

Produkte
Products

Prüfbericht - Nr.: 19004912 001 <i>Test Report No.:</i>		Seite 1 von 5 <i>Page 1 of 5</i>	
Auftraggeber: <i>Client:</i>		Wonderful Plastic limited Partnership 259 Moo 12 Seelong-Bangpleenoi Rd., T.Klonghan, A.Bangbor, Samutprakarn	
Gegenstand der Prüfung: Refer to next pages <i>Test item:</i>			
Bezeichnung: <i>Identification:</i>		Serien-Nr.: <i>Serial No.:</i>	
POLY HDPE BAG		N/A	
Wareneingangs-Nr.: <i>Receipt No.:</i>		Eingangsdatum: <i>Date of receipt:</i>	
1203010708-1		7 November 2011	
Prüfart: <i>Testing location:</i>			
TÜV Rheinland Hong Kong Co., Ltd. 9-10/F, Emperor International Square, 7 Wang Tai Road, Kowloon Bay, Hong Kong			
Prüfgrundlage: <i>Test specification:</i>			
Restriction of the Use of Hazardous Substances Directive (RoHS), 2002/95/EC, Amended Directive updated to 2005/618/EC			
Prüfergebnis: <i>Test Result:</i>			
Der Prüfgegenstand entspricht oben genannter Prüfgrundlage(n). <i>The test item passed the test specification(s).</i>			
Prüflaboratorium: <i>Testing Laboratory:</i>			
TÜV Rheinland Thailand Ltd.			
kontrolliert/ reviewed by:			
			
10 November 2011 Rutchuporn Moungsom / Assistant Manager			
Datum <i>Date</i>		Name/Stellung <i>Name/Position</i>	
10 November 2011		Rutchuporn Moungsom / Assistant Manager	
Sonstiges/ Other Aspects:			
Other information: Test period: 7 – 10 November 2011 Delivery Condition: Apparent good			
Abkürzungen:		Abbreviations:	
P(ass) = entspricht Prüfgrundlage F(ail) = entspricht nicht Prüfgrundlage N/A = nicht anwendbar N/T = nicht getestet		P(ass) = passed F(ail) = failed N/A = not applicable N/T = not tested	
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.</i>			

Prüfbericht - Nr.: 19004912 001

Test Report No.:

Seite 2 von 5

Page 2 of 5

Material list

Material No.	Material	Color	Description/ Location
M001	Plastic	Clear	Size 1.8x9x0.23"
M002	Plastic	Clear	Size 6x12x0.20"
M003	Plastic	Clear	Size 9x12x0.23"

Test method: Total Cadmium, Lead, Mercury
Chromium VI
PBBs, PBDEs

- Ref. to IEC 62321 Ed.,1, 2008
- Ref. to IEC 62321 Ed.,1, 2008
- Ref. to IEC 62321 Ed.,1, 2008

Total Cadmium, Lead, Mercury, Hexavalent Chromium, PBBs, PBDEs Content

Analyte (s):	Unit	RL	Result	Maximum Permissible Limit
			M001/M002 /M003	
Lead (Pb)	mg/kg	2	n.d.	1000
Cadmium (Cd)	mg/kg	2	n.d.	100
Mercury (Hg)	mg/kg	2	n.d.	1000
Hexavalent Chromium (Cr VI) by Alkaline Digestion/ Colorimetric Method	mg/kg	2	n.d.	1000
Sum of PBBs	mg/kg	-	n.d.	1000
Bromobiphenyl	mg/kg	5	n.d.	--
Dibromobiphenyl	mg/kg	5	n.d.	--
Tribromobiphenyl	mg/kg	5	n.d.	--
Tetrabromobiphenyl	mg/kg	5	n.d.	--
Pentabromobiphenyl	mg/kg	5	n.d.	--
Hexabromobiphenyl	mg/kg	5	n.d.	--
Heptabromobiphenyl	mg/kg	5	n.d.	--
Octabromobiphenyl	mg/kg	5	n.d.	--
Nonabromobiphenyl	mg/kg	5	n.d.	--
Decabromobiphenyl	mg/kg	5	n.d.	--
Sum of PBDEs	mg/kg	-	n.d.	1000
Bromodiphenylether	mg/kg	5	n.d.	--
Dibromodiphenyl ether	mg/kg	5	n.d.	--
Tribromodiphenyl ether	mg/kg	5	n.d.	--
Tetrabromodiphenyl ether	mg/kg	5	n.d.	--
Pentabromodiphenyl ether	mg/kg	5	n.d.	--
Hexabromodiphenyl ether	mg/kg	5	n.d.	--
Heptabromodiphenyl ether	mg/kg	5	n.d.	--
Octabromodiphenyl ether	mg/kg	5	n.d.	--
Nonabromodiphenyl ether	mg/kg	5	n.d.	--
Decabromodiphenyl ether	mg/kg	5	n.d.	--

Abbreviation: n.d. denotes Not Detected (<RL)
RL denotes Reporting Limit
mg/kg denotes Milligram per kilogram
PBBs denotes Total Polybrominated Biphenyl
PBDEs denotes Total Polybrominated Diphenyl Ethers
denotes Not regulated

☐ TÜV Rheinland Thailand Ltd.
18/F, Tararom Business Tower
2445/36-38 New Petchburi Road
Bangkapi, Huay Kwang
Bangkok 10320
Tel +66 (0) 2318-4862
Fax +66 (0) 2318-4864, +66 (0) 2318-6084
Email info@tha.tuv.com
Web www.tuv.co.th

☐ TÜV Rheinland Thailand Ltd.
Global Technology Assessment Center Bangkok
Ladkrabang Industrial Estate
123/1, Floor 1-2, Soi Chalongsung 31, Lamplatew
Sub-district, Ladkrabang District, Bangkok 10520
Tel +66 (0) 2326-1333
Fax +66 (0) 2326-1334-5
Email info@tha.tuv.com
Web www.tuv.co.th

☐ TÜV Rheinland Thailand Ltd.
Hatyai Branch Office
7,9,11,13,15 3/F, Chaiyong Building, Room 3 C
Juti-Uthit 1 Road
Hatyai, Songkhla 90110
Tel +66 (0) 74 247550-2
Fax +66 (0) 74 247553
Email info@tha.tuv.com
Web www.tuv.co.th

Prüfbericht - Nr.: 19004912 001*Test Report No.:*

Seite 3 von 5

Page 3 of 5

The test item was done at TUV Rheinland Hong Kong Ltd. Testing Laboratory accredited by DAP according to DIN EN ISO/IEC 17025. The accreditation is valid for the test methods stated in the certificate.

Note:

(*1) The exemption of DecaBDE in polymeric application according to 2005/17/EC was overruled by the European Court of Justice by its decision of 01.04.2008. Subsequently DecaBDE will be included in the sum of PBDE after 01.07.2008

www.tuv.com

Prüfbericht - Nr.: 19004912 001
Test Report No.:

Seite 4 von 5
Page 4 of 5

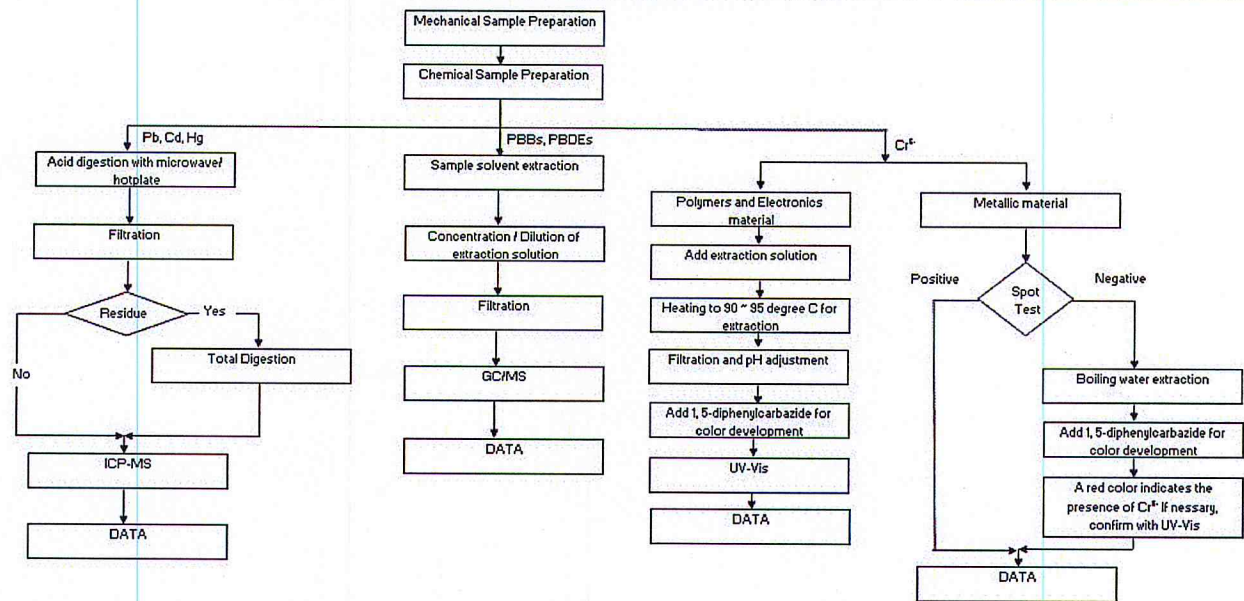
Sample photo:



☐ TÜV Rheinland Thailand Ltd.
18/F, Tararom Business Tower
2445/36-38 New Petchburi Road
Bangkapi, Huay Kwang
Bangkok 10320
Tel +66 (0) 2318-4862
Fax +66 (0) 2318-4864, +66 (0) 2318-6084
Email info@tha.tuv.com
Web www.tuv.co.th

☐ TÜV Rheinland Thailand Ltd.
Global Technology Assessment Center Bangkok
Ladkrabang Industrial Estate
123/1, Floor 1-2, Soi Chalangkung 31, Lamplatew
Sub-district, Ladkrabang District, Bangkok 10520
Tel +66 (0) 2326-1333
Fax +66 (0) 2326-1334-5
Email info@tha.tuv.com
Web www.tuv.co.th

☐ TÜV Rheinland Thailand Ltd.
Hatyai Branch Office
7,9,11,13,15 3/F, Chaiyong Building, Room 3 C
Juti-Uthit 1 Road
Hatyai, Songkhla 90110
Tel +66 (0) 74 247550-2
Fax +66 (0) 74 247553
Email info@tha.tuv.com
Web www.tuv.co.th

Flow chart for RoHS : Pb/ Cd/ Hg/ Cr6+/ PBBs/ PBDEs Testing


1. The sample was totally dissolved by pre-conditioning method according to above flow chart (excluded Cr⁶⁺ and PBBs/ PBDEs test method)

- END -

Produkte
Products

Prüfbericht - Nr.: 19004913 001		Seite 1 von 3 Page 1 of 3	
<i>Test Report No.:</i>			
Auftraggeber: <i>Client:</i>	Wonderful Plastic limited Partnership 259 Moo 12 Seelong-Bangpleenoi Rd., T.Klonghan, A.Bangbor, Samutprakarn		
Gegenstand der Prüfung: <i>Test item:</i>	Refer to next pages		
Bezeichnung: <i>Identification:</i>	POLY HDPE BAG	Serien-Nr.: <i>Serial No.:</i>	N/A
Wareneingangs-Nr.: <i>Receipt No.:</i>	1203010708-2	Eingangsdatum: <i>Date of receipt:</i>	7 November 2011
Prüfort: <i>Testing location:</i>	TÜV Rheinland Hong Kong Co., Ltd. 9-10/F, Emperor International Square, 7 Wang Tai Road, Kowloon Bay, Hong Kong		
Prüfgrundlage: <i>Test specification:</i>	End-of-Life-Vehicles Directive, 2000/53/EC		
Prüfergebnis: <i>Test Result:</i>	Der Prüfgegenstand entspricht oben genannter Prüfgrundlage(n). <i>The test item passed the test specification(s).</i>		
Prüflaboratorium: <i>Testing Laboratory:</i>	TÜV Rheinland Thailand Ltd.		
kontrolliert/ reviewed by:			
 10 November 2011 Rutchuporn Mounsom / Assistant Manager Datum Name/Stellung Unterschrift <i>Date</i> <i>Name/Position</i> <i>Signature</i>			
Sonstiges/ Other Aspects:			
Other information:			
Test period: 7 – 10 November 2011			
Delivery Condition: Apparent good			
Abkürzungen:		Abbreviations:	
P(ass) = entspricht Prüfgrundlage		P(ass) = passed	
F(ail) = entspricht nicht Prüfgrundlage		F(ail) = failed	
N/A = nicht anwendbar		N/A = not applicable	
N/T = nicht getestet		N/T = not tested	
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.</i>			

Prüfbericht - Nr.: 19004913 001

Test Report No.:

Seite 2 von 3

Page 2 of 3

Material list

Material No.	Material	Color	Description/ Location
M001	Plastic	Clear	Size 1.8x9x0.23"
M002	Plastic	Clear	Size 6x12x0.20"
M003	Plastic	Clear	Size 9x12x0.23"

Total Cadmium, Lead, Mercury, Hexavalent Chromium Content

Test Method: Total Cadmium, Lead, Mercury – Ref. to US EPA 3052, acid digestion.
Analysis was performed by ICP- MS.

Hexavalent Chromium – Ref. to US EPA 3060A & 7196A. Analysis was performed by
UV-Vis Spectrophotometer.

Test Result:

Analyte (s):	Unit	MDL	Result	Maximum Permissible Limit
			M001/M002/M003	
Lead (Pb)	mg/kg	2	n.d.	1000
Cadmium (Cd)	mg/kg	2	n.d.	100
Mercury (Hg)	mg/kg	2	n.d.	1000
Hexavalent Chromium (Cr VI)	mg/kg	2	n.d.	1000

Abbreviation: n.d. denotes Not Detected (<MDL)
MDL denotes Method Detection Limit
ppm denotes Part per million
mg/kg denotes Milligram per kilogram

Note:

The test item was done at TÜV Rheinland Hong Kong Ltd. Testing Laboratory accredited by DAP according to DIN EN ISO/IEC 17025. The accreditation is valid for the test methods stated in the certificate.

☐ TÜV Rheinland Thailand Ltd.
18/F, Tararom Business Tower
2445/36-38 New Petchburi Road
Bangkapi, Huay Kwang
Bangkok 10320
Tel +66 (0) 2318-4862
Fax +66 (0) 2318-4864, +66 (0) 2318-6084
Email info@tha.tuv.com
Web www.tuv.co.th

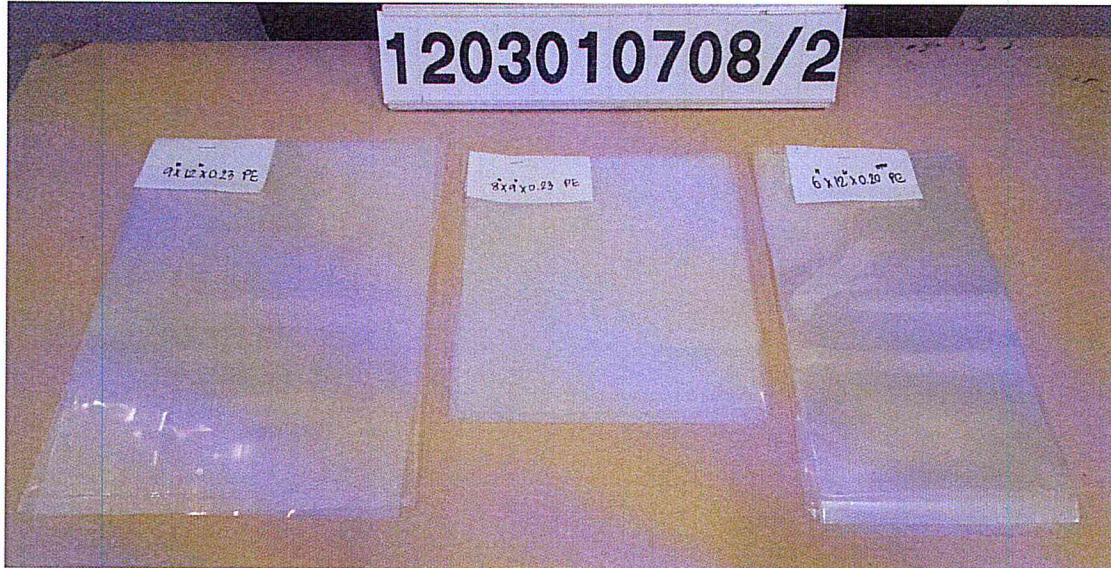
☐ TÜV Rheinland Thailand Ltd.
Global Technology Assessment Center Bangkok
Ladkrabang Industrial Estate
123/1, Floor 1-2, Soi Chalongsung 31, Lamplatew
Sub-district, Ladkrabang District, Bangkok 10520
Tel +66 (0) 2326-1333
Fax +66 (0) 2326-1334-5
Email info@tha.tuv.com
Web www.tuv.co.th

☐ TÜV Rheinland Thailand Ltd.
Hatyai Branch Office
7,9,11,13,15 3/F, Chaiyong Building, Room 3 C
Juti-Uthit 1 Road
Hatyai, Songkhla 90110
Tel +66 (0) 74 247550-2
Fax +66 (0) 74 247553
Email info@tha.tuv.com
Web www.tuv.co.th

Prüfbericht - Nr.: 19004913 001
Test Report No.:

Seite 3 von 3
Page 3 of 3

Sample photo:



- END -