



Prüfbericht - Nr.: 113137964		Seite 1 von 7
<i>Test Report No.:</i>		<i>Page 1 of 7</i>
Auftraggeber: <i>Client:</i>	Guay Guay Trading Co., Ltd. 11F-3, No. 27, Lane 169, Kangning St., Shijr City, Taipei County, Taiwan, R.O.C.	
Gegenstand der Prüfung: <i>Test Item:</i>	1 plastic, grey	
Bezeichnung: <i>Identification:</i>	Bio 0.2g	
Anlieferungszustand: <i>Delivery condition:</i>	apparent good	Eingangsdatum: <i>Date of Receipt:</i> 16.09.2010
Prüfört: <i>Testing location:</i>	Nankang Branch, Taipei	
Prüfgrundlage: <i>Test specification:</i>	<p>According to customer request:</p> <p>With reference to Corrigendum to Regulation (EC) no.1907/2006, concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) Screening of 38 Substances of Very High Concern (SVHC) based on the Candidate List published on 28.10.2008, 13.01.2010, 30.03.2010 and 18.06.2010 by European Chemicals Agency (ECHA) ;</p> <p>With reference to Regulation (EC) No 1907/2006 (REACH) Annex XVII for articles last amended by Regulation (EC) No 276/2010: Cadmium, Flame Retardants (PentaBDE/OctaBDE), Phthalates, Benzene ;</p> <p>Lead according to the US Federal Consumer Product Safety Improvement Act of 2008 ; and Polycyclic Aromatic Hydrocarbons (PAHs), EN 71 part 3: 1994-12 +A1/09.00+AC/07.02</p>	
Prüfergebnis: <i>Test result:</i>	The test results are the measurements, stated in the test report.	
geprüft: tested by:	kontrolliert: checked by:	
		
07.10.2010 Tammy Wang /Project Engineer	07.10.2010 Dr. Chi-Peng Chang /Senior Project Manager	
Datum <i>Date</i>	Name/Stellung <i>Name/Position</i>	Unterschrift <i>Signature</i>
Datum <i>Date</i>	Name/Stellung <i>Name/Position</i>	Unterschrift <i>Signature</i>
Sonstiges/ Other Aspects:		
Test period: 24.09.2010 – 07.10.2010		
Abkürzungen:	<i>ok / P = entspricht Prüfgrundlage</i>	Abbreviations: <i>ok / P = passed</i>
	<i>fail / F = entspricht nicht Prüfgrundlage</i>	<i>fail / F = failed</i>
	<i>n.a. / N = nicht anwendbar</i>	<i>n.a. / N = not applicable</i>
<p>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.</p> <p><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></p>		



Test Report No. : 113137964
Customer : Guay Guay Trading Co., Ltd.

07.10.2010

Test results

Screening of Substances of Very High Concern (SVHC):

- Test Method:
- 1) ICP-Screening: Test portion is digested with acid and assisted with microwave, the elements are analyzed by means of ICP-OES.
 - 2) GC-MS Screening: Test portion is extracted with organic solvent; the extraction solution is then analyzed by GC-MS.
 - 3) GC-ECD Screening: Test portion is extracted with organic solvent; the extraction solution is then analyzed by GC-ECD.

Sample Material Lab.-No.	Bio 0.2g plastic/grey TCL100916-19	Reporting limit		
Substance ⁽¹⁾	CAS No.	Unit	Results ⁽⁴⁾	
4,4'-Methyldianiline	101-77-9	mg/kg	n.d.	100
Benzylbutylphthalate (BBP)	85-68-7	mg/kg	n.d.	100
Di(2-ethylhexyl)phthalate (DEHP)	117-81-7	mg/kg	n.d.	100
Dibutylphthalate (DBP)	84-74-2	mg/kg	n.d.	100
Anthracene	120-12-7	mg/kg	n.d.	100
Hexabromocyclododecane (HBCDD)	25637-99-4	mg/kg	n.d.	100
5-Tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	mg/kg	n.d.	100
Short chain chlorinated paraffins, C ₁₀ -C ₁₃ (SCCP)	85535-84-8	mg/kg	n.d.	100
Bis(tributyltin)oxide (TBTO)	56-35-9	mg/kg	n.d.	100
Triethyl arsenate ⁽²⁾	15606-95-8	mg/kg	n.d.	100
Diarsenic pentoxide ⁽²⁾	1303-28-2	mg/kg	n.d.	100
Diarsenic trioxide ⁽²⁾	1327-53-3	mg/kg	n.d.	100
Lead hydrogen arsenate ⁽²⁾	7784-40-9	mg/kg	n.d.	100
Cobalt dichloride ⁽²⁾	7646-79-9	mg/kg	n.d.	100
Sodium dichromate, dihydrate ⁽³⁾	7789-12-0	mg/kg	n.d.	100

Remark:

- (1) The 15 Substances of Very High Concern (SVHC) of the Candidate List published by the European Chemicals Agency (ECHA) on 28.10.2008
- (2) The substances are tested in term of their respective elements (e.g. As, Pb, Co)
- (3) The substances are tested in term of hexavalent chromium, Cr (VI)
- (4) n.a. – test not applicable for the respective material type
n.d. – not detected
- (5) Reporting Limit – results below this value will be stated as n.d.



Test Report No. : 113137964
Customer : Guay Guay Trading Co., Ltd.

07.10.2010

- Test Method:
- 1) ICP-Screening: Test portion is digested with acid and assisted with microwave, the elements are analyzed by means of ICP-OES.
 - 2) GC-MS Screening: Test portion is extracted with organic solvent; the extraction solution is then analyzed by GC-MS.
 - 3) LC-MS Analysis: Test portion is extracted with solvent; the extraction solution is then analyzed by LC-MS.

Sample Material Lab.-No.	Bio 0.2g plastic/grey TCL100916-19		Reporting limit	
Substance ⁽¹⁾	CAS No.	Unit	Results ⁽⁴⁾	
2,4-Dinitrotoluene	121-14-2	mg/kg	n.d.	100
Anthracene oil ⁽³⁾	90640-80-5	mg/kg	n.d.	100
Anthracene oil, anthracene paste, distn. Lights ⁽³⁾	91995-17-4	mg/kg	n.d.	100
Anthracene oil, anthracene paste, anthracene fraction ⁽³⁾	91995-15-2	mg/kg	n.d.	100
Anthracene oil, anthracene-low ⁽³⁾	90640-82-7	mg/kg	n.d.	100
Anthracene oil, anthracene paste ⁽³⁾	90640-81-6	mg/kg	n.d.	100
Coal tar pitch, high temperature ⁽³⁾	65996-93-2	mg/kg	n.d.	100
Diisobutyl phthalate (DIBP)	84-69-5	mg/kg	n.d.	100
Tris(2-chloroethyl)phosphate (TCEP)	115-96-8	mg/kg	n.d.	100
Acrylamide	79-06-1	mg/kg	n.d.	100
Lead chromate ⁽²⁾	7758-97-6	mg/kg	n.d.	100
Lead chromate molybdate sulfate red (C.I. Pigment Red 104) ⁽²⁾	12656-85-8	mg/kg	n.d.	100
Lead sulfochromate yellow (C.I. Pigment Yellow 34) ⁽²⁾	1344-37-2	mg/kg	n.d.	100
Aluminosilicate, Refractory Ceramic Fibers	--	mg/kg	n.a.	--
Zirconia Aluminosilicate, Refractory Ceramic Fibers	--	mg/kg	n.a.	--

Remark:

- (1) The 15 Substances of Very High Concern (SVHC) of the Candidate List published by the European Chemicals Agency (ECHA) on 13.01.2010 and 30.03.2010
- (2) The substances are tested in term of their respective elements (e.g. Pb, Cr)
- (3) Determined and calculated as anthracene (CAS No. 120-12-7)
- (4) n.a. – test not applicable for the respective material type
n.d. – not detected
- (5) Reporting Limit – results below this value will be stated as n.d.



Test Report No. : 113137964
Customer : Guay Guay Trading Co., Ltd.

07.10.2010

- Test Method: 1) ICP-Screening: Test portion is digested with acid and assisted with microwave, the elements are analyzed by means of ICP-OES.
- 2) GC-MS Screening: Test portion is extracted with organic solvent; followed by P&T/GC-MS screening

Sample Material Lab.-No.		Bio 0.2g plastic/grey TCL100916-19		Reporting limit	
Substance ⁽¹⁾	CAS No.	Unit	Results ⁽⁴⁾		
Trichloroethylene	79-01-6	mg/kg	n.d.	100	
Boric acid ⁽²⁾	10043-35-3 / 11113-50-1	mg/kg	n.d.	100	
Disodium tetraborate, anhydrous ⁽²⁾	1330-43-4	mg/kg	n.d.	100	
Tetraboron disodium heptaoxide, hydrate ⁽²⁾ (CAS No.12267-73-1)	Disodium tetraborate, pentahydrate ⁽²⁾	12179-04-3	mg/kg	n.d.	100
	Disodium tetraborate, decahydrate ⁽²⁾	1303-96-4	mg/kg	n.d.	100
Sodium chromate ⁽³⁾	7775-11-3	mg/kg	n.d.	100	
Potassium chromate ⁽³⁾	7789-00-6	mg/kg	n.d.	100	
Ammonium dichromate ⁽³⁾	7789-09-5	mg/kg	n.d.	100	
Potassium dichromate ⁽³⁾	7778-50-9	mg/kg	n.d.	100	

Remark:

- (1) The 8 Substances of Very High Concern (SVHC) of the Candidate List published by the European Chemicals Agency (ECHA) on 18.06.2010.
- (2) The substances are tested in term of their respective elements, Boron.
- (3) The substances are tested in term of hexavalent chromium, Cr (VI).
- (4) n.a. – test not applicable for the respective material type
n.d. – not detected
- (5) Reporting Limit – results below this value will be stated as n.d.



Test Report No. : 113137964 07.10.2010
 Customer : Guay Guay Trading Co., Ltd.
 Test Method : Cadmium - according to DIN EN 1122 B or microwave digestion; ICP-OES
 Flame Retardants - solvent extraction; determination by GC/MS & LC-MS
 Phthalates - extraction by organic solvent; determination by GC-MS

Sample Material Lab.-No.		Bio 0.2g plastic/grey TCL100916-19
Cadmium (Cd)	mg/kg	<20

* max. permissible level of cadmium according to "Annex XVII to Regulation (EC) No 1907/2006 (REACH)" : 100 mg/kg

Sample Material Lab.-No.		Bio 0.2g plastic/grey TCL100916-19
Flame Retardants	Unit	Result
Penta-bromodiphenyl ether (PentaBDE) ¹⁾	mg/kg	<10
Octa-bromodiphenyl ether (OctaBDE) ¹⁾	mg/kg	<10

1) According to "Annex XVII to Regulation (EC) No 1907/2006 (REACH)", Articles shall not be placed on the market if they, or flame-retardant parts thereof, contain this substance in concentrations greater than 0.1 % by weight.

- Analysis of PBDE includes the following compounds (BZ#):
 Penta-bromodiphenyl ether: 99
 Octa-bromodiphenyl ether: 203

Sample Material Lab.-No.		Bio 0.2g plastic/grey TCL100916-19
Diethylhexylphthalate (DEHP) ¹⁾	%	<0.01
Dibutylphthalate (DBP) ¹⁾	%	<0.01
Benzylbutylphthalate (BBP) ¹⁾	%	<0.01
Di-n-octylphthalate (DNOP) ²⁾	%	<0.01
Diisononylphthalate (DINP) ²⁾	%	<0.01
Diisodecylphthalate (DIDP) ²⁾	%	<0.01

According to "Annex XVII to Regulation (EC) No 1907/2006 (REACH)": Phthalates

- ¹⁾ Shall not be used as substances or in mixtures, in concentrations greater than 0.1% by weight of the plasticized material, in toys and childcare articles.
- ²⁾ Shall not be used as substances or in mixtures, in concentrations greater than 0.1% by weight of the plasticized material, in toys and childcare articles which can be placed in the mouth by children.



Test Report No. : 113137964
 Customer : Guay Guay Trading Co., Ltd.
 Test Method : Benzene - semi-quantitative purge & trap screening
 PAH - ZEK 01.2-08: solvent extraction, determination by GC-MS

07.10.2010

Sample Material Lab.-No.		Bio 0.2g plastic/grey TCL100916-19
Benzene	mg/kg	<1

According to "Annex XVII to Regulation (EC) No 1907/2006 (REACH)": Benzene

- 1) Shall not be used in toys or parts of toys where concentrations in the free state is greater than 5 mg/kg of the weight of the toy or part of toy.
- 2) Shall not be placed on the market or used as a substance; as a constituent of other substances, or in mixtures, in concentrations equal to, or greater than 0.1% by weight.

Sample Material Lab.-No.	Bio 0.2g plastic/grey TCL100916-19		
Parameter	CAS#	Unit	Result
Acenaphthene	83-32-9	mg/kg	<0.1
Acenaphthylene	208-96-8	mg/kg	<0.1
Anthracene	120-12-7	mg/kg	<0.1
Benz[a]anthracene	56-55-3	mg/kg	<0.1
Benzo[b]fluoranthene	205-99-2	mg/kg	<0.1
Benzo[ghi]perylene	191-24-2	mg/kg	<0.1
Benzo[k]fluoranthene	207-08-9	mg/kg	<0.1
Chrysene	218-01-9	mg/kg	<0.1
Dibenz[ah]anthracene	53-70-3	mg/kg	<0.1
Fluoranthene	206-44-0	mg/kg	<0.1
Fluorene	86-73-7	mg/kg	<0.1
Indeno[1,2,3-cd]pyrene	193-39-5	mg/kg	<0.1
Naphthalene	91-20-3	mg/kg	<0.1
Phenanthrene	85-01-8	mg/kg	<0.1
Pyrene	129-00-0	mg/kg	<0.1
Benzo[a]pyrene (BaP)	50-32-8	mg/kg	<0.1
group PAH* (sum)	---	mg/kg	<0.1

Single components with concentrations below the limit of detection (LoD) are not regarded for calculation of the sum.



Test Report No. : 113137964
 Customer : Guay Guay Trading Co., Ltd.
 Test Method : Lead - CPSC-CH-E1002-08.1 (for non-metal)
 Heavy metals - EN 71 part 3: 1994-12 +A1/09.00+AC/07.02

07.10.2010

Sample Material Lab.-No.	Bio 0.2g plastic/grey TCL100916-19
Lead (Pb) mg/kg	<20

According to the US Federal Consumer Product Safety Improvement Act (CPSIA) of 2008 the limit on lead content in parts of children's products and lead in paint are regulated as follows:

Lead in substrate (any part of the product)	
Effective date	Limit
February 10, 2009	600 ppm (mg/kg)
August 14, 2009	300 ppm (mg/kg)
August 14, 2011	100 ppm (mg/kg)

Lead in paint	
Effective date	Limit
August 14, 2009	90 ppm (mg/kg)

Sample Material Lab.-No.	Bio 0.2g plastic/grey TCL100916-19	Required by EN 71 part 3
Antimony (Sb) mg/kg	<5	<60
Arsenic (As) mg/kg	<5	<25
Barium (Ba) mg/kg	46*	<1000
Cadmium (Cd) mg/kg	<5	<75
Chromium (Cr) mg/kg	<5	<60
Lead (Pb) mg/kg	<5	<90
Mercury (Hg) mg/kg	<5	<60
Selenium (Se) mg/kg	<5	<500

* result corrected as required by EN71-3

Test sample


--- End of Test-Report ---

