

Test Report

No. CANEC1900348305

Date: 14 Jan 2019

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HANGZHOU SILAN MICROELECTRONICS CO.,LTD
NO.4 HUANGGUSHAN ROAD,HANGZHOU,ZHEJIANG
CHINA

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

SGS Job No. : CP19-000735 - GZ
Model No. : SD6703S
Client Ref. Info. : SEE REMARK
Date of Sample Received : 07 Jan 2019
Testing Period : 07 Jan 2019 - 10 Jan 2019
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.

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

Dongyu Xie

Dongyu Xie
Approved Signatory

Zmguan

Zm guan
Approved Signatory



Test Results :

Test Part Description :

Specimen No.	SGS Sample ID	Description
SN1	CAN19-003483.005	Black plastic w/ brown printing & chip
SN2	CAN19-003483.006	Silvery metal pin

Remarks :

- (1) 1 mg/kg = 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	005
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



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Test Item(s)	Limit	Unit	MDL	005
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
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
http://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101:::FSP_ORG_ID,FSP_LANG_ID:1258637,25

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 62321-7-1:2015, analyzed by ICP-OES and UV-Vis .

Test Item(s)	Limit	Unit	MDL	006
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1,000	mg/kg	2	17
Mercury (Hg)	1,000	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))▼	-	µg/cm ²	0.10	ND

Notes :

(1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863. IEC 62321 series is equivalent to EN 62321 series
http://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101:::FSP_ORG_ID,FSP_LANG_ID:1258637,25

(2) ▼= a. The sample is positive for CrVI if the CrVI concentration is greater than 0.13 µg/cm². The sample coating is considered to contain CrVI
 b. The sample is negative for CrVI if CrVI is ND (concentration less than 0.10 µg/cm²). The coating is considered a non-CrVI based coating
 c. The result between 0.10 µg/cm² and 0.13 µg/cm² is considered to be inconclusive - unavoidable coating variations may influence the determination
 Information on storage conditions and production date of the tested sample is unavailable



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and thus Cr(VI) results represent status of the sample at the time of testing.



REMARK:

SC6121-001/SC6122-001/SC7313S/SC7314S/SC8568/SDH2136/SC8569/SD6601S/SD6601AS/SD6602S/SD6602AS/SD6701ASC/SD6701SE/SD6701SC/SD6702SC/SD6703S/SD6704S/SD6802S/SD6802SE/SD6804AS/SD6804SE/SD6804S/SD6904S/SD6914S/SD6921S/SD6922S/SD6922AS/SD6924AS/SD6924S/SD6952AS/SD6952CS/SD6952DS/SD6952S/SD8583S/SD8584S/SD8585S/SDH6971S/SDH6971FS/SDH6972S/SDH6972SC/SDH8592AS/SDH8595S/SDH8595AS/SD7701S/SD4932B/SD7701AS/SD8502/SDH6931S/SDH6971AS/SDH6981S/SDH6982S/SDH7753S/SDH8593AS/SDH8593DS/SDH8594AS/SD6702SE/SD8530AS/SD8530CS/SD8530DS/SD8583HS/SDH6983S/SDH7611AS/SDH7611S/SDH7612S/SDH7711AS/SDH7711ASC/SDH7711S/SDH7711SC/SDH7712S/SDH7713S/SDH7752S/SD7401RC/SA9614/SA9618A/SC51P0301SC1G/SC51P57A04SC1G/SC51P67A04SC1G/SC51P0304SC1G/SC51P03A04SC1G/SC51P0304SC2G/SC51P2316SC1G/SC51P2317SC1G/SC51P57A04SC1G/SCT2000SC/SD4954/SD7402/SC51P03A02SC1G/SC51P03A02SC2G/SC51P0304SC2G/SC51P67A04SC2G/SCT2010/SD4752/SD4753/SD4952B/SA3525SC/SC51P57A04SC2G/SD4954B/SD7551/SD7794SC/SD42609/SD7794S/SC51P0305SC1G/SC51P2320SC1G/SA3846SE/MIP015/MIP016/SC51P0304SA1G/SC51P57A04SA1G/SC51P03A02SA1G/SC51P67A04SA1G/SD4924/SD4931/SD4933/SDH2116SA/SDH7722S/SDH7723S/SDH8302S/SU0306SAG/SU0504SAG/SU3304SAG/SVD1055SA/SVT09N04SA/SD42522/SD42524/SD4872R/SD6800/A/B/BC/SD7530S/SDH2106SA/SA3116/SA3116A/SC51P6604SA1G/SD45232RSA/SD4691/SD4938/SD6910A/SD6910C/SD7602S/SD7603S/SDH2103SA/SDH2104SA/SDH2116A/SDH6984R/SVT09N06SA/SVT1040SA/SVT13N06SA/SC51P03E02SA1G/SC51P03A02SA1G/SD45230RSA/SD4924S/SD4942/SD6533/SD6800/SD7880/SDH2126/SDH21263/SDH6981R/SDH6983R/SDH6984RC/SDH8594ES/SVG069R5NSA/SD42560E/SD42527E/SA1118B-1833/SD4923E/SD6501E/SD6501HE/SD6532/SDH6535/SA1461/SA1465/SA1466/SA1469PH/SA5888/SA9258/SA9259



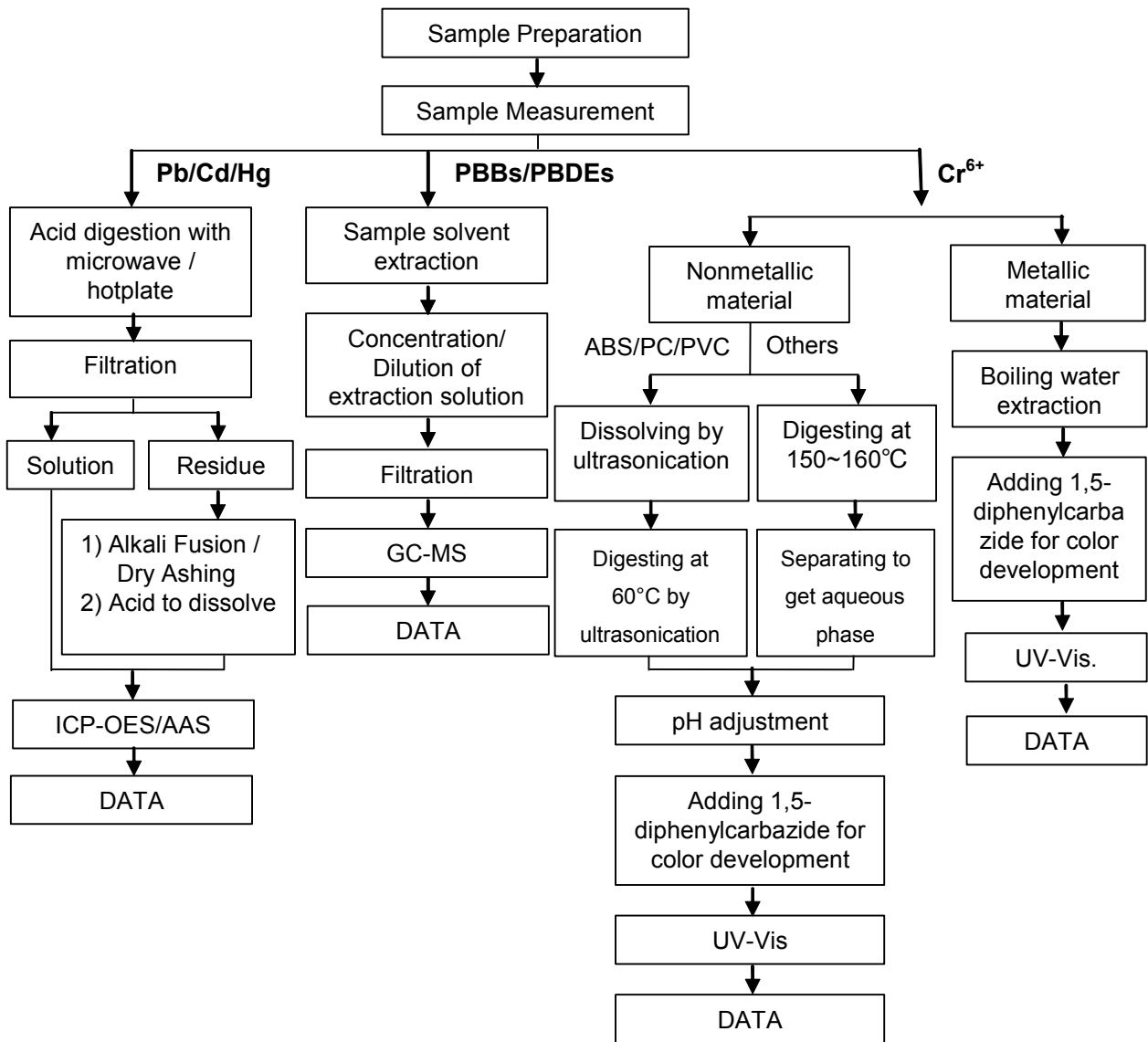
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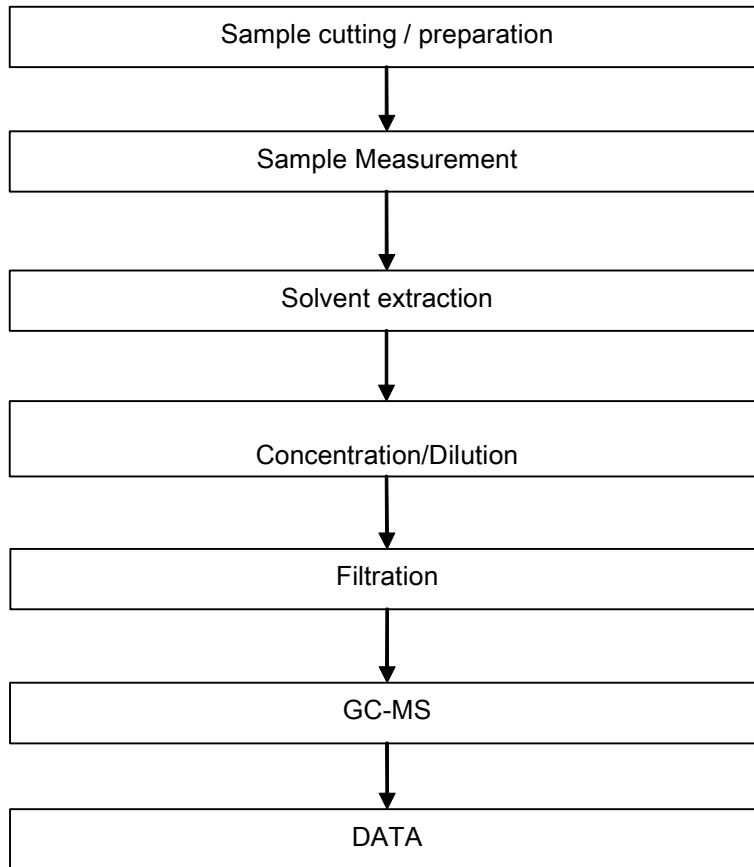
Pb/Cd/Hg/Cr⁶⁺/PBBs/PBDEs Testing Flow Chart

1) These samples were dissolved totally by pre-conditioning method according to below flow chart.
(Cr⁶⁺ and PBBs/PBDEs test method excluded).

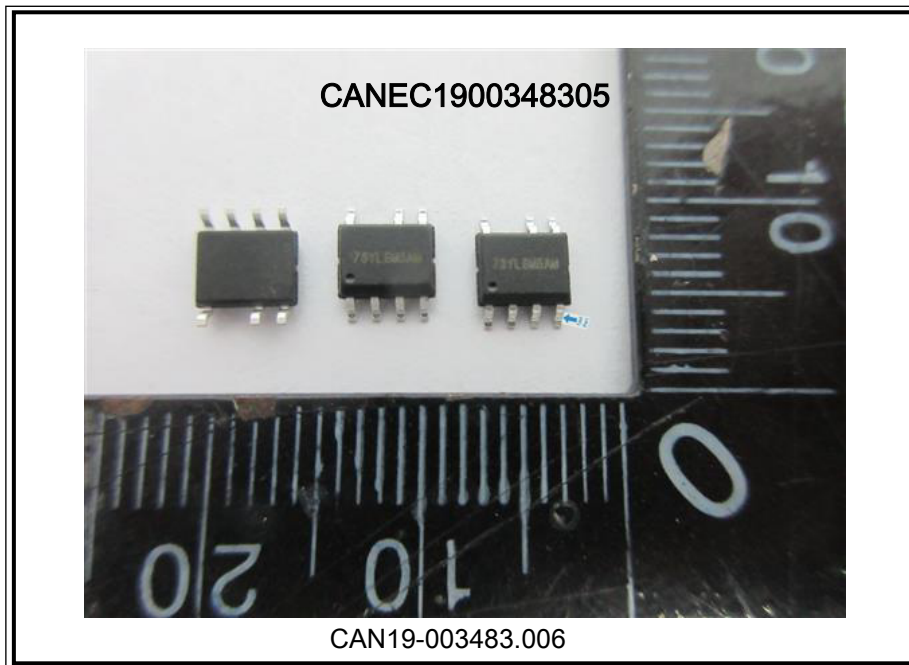
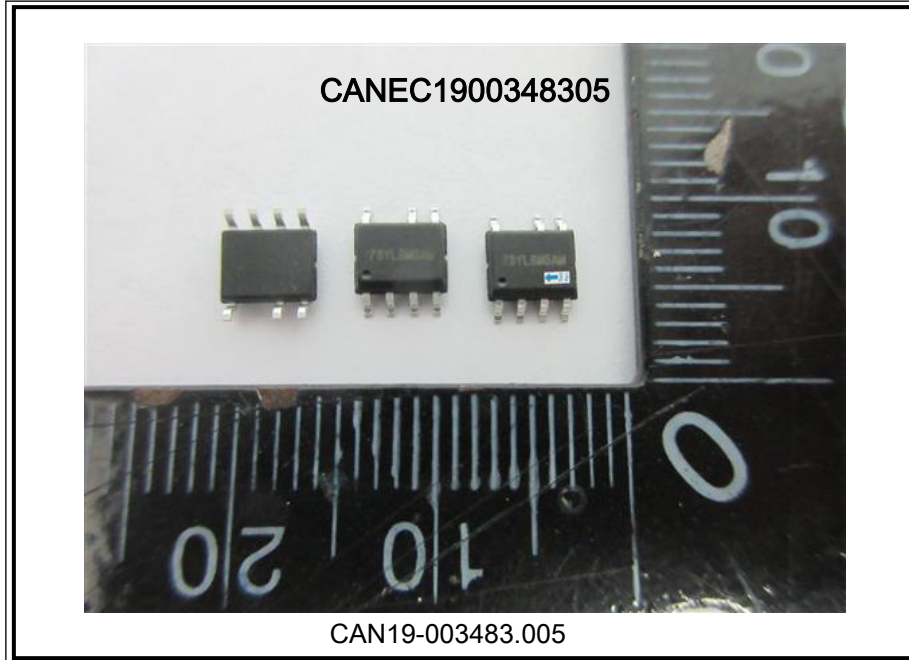


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Phthalates Testing Flow Chart



Sample photo:



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