

# Test Report

No. CANEC2003250101

Date: 27 Mar 2020

Page 1 of 7

GUANGDONG KEXIN ELECTRICAL CO.,LTD.

NO.6,LANE 3,FUXIN ROAD,SHANTANGWEI,PINGDI STREET, LONGGANG  
DISTRICT,SHENZHEN, GUANGDONG, CHINA

The following sample(s) was/were submitted and identified on behalf of the clients as : SOT23-3

SGS Job No. : CP20-009034 - SZ

Model No. : SOT23-3

Client Ref. Info. : SOT23/23-5/23-6/89/89-5/223/143/143R/153/163/323/343/343R/353/363/  
523/563/723/923/353/363/883,SOP4/8/14/16/18/20/24,TSSOP8/14/16/  
18/20/24,DFN/PDFN/QFN,SOD106/123/123F/123FL/123FH/323/323F/  
323FL/523/723/882/923,DO15/27/34/35/41/123AB/201AD,TO92/126/220/  
220AB/220MF/220F/247/251/252/263/277,LL34/41/43/51,SMA/SMAF/  
SMB/SMBF/SMC,TO252/251,0402/0603/0805/1206,R1/3/6,DIP,1N/1Z,  
SC59/75,ABF/ABS/LBF/DBS/DBJ/DFS/KBL/GBL/GBJ/GBP/MBS/MSB/  
MLP/MDS/MBF/TWB/MB/TSB/WOB/WOG/KBP/KBU/KBPC/TS4B/RB-5

Date of Sample Received : 19 Mar 2020

Testing Period : 19 Mar 2020 - 25 Mar 2020

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 : Based on the performed tests on submitted sample(s), the results of Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs) and Phthalates such as Bis(2-ethylhexyl) phthalate (DEHP) , Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) , and Diisobutyl phthalate (DIBP) comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.



## Test Report

No. CANEC2003250101

Date: 27 Mar 2020

Page 2 of 7

Signed for and on behalf of  
SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

*Jessie Li*

Jessie Li  
Approved Signatory



SGS-CSTC Standards Technical Services Co., Ltd.  
Guangzhou Branch Testing Center Chemical Laboratory

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## Test Report

No. CANEC2003250101

Date: 27 Mar 2020

Page 3 of 7

Test Results :

### Test Part Description :

Specimen No.	SGS Sample ID	Description
SN1	CAN20-032501.001	"SOT23-3"

Remarks :

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

### RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU

Test Method : With reference to IEC 62321-4:2013+A1:2017, IEC 62321-5:2013, IEC 62321-7-2:2017 , IEC 62321-6:2015 and IEC 62321-8:2017, analyzed by ICP-OES , UV-Vis and GC-MS .

Test Item(s)	Limit	Unit	MDL	001
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1,000	mg/kg	2	ND
Mercury (Hg)	1,000	mg/kg	2	ND
Hexavalent Chromium (CrVI)	1,000	mg/kg	8	ND
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
Dibromodiphenyl ether	-	mg/kg	5	ND
Tribromodiphenyl ether	-	mg/kg	5	ND
Tetrabromodiphenyl ether	-	mg/kg	5	ND
Pentabromodiphenyl ether	-	mg/kg	5	ND



SGS-CSTC Service & Technology Co., Ltd.  
Guangzhou Branch Testing Center Chemical Laboratory.

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## Test Report

No. CANEC2003250101

Date: 27 Mar 2020

Page 4 of 7

Test Item(s)	Limit	Unit	MDL	001
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
Dibutyl phthalate (DBP)	1,000	mg/kg	50	ND
Butyl benzyl phthalate (BBP)	1,000	mg/kg	50	ND
Bis (2-ethylhexyl) phthalate (DEHP)	1,000	mg/kg	50	ND
Diisobutyl Phthalates (DIBP)	1,000	mg/kg	50	ND

### Notes :

(1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863.IEC 62321 series is equivalent to EN 62321 series

[https://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101:::FSP\\_ORG\\_ID,FSP\\_LANG\\_ID:1258637,25](https://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101:::FSP_ORG_ID,FSP_LANG_ID:1258637,25)

(2) The restriction of DEHP, BBP, DBP and DIBP shall apply to medical devices, including in vitro medical devices, and monitoring and control instruments, including industrial monitoring and control instruments, from 22 July 2021.

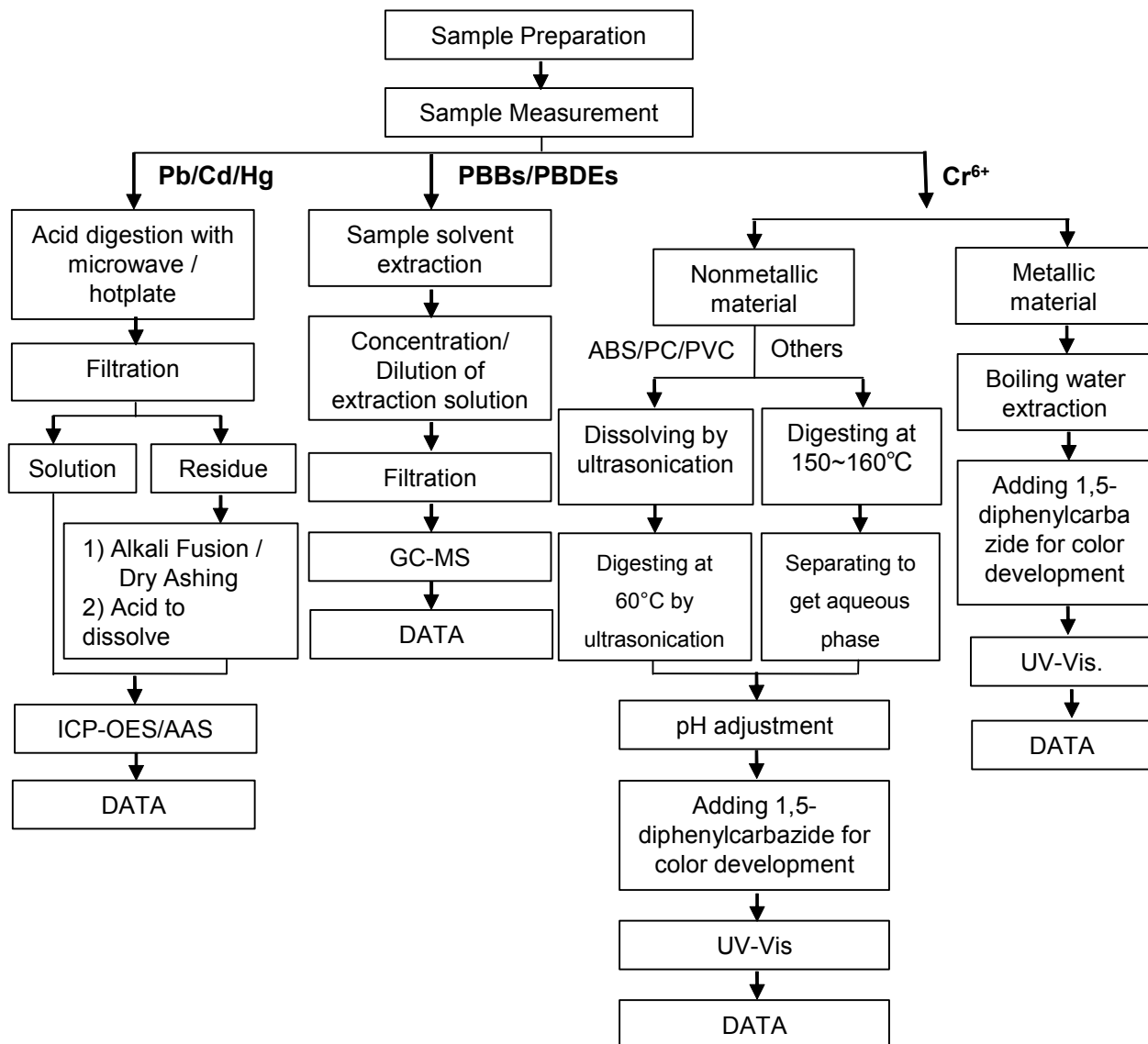
(3) The restriction of DEHP, BBP, DBP and DIBP shall not apply to toys which are already subject to the restriction of DEHP, BBP, DBP and DIBP through entry 51 of Annex XVII to Regulation (EC) No 1907/2006.



## ATTACHMENTS

### Pb/Cd/Hg/Cr<sup>6+</sup>/PBBs/PBDEs Testing Flow Chart

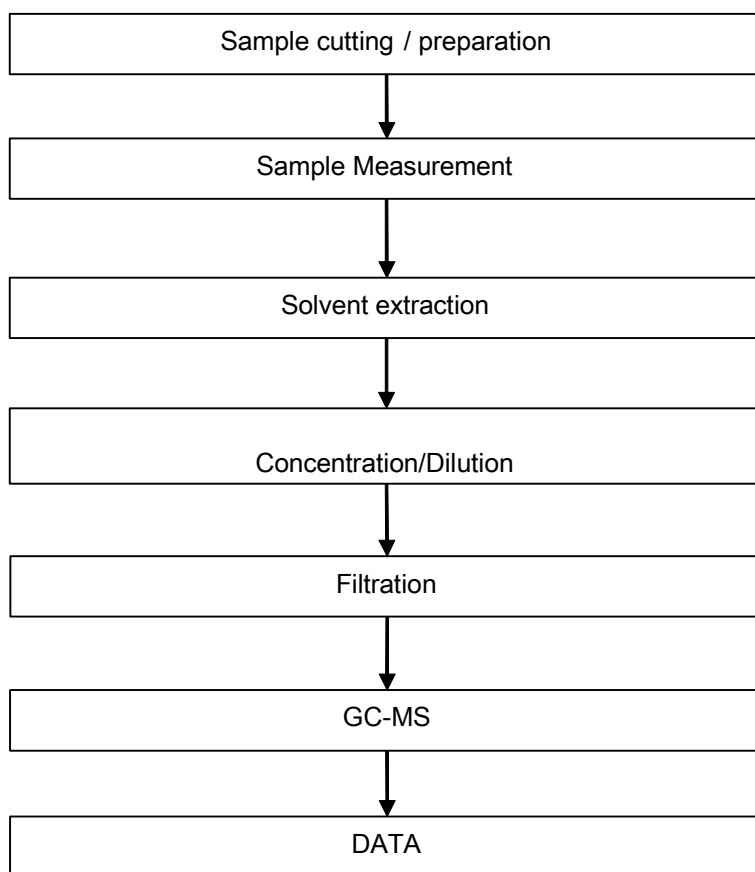
- 1) These samples were dissolved totally by pre-conditioning method according to below flow chart.  
(Cr<sup>6+</sup> and PBBs/PBDEs test method excluded).





## ATTACHMENTS

### Phthalates Testing Flow Chart



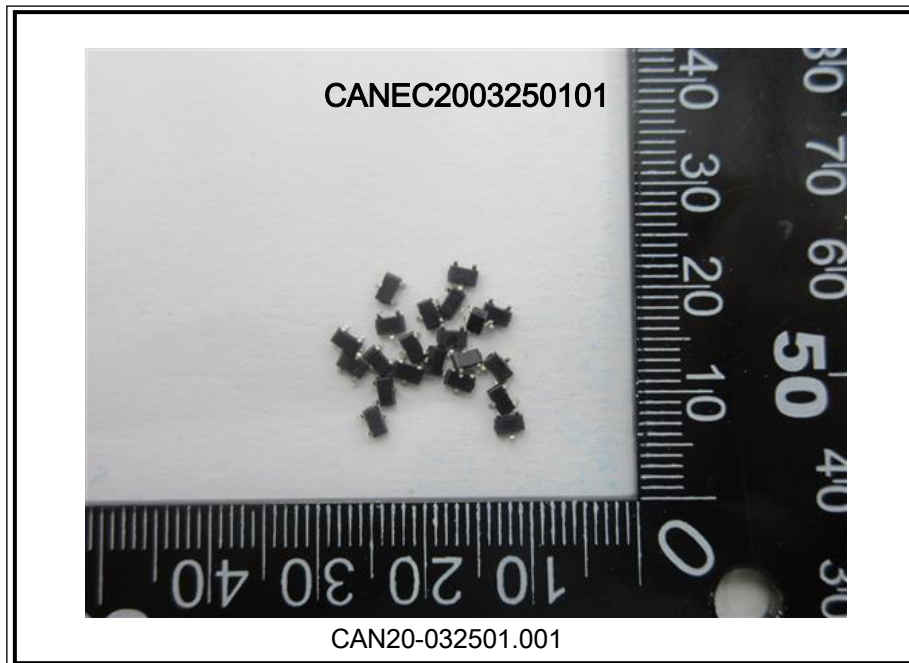
## Test Report

No. CANEC2003250101

Date: 27 Mar 2020

Page 7 of 7

Sample photo:



SGS authenticate the photo on original report only

\*\*\* End of Report \*\*\*

