

No. CANEC1208504210

Date: 04 Jul 2012

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### JIEYANG SHUNCHENGFA MICROMOTOR CO., LTD

INDUSTRIAL PARK PENLIN VILLAGE RONGDONG RONGCHENG DISTRICT JIEYANG CITY GUANGDONG PROVINCE

CHINA

The following sample(s) was/were submitted and identified on behalf of the clients as : ferro-gum

SGS Job No. :	CP12-030731 - GZ
Date of Sample Received :	28 Jun 2012
Testing Period :	28 Jun 2012 - 03 Jul 2012
Test Requested :	Selected test(s) as requested by client.
Test Method :	Please refer to next page(s).
Test Results :	Please refer to next page(s).
Conclusion :	A:Based on the performed tests on submitted samples, the results of Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE) comply with the limits as set by RoHS Directive 2011/65/EU Annex II; recasting 2002/95/EC.

Signed for and on behalf of SGS-CSTC Ltd.

Kenny Wang Approved Signatory

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Test Results :

Test Part Description :

Specimen No.	SGS Sample ID	Description
1	CAN12-085042.012	Dk-grey sheet

#### Remarks :

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected ( < MDL )
- (4) "-" = Not Regulated

#### A:RoHS Directive 2011/65/EU

- Test Method : With reference to IEC 62321:2008
  - (1) Determination of Cadmium by ICP-OES.
  - (2) Determination of Lead by ICP-OES.
  - (3) Determination of Mercury by ICP-OES.
  - (4) Determination of Hexavalent Chromium by Colorimetric Method using UV-Vis.
  - (5) Determination of PBBs / PBDEs content by GC-MS.

<u>Test Item(s)</u>	<u>Limit</u>	<u>Unit</u>	MDL	<u>012</u>
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1,000	mg/kg	2	4
Mercury (Hg)	1,000	mg/kg	2	ND
Hexavalent Chromium (CrVI)	1,000	mg/kg	2	10
Sum of PBBs	1,000	mg/kg	-	ND
Monobromobiphenyl	-	mg/kg	5	ND
Dibromobiphenyl	-	mg/kg	5	ND
Tribromobiphenyl	-	mg/kg	5	ND
Tetrabromobiphenyl	-	mg/kg	5	ND
Pentabromobiphenyl	-	mg/kg	5	ND
Hexabromobiphenyl	-	mg/kg	5	ND
Heptabromobiphenyl	-	mg/kg	5	ND
Octabromobiphenyl	-	mg/kg	5	ND
Nonabromobiphenyl	-	mg/kg	5	ND
Decabromobiphenyl	-	mg/kg	5	ND
Sum of PBDEs	1,000	mg/kg	-	ND
Monobromodiphenyl ether	-	mg/kg	5	ND

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<u>Test Item(s)</u>	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>012</u>	
Dibromodiphenyl ether	-	mg/kg	5	ND	
Tribromodiphenyl ether	-	mg/kg	5	ND	
Tetrabromodiphenyl ether	-	mg/kg	5	ND	
Pentabromodiphenyl ether	-	mg/kg	5	ND	
Hexabromodiphenyl ether	-	mg/kg	5	ND	
Heptabromodiphenyl ether	-	mg/kg	5	ND	
Octabromodiphenyl ether	-	mg/kg	5	ND	
Nonabromodiphenyl ether	-	mg/kg	5	ND	
Decabromodiphenyl ether	-	mg/kg	5	ND	

Notes :

(1) The maximum permissible limit is quoted from the directive 2011/65/EU, Annex II

#### **B:Phthalate**

Test Method : With reference to EN14372: 2004. Analysis was performed by GC-MS.

Test Item(s)	<u>Unit</u>	MDL	<u>012</u>
Dibutyl Phthalate (DBP)	% (w/w)	0.003	ND
Benzylbutyl Phthalate (BBP)	% (w/w)	0.003	ND
Bis-(2-ethylhexyl) Phthalate (DEHP)	% (w/w)	0.003	0.070
Diisononyl Phthalate (DINP)	% (w/w)	0.010	ND
Di-n-octyl Phthalate (DNOP)	% (w/w)	0.003	ND
Diisodecyl Phthalate (DIDP)	% (w/w)	0.010	ND
Dimethyl Phthalate (DMP)	% (w/w)	0.003	ND
Diethyl Phthalate (DEP)	% (w/w)	0.003	ND
Diisobutyl Phthalate (DIBP)	% (w/w)	0.003	ND
Dinonyl Phthalate (DNP)	% (w/w)	0.003	ND
Diisooctyl Phthalate (DiOP)	% (w/w)	0.010	ND
Dipropyl Phthalate (DPrP)	% (w/w)	0.003	ND
Dicyclohexyl Phthalate (DCHP)	% (w/w)	0.003	ND
Dipentyl Phthalate (DPP)	% (w/w)	0.003	ND
Dibenzyl Phthalate (DBzP)	% (w/w)	0.003	ND
Diphenyl Phthalate (DPhP)	% (w/w)	0.003	ND
Di-n-hexyl Phthalate (DnHP)	% (w/w)	0.003	ND

#### Notes :

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(1)DBP,BBP,DEHP Reference information: Entry 51 of Regulation (EC) No 552/2009 amending Annex XVII of REACH Regulation (EC) No 1907/2006 (previously restricted under Directive 2005/84/EC): i) Shall not be used as substances or in mixtures, in concentrations greater than 0.1 % by weight of the plasticised material, in toys and childcare articles.

ii) Toys and childcare articles containing these phthalates in a concentration greater than 0.1 % by weight of the plasticised material shall not be placed on the market.

Please refer to Regulation (EC) No 552/2009 to get more detail information

DINP, DNOP, DIDP Reference information: Entry 52 of Regulation (EC) No 552/2009 amending Annex XVII of REACH Regulation (EC) No 1907/2006 (previously restricted under Directive 2005/84/EC).

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

ii) Such toys and childcare articles containing these phthalates in a concentration greater than 0.1 % by weight of the plasticised material shall not be placed on the market.

Please refer to Regulation (EC) No 552/2009 to get more detail information

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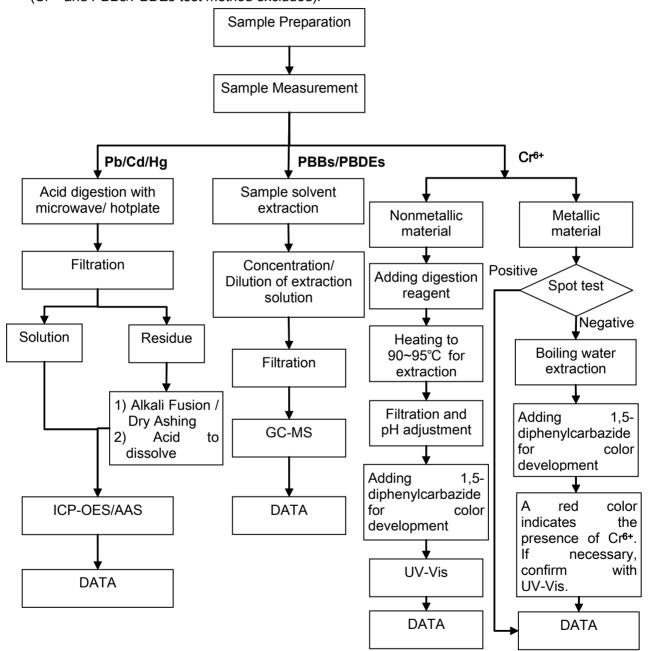
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## **ATTACHMENTS**

#### **RoHS Testing Flow Chart**

- 1) Name of the person who made testing: Bella Wang / Cutey Yu
- 2) Name of the person in charge of testing: Adams Yu / Ryan Yang
- 3) These samples were dissolved totally by pre-conditioning method according to below flow chart (Cr<sup>6+</sup> and PBBs/PBDEs test method excluded).



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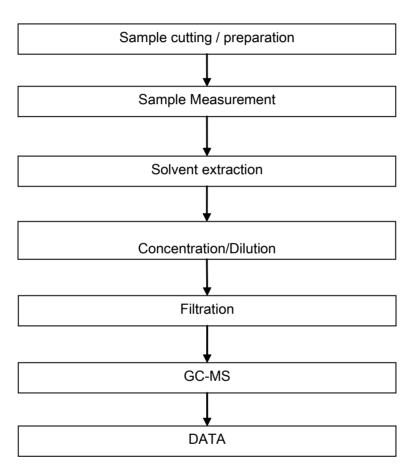
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## **ATTACHMENTS**

## Phthalates Testing Flow Chart

1) Name of the person who made testing: Tina Zhao

2) Name of the person in charge of testing: Ryan Yang



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