remark : Detection limit = 0.01 mg/kg  
# = Use condition was provided by the client.

Tested components : See component list in the last section of this report.

Date sample received : May 14, 2013

Testing period : May 14, 2013 to Jun 07, 2013

\*\*\*\*\*



**Test Report**

Number: HKGH01488639

Tests Conducted

5 Detection of Dye Migration

As per Italian Ministerial Decree 21/3/1973, Title II Heading I – Articles Made of Plastic, migration test on the submitted sample was carried out at specified time and temperature and the test solutions were then measured for transmittance between 400nm and 750nm using UV/VIS spectrophotometer.

- I. Food Simulants :  
 Distilled water.  
 3% (w/v) Acetic acid.  
 50% (v/v) Ethanol.  
 Sunflower oil.

II. Test Condition :

Food Simulant	Temperature	Time
Distilled water	40°C	10 days
3% (w/v) Acetic acid	40°C	10 days
50% (v/v) Ethanol	40°C	10 days
Sunflower oil	40°C	10 days

III. Dye Migration :

Food Simulant	Result (Transmittance, %)					Requirement (Transmittance, %)
	(1)	(2)	(3)	(4)	(5)	
Distilled water	>95	>95	>95	>95	>95	≥ 95
3% (w/v) Acetic acid	>95	>95	>95	>95	>95	
50% (v/v) Ethanol	>95	>95	>95	>95	>95	
Sunflower oil	>95	>95	>95	>95	>95	

III. Dye Migration :

Food Simulant	Result (Transmittance, %)				Requirement (Transmittance, %)
	(6)	(7)	(8)	(9)	
Distilled water	>95	>95	>95	>95	≥ 95
3% (w/v) Acetic acid	>95	>95	>95	>95	
50% (v/v) Ethanol	>95	>95	>95	>95	
Sunflower oil	>95	>95	>95	>95	

Remark : # = As per client's request, the above food simulants were used for migration test and use condition was provided by the client.

Tested Components : See component list in the last section of this report.

Date sample received : May 14, 2013

Testing period : May 14, 2013 to Jun 07, 2013

\*\*\*\*\*





Hong Kong Government Recognized Service Supplier  
Approved Laboratory of The Woolmark Company

Members of :

American National Standards Institute  
American Society for Testing and Materials  
British Standards Institute

Hong Kong Association for Testing, Inspection and Certification Limited  
Hong Kong Toys Council

**Test Report**

Number: HKGH01488639

Tests Conducted

Component List :

- (1) Purple plastic container.
- (2) Red plastic container.
- (3) Light blue plastic container.
- (4) Yellow plastic container.
- (5) Orange plastic container.
- (6) Pink plastic container.
- (7) Light green plastic container.
- (8) Green plastic container.
- (9) Blue plastic container.

\*\*\*\*\*

End of report

*This report is made solely on the basis of your instructions and/or information and materials supplied by you. It is not intended to be a recommendation for any particular course of action. Intertek does not accept a duty of care or any other responsibility to any person other than the Client in respect of this report and only accepts liability to the Client insofar as is expressly contained in the terms and conditions governing Intertek's provision of services to you. Intertek makes no warranties or representations either express or implied with respect to this report save as provided for in those terms and conditions. We have aimed to conduct the Review on a diligent and careful basis and we do not accept any liability to you for any loss arising out of or in connection with this report, in contract, tort, by statute or otherwise, except in the event of our gross negligence or wilful misconduct.*

