TEST REPORT

Job Number :	1504F007	**Date :**	18-05-15
Sample Description :	Plastic Film Sample	**Page**	1 of 4
Sample Source :	Universal Plastic & Metal Manufacturing Limited Suite 1009, 10/F, Landmark North, 39 Lung Sum Avenue, Sheung Shui, HK		
Sampling Done by :	The above company		
Receipt Date :	23-04-15		
Test Performing Date :	23-04-15 to 18-05-15		
Nature of Test :	Accelerated Weathering and Tensile Test		

Test Results :

I. Sample Description:

A piece of sample was submitted by the client and sample information supplied by the client is shown as follows:

Sample ID	Sample Description
1	Customer Name: Maxim's Caterers Limited Maxims Product Code: 0902105067 Manufacturer Name: Universal Plastic and Metal Manufacturing Ltd UPM Product Code: CBBH-00158 Product Name: 美心排包袋 Material: LDPE (transparent) Thickness: 0.035mm Size: 230mm x 310mm + 35mm (lip) + 45mm (bottom gusset)

II. Objective:

1. To evaluate the degradation performance of the submitted sample.
2. To perform the migration test on the submitted samples.

III. Methods:

1. Degradation test: ASTM D5208-09 & ASTM D3826-98(Reapproved 08)
2. Migration test: FDA 21 CFR 177.1520

Please see reverse for Testing Conditions.

For Enquiry Tel 查詢電話：27885538 / 27885541
MTD, 5/F HKPC Building, 78 Tat Chee Avenue, Kowloon, Hong Kong.
香港九龍達之路78號生產力大樓5樓材料及製造科技部。 Tel: 2788 5533, Fax: 2788 5522

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IV. Equipments and Conditions:

1. UV-Degradation Test
   Equipment: QUV Accelerated Weathering Tester, Q-Panel Lab Products
   Light source: UVA-340
   Exposure duration: 14 days
   Weathering Cycle: Continuous UV with uninsulated black panel temperature controlled at 50℃ (Requested by the client)

2. Tensile Test
   Equipment: LLOYD LR 10K plus (no extensometer)
   Grip separation: 50mm
   Crosshead speed: 5mm/min
   Grips used: Silicon grips

V. Sample Preparation:

Specimens are cut by JDC sample cutter.
Specimen dimension: 130mm x 25.4mm x 0.030mm

Please see reverse for Testing Conditions.

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Test Results :

VI. Results:

Sample 1

UV degradation of Sample 1

Day 0

Trial	Percentage Elongation at Break
1	520
2	330
3	520
4	540
5	410
Average	460

Day 14

Trial	Percentage Elongation at Break
1	0.00*
2	0.00*
3	0.00*
4	0.00*
5	0.00*
Average	0.00

*Test specimens broke before they were taken for tensile test.

Please see reverse for Testing Conditions.

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Test Results :

Migration test

Sample ID	Test Items	Results (%, w/w)	Pass Criteria	Remarks
1	*n*-Hexane extraction test	2.0%	< 5.5 % at 50℃	Pass
	Xylene extraction test	1.9%	< 11.3 % at 25℃	Pass

VII. Conclusion:

Sample 1

UV degradation

From the result of the UV degradation test by accelerated weathering, Sample 1 conforms to the degradation requirement of ASTM D3826 (degraded to 5% elongation or less at break) after exposure under UV-A for 14 days.

Migration test

From the result of the migration test, Sample 1 compile with food grade PE material according to FDA 21 CFR 177.1520.

Prepared by:

Mr. TAM Yui-kei
Engineer
Materials & Manufacturing Technology Division

Approved signature:

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B.Sc., Ph.D., C.Chem, MRSC
Principal Consultant,
Materials & Manufacturing Technology Division

-End of Report-

Report No. 82469

Please see reverse for Testing Conditions.

Annex of Job No. : 1504F007

Day 0

Trial	Percentage Elongation at Break
1	520
2	330
3	520
4	540
5	410
Average	460

Day 3

Trial	Percentage Elongation at Break
1	9.1
2	29
3	11
4	24
5	12
Average	17

Day 5

Trial	Percentage Elongation at Break
1	9.8
2	7.7
3	3.7
4	7.9
5	3.5
Average	6.5

Annex of Job No. : 1504F007

Day 10

Trial	Percentage Elongation at Break
1	0.00*
2	2.0
3	0.96
4	1.2
5	3.1
Average	1.5

Day 14

Trial	Percentage Elongation at Break
1	0.00*
2	0.00*
3	0.00*
4	0.00*
5	0.00*
Average	0.00*

*Test specimens broke before they were taken for tensile test.

Graphical Presentation of Tensile Property of Sample 1 under UV-A