



扫二维码
关注诺尼测试



Pony Testing International Group

Test Report

NO.: BMCUJ37H83720704a

Date: 2018.07.05

Page 1 of 13

Applicant:

Zhejiang Rectron Electronic Co.,Ltd

Address:

28#Lizheng Road,Jia Shan Economic Development Zone,Zhe Jiang,Chian

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

Sample Name: Please refer to next page(s)

Material: Please refer to next page(s)

Encapsulation information: SMA(L)(F) /SMB(L)(F) /SMC(L)(F) / SMX /SlimPAQ (P) /ThinPAQ /

SOD123 (L) / SOD123F(L) (H) (X) / MELF / MINI MELF / R1 / A405 /

DO41 / DO15 / R3 / R6 / R7 / 1.5KE / DO201 / DO204 /HVM / HVP / DBS /

DB / DBLS (LDBS) / SLDBS / MDS / MD /BDB / RS1(L) / RS2(L) / RS4(L) /

RS6(L) / RS8(L) / RB15 / WOM /RC2 / BR3 / BR6 / BR8 / BR10 /

BR15(W)-25(W)-35(W) /MB15(W)-25(W)-35(W) /

MP15(W)-25(W)-35(W)-50 (W) /

RS1M-2M-4M-6M-8M-10M-15M-20M-25M-35M-50M /

RBU4M-6M-8M-10M-15M-20M-25M / (I)TO220A / (I)TO220 / DPAK /

D2PAK/SKBPC/TO247/MDSJ/LMDS/DO-277/SOD323/MB/MSBS/

D3K/MB-F/MD-F/DO218/RxK (000) (H)(F) (x: 5-20) /SOD523/SOD923/

SOP-8/TSSOP-8/SOT-23/SOT-363/SOT-523/TO-251/TO-252/TO-263/TO-3P/

TO-92/SUB-SMA/DFN5x6/DFN3x3.

Sample Received Date: 2018.06.08

Testing Period: 2018.06.08 To 2018.07.05

Test Methods:

- (1) IEC 62321-5 Edition 1.0:2013 method, Lead analysis is performed by AAS
- (2) IEC 62321-5 Edition 1.0:2013 method, Cadmium analysis is performed by AAS
- (3) IEC 62321-4:2013+AMD1:2017 CSV method, Mercury analysis is performed by ICP-OES
- (4) IEC 62321-7-2 Edition 1.0:2017 method, Hexavalent Chromium analysis is performed by UV-Vis
IEC62321-7-1Edition1.0:2015 method,Hexavalent Chromium analysis is performed by UV-Vis
- (5) IEC 62321-6 Edition 1.0:2015 method, PBBs and PBDEs analysis is performed by GC-MS
- (6) IEC 62321-8 Edition 1.0:2017 method, Phthalate analysis is performed by GC-MS
- (7) EPA6010D-2014 method,Be analysis is performed by ICP-OES

Test Result: Please refer to next page(s)

Approved by:

Caopia



微信扫一扫，使用小程序



小程序扫一扫，在线验证

Code: s2d238h

The page below is blank



Pony Testing Group (Shanghai) Co., Ltd.
Test Address:2/3/4/6/F, Building 35, No.680, Guiping Road, Xuhui District, Shanghai, China

BeijingLab: (010)82618116

ShanghaiLab: (021)64851999

QingdaoLab: (0532)88706866

ShenzhenLab: (0755)26050909

TianjinLab: (022)27360730

SuzhouLab: (0512)62997900

ChangchunLab: (0431)85150908

DalianLab: (0411)87336618

HaerbinLab: (0451)88104561

ZhengzhouLab: (0371)69350670

XinjiangLab: (0991)6684186

ShijiazhuangLab: (0311)85376660

XianLab: (029)89608785

HuhehaoteLab: (0471)3450025

HangzhouLab: (0571)87219096

NingboLab: (0574)87736499

WuhanLab: (027)83997127

HefeiLab: (0551)63843474

GuangzhouLab: (020)89224310

XianmenLab: (0592)5568048

ChengduLab: (028)87702708



扫二维码
关注诺尼测试



Pony Testing International Group

Test Report

NO.: BMCUJ37H83720704a

Date: 2018.07.05

Page 2 of 13

Test Result (Unit: mg/kg)

Sample No.: H83710704

Sample Name: Dice Wafer

Material: Si

Test Item	MDL	Test Result	RoHS Limit
Lead (Pb)	1	N.D.	1000
Cadmium (Cd)	1	N.D.	100
Mercury (Hg)	1	N.D.	1000
Hexavalent Chromium (Cr ⁶⁺)	8	N.D.	1000
Sum of PBBs	—	N.D.	1000
Bromobiphenyl	5	N.D.	—
Dibromobiphenyl	5	N.D.	—
Tribromobiphenyl	5	N.D.	—
Tetrabromobiphenyl	5	N.D.	—
Pentabromobiphenyl	5	N.D.	—
Hexabromobiphenyl	5	N.D.	—
Heptabromobiphenyl	5	N.D.	—
Octabromobiphenyl	5	N.D.	—
Nonabromobiphenyl	5	N.D.	—
Decabromobiphenyl	5	N.D.	—
Sum of PBDEs	—	N.D.	1000
Bromodiphenyl ether	5	N.D.	—
Dibromodiphenyl ether	5	N.D.	—
Tribromodiphenyl ether	5	N.D.	—
Tetrabromodiphenyl ether	5	N.D.	—
Pentabromodiphenyl ether	5	N.D.	—
Hexabromodiphenyl ether	5	N.D.	—
Heptabromodiphenyl ether	5	N.D.	—
Octabromodiphenyl ether	5	N.D.	—
Nonabromodiphenyl ether	5	N.D.	—
Decabromodiphenyl ether	5	N.D.	—

The page below is blank



©Hotline 400-819-5688

Pony Testing International Group
www.ponytest.com

BeijingLab: (010)82618116

ShanghaiLab: (021)64851999

QingdaoLab: (0532)88706866

ShenzhenLab: (0755)26050909

TianjinLab: (022)27360730

SuzhouLab: (0512)62997900

ChangchunLab: (0431)85150908

DalianLab: (0411)87336618

HaerbinLab: (0451)88104561

ZhengzhouLab: (0371)69350670

XinjiangLab: (0991)6684186

ShijiazhuangLab: (0311)85376660

XianLab: (029)89608785

HuhehaoteLab: (0471)3450025

HangzhouLab: (0571)87219096

NingboLab: (0574)87736499

WuhanLab: (027)83997127

HefeiLab: (0551)63843474

GuangzhouLab: (020)89224310

XianmenLab: (0592)5568048

ChengduLab: (028)87702708



扫二维码
关注诺尼测试



Pony Testing International Group

Test Report

NO.: BMCUJ37H83720704a

Date: 2018.07.05

Page 3 of 13

Test Result (Unit: mg/kg)

Sample No.: H83713704

Sample Name: Molding

Material: Epoxy

Test Item	MDL	Test Result	RoHS Limit
Lead (Pb)	1	N.D.	1000
Cadmium (Cd)	1	N.D.	100
Mercury (Hg)	1	N.D.	1000
Hexavalent Chromium (Cr ⁶⁺)	8	N.D.	1000
Sum of PBBs	—	N.D.	1000
Bromobiphenyl	5	N.D.	—
Dibromobiphenyl	5	N.D.	—
Tribromobiphenyl	5	N.D.	—
Tetrabromobiphenyl	5	N.D.	—
Pentabromobiphenyl	5	N.D.	—
Hexabromobiphenyl	5	N.D.	—
Heptabromobiphenyl	5	N.D.	—
Octabromobiphenyl	5	N.D.	—
Nonabromobiphenyl	5	N.D.	—
Decabromobiphenyl	5	N.D.	—
Sum of PBDEs	—	N.D.	1000
Bromodiphenyl ether	5	N.D.	—
Dibromodiphenyl ether	5	N.D.	—
Tribromodiphenyl ether	5	N.D.	—
Tetrabromodiphenyl ether	5	N.D.	—
Pentabromodiphenyl ether	5	N.D.	—
Hexabromodiphenyl ether	5	N.D.	—
Heptabromodiphenyl ether	5	N.D.	—
Octabromodiphenyl ether	5	N.D.	—
Nonabromodiphenyl ether	5	N.D.	—
Decabromodiphenyl ether	5	N.D.	—

The page below is blank



©Hotline 400-819-5688

Pony Testing International Group
www.ponytest.com

BeijingLab: (010)82618116

ShanghaiLab: (021)64851999

QingdaoLab: (0532)88706866

ShenzhenLab: (0755)26050909

TianjinLab: (022)27360730

SuzhouLab: (0512)62997900

ChangchunLab: (0431)85150908

DalianLab: (0411)87336618

HaerbinLab: (0451)88104561

ZhengzhouLab: (0371)69350670

XinjiangLab: (0991)6684186

ShijiazhuangLab: (0311)85376660

XianLab: (029)89608785

HuhehaoteLab: (0471)3450025

HangzhouLab: (0571)87219096

NingboLab: (0574)87736499

WuhanLab: (027)83997127

HefeiLab: (0551)63843474

GuangzhouLab: (020)89224310

XianmenLab: (0592)5568048

ChengduLab: (028)87702708



扫二维码
关注诺尼测试



Pony Testing International Group

Test Report

NO.: BMCUJ37H83720704a

Date: 2018.07.05

Page 4 of 13

Test Result (Unit: mg/kg)

Sample No.: H83715704

Sample Name: Silicon Rubber

Material: Si

Test Item	MDL	Test Result	RoHS Limit
Lead (Pb)	1	N.D.	1000
Cadmium (Cd)	1	N.D.	100
Mercury (Hg)	1	N.D.	1000
Hexavalent Chromium (Cr ⁶⁺)	8	N.D.	1000
Sum of PBBs	—	N.D.	1000
Bromobiphenyl	5	N.D.	—
Dibromobiphenyl	5	N.D.	—
Tribromobiphenyl	5	N.D.	—
Tetrabromobiphenyl	5	N.D.	—
Pentabromobiphenyl	5	N.D.	—
Hexabromobiphenyl	5	N.D.	—
Heptabromobiphenyl	5	N.D.	—
Octabromobiphenyl	5	N.D.	—
Nonabromobiphenyl	5	N.D.	—
Decabromobiphenyl	5	N.D.	—
Sum of PBDEs	—	N.D.	1000
Bromodiphenyl ether	5	N.D.	—
Dibromodiphenyl ether	5	N.D.	—
Tribromodiphenyl ether	5	N.D.	—
Tetrabromodiphenyl ether	5	N.D.	—
Pentabromodiphenyl ether	5	N.D.	—
Hexabromodiphenyl ether	5	N.D.	—
Heptabromodiphenyl ether	5	N.D.	—
Octabromodiphenyl ether	5	N.D.	—
Nonabromodiphenyl ether	5	N.D.	—
Decabromodiphenyl ether	5	N.D.	—

The page below is blank



©Hotline 400-819-5688

Pony Testing International Group
www.ponytest.com

BeijingLab: (010)82618116

ShanghaiLab: (021)64851999

QingdaoLab: (0532)88706866

ShenzhenLab: (0755)26050909

TianjinLab: (022)27360730

SuzhouLab: (0512)62997900

ChangchunLab: (0431)85150908

DalianLab: (0411)87336618

HaerbinLab: (0451)88104561

ZhengzhouLab: (0371)69350670

XinjiangLab: (0991)6684186

ShijiazhuangLab: (0311)85376660

XianLab: (029)89608785

HuhehaoteLab: (0471)3450025

HangzhouLab: (0571)87219096

NingboLab: (0574)87736499

WuhanLab: (027)83997127

HefeiLab: (0551)63843474

GuangzhouLab: (020)89224310

XianmenLab: (0592)5568048

ChengduLab: (028)87702708



Pony Testing International Group



扫二维码
关注诺尼测试

Test Report

NO.: BMCUJ37H83720704a

Date: 2018.07.05

Page 5 of 13

Test Result (Unit: mg/kg)

Sample No.: H83716704

Sample Name: Uv Ink

Material: Ink

Test Item	MDL	Test Result	RoHS Limit
Lead (Pb)	1	N.D.	1000
Cadmium (Cd)	1	N.D.	100
Mercury (Hg)	1	N.D.	1000
Hexavalent Chromium (Cr ⁶⁺)	8	N.D.	1000
Sum of PBBs	—	N.D.	1000
Bromobiphenyl	5	N.D.	—
Dibromobiphenyl	5	N.D.	—
Tribromobiphenyl	5	N.D.	—
Tetrabromobiphenyl	5	N.D.	—
Pentabromobiphenyl	5	N.D.	—
Hexabromobiphenyl	5	N.D.	—
Heptabromobiphenyl	5	N.D.	—
Octabromobiphenyl	5	N.D.	—
Nonabromobiphenyl	5	N.D.	—
Decabromobiphenyl	5	N.D.	—
Sum of PBDEs	—	N.D.	1000
Bromodiphenyl ether	5	N.D.	—
Dibromodiphenyl ether	5	N.D.	—
Tribromodiphenyl ether	5	N.D.	—
Tetrabromodiphenyl ether	5	N.D.	—
Pentabromodiphenyl ether	5	N.D.	—
Hexabromodiphenyl ether	5	N.D.	—
Heptabromodiphenyl ether	5	N.D.	—
Octabromodiphenyl ether	5	N.D.	—
Nonabromodiphenyl ether	5	N.D.	—
Decabromodiphenyl ether	5	N.D.	—

The page below is blank



©Hotline 400-819-5688

Pony Testing International Group
www.ponytest.com

BeijingLab: (010)82618116

ShanghaiLab: (021)64851999

QingdaoLab: (0532)88706866

ShenzhenLab: (0755)26050909

TianjinLab: (022)27360730

SuzhouLab: (0512)62997900

ChangchunLab: (0431)85150908

DalianLab: (0411)87336618

HaerbinLab: (0451)88104561

ZhengzhouLab: (0371)69350670

XinjiangLab: (0991)6684186

ShijiazhuangLab: (0311)85376660

XianLab: (029)89608785

HuhehaoteLab: (0471)3450025

HangzhouLab: (0571)87219096

NingboLab: (0574)87736499

WuhanLab: (027)83997127

HefeiLab: (0551)63843474

GuangzhouLab: (020)89224310

XianmenLab: (0592)5568048

ChengduLab: (028)87702708



扫二维码
关注诺尼测试



Pony Testing International Group

Test Report

NO.: BMCUJ37H83720704a

Date: 2018.07.05

Page 6 of 13

Test Results (Unit: mg/kg)

Sample No.: H83710704

Sample Name: Dice Wafer

Material: Si

Test Item	CAS Number	MDL	Test Result	RoHS Limit
DEHP	117-81-7	30	N.D.	1000
DBP	84-74-2	30	N.D.	1000
BBP	85-68-7	30	N.D.	1000
DIBP	84-69-5	30	N.D.	1000

Sample No.: H83713704

Sample Name: Molding

Material: Epoxy

Test Item	CAS Number	MDL	Test Result	RoHS Limit
DEHP	117-81-7	30	N.D.	1000
DBP	84-74-2	30	N.D.	1000
BBP	85-68-7	30	N.D.	1000
DIBP	84-69-5	30	N.D.	1000

Sample No.: H83715704

Sample Name: Silicon Rubber

Material: Si

Test Item	CAS Number	MDL	Test Result	RoHS Limit
DEHP	117-81-7	30	N.D.	1000
DBP	84-74-2	30	N.D.	1000
BBP	85-68-7	30	N.D.	1000
DIBP	84-69-5	30	N.D.	1000

Sample No.: H83716704

Sample Name: Uv Ink

Material: Ink

Test Item	CAS Number	MDL	Test Result	RoHS Limit
DEHP	117-81-7	30	N.D.	1000
DBP	84-74-2	30	N.D.	1000
BBP	85-68-7	30	N.D.	1000
DIBP	84-69-5	30	N.D.	1000

The page below is blank



©Hotline 400-819-5688

Pony Testing International Group
www.ponytest.com

BeijingLab: (010)82618116

ShanghaiLab: (021)64851999

QingdaoLab: (0532)88706866

ShenzhenLab: (0755)26050909

TianjinLab: (022)27360730

SuzhouLab: (0512)62997900

ChangchunLab: (0431)85150908

DalianLab: (0411)87336618

HaerbinLab: (0451)88104561

ZhengzhouLab: (0371)69350670

XinjiangLab: (0991)6684186

ShijiazhuangLab: (0311)85376660

XianLab: (029)89608785

HuhehaoteLab: (0471)3450025

HangzhouLab: (0571)87219096

NingboLab: (0574)87736499

WuhanLab: (027)83997127

HefeiLab: (0551)63843474

GuangzhouLab: (020)89224310

XianmenLab: (0592)5568048

ChengduLab: (028)87702708



扫二维码
关注谱尼测试



Pony Testing International Group

Test Report

NO.: BMCUJ37H83720704a

Date: 2018.07.05

Page 7 of 13

Test Results (Unit: mg/kg)

Sample No.: H83706704

Sample Name: Lead Wire

Material: Cu

Test Item	MDL	Test Result	RoHS Limit
Lead (Pb)	1	N.D.	1000
Cadmium (Cd)	1	N.D.	100
Mercury (Hg)	1	N.D.	1000
Hexavalent Chromium (Cr ⁶⁺)	See Note (6)	Negative	—

Sample No.: H83708704

Sample Name: Solder Wafer

Material: Pb、Sn、Ag

Test Item	MDL	Test Result	RoHS Limit
Lead (Pb)	1	9.68x10 ⁵	1000
Cadmium (Cd)	1	N.D.	100
Mercury (Hg)	1	N.D.	1000
Hexavalent Chromium (Cr ⁶⁺)	See Note (6)	Negative	—

Sample No.: H83711704

Sample Name: Plating

Material: Sn

Test Item	MDL	Test Result	RoHS Limit
Lead (Pb)	1	46	1000
Cadmium (Cd)	1	N.D.	100
Mercury (Hg)	1	N.D.	1000
Hexavalent Chromium (Cr ⁶⁺)	See Note (6)	Negative	—

Test Result (Unit: %)

Sample No.: H83706704

Sample Name: Lead Wire

Material: Cu

Test Item	MDL	Test Result
Be	0.0002	Not Detected

Sample No.: H83708704

Sample Name: Solder Wafer

Material: Pb、Sn、Ag

Test Item	MDL	Test Result
Be	0.0002	Not Detected

Sample No.: H83711704

Sample Name: Plating

Material: Sn

Test Item	MDL	Test Result
Be	0.0002	Not Detected

The page below is blank



©Hotline 400-819-5688

Pony Testing International Group
www.ponytest.com

BeijingLab: (010)82618116

ShanghaiLab: (021)64851999

QingdaoLab: (0532)88706866

ShenzhenLab: (0755)26050909

TianjinLab: (022)27360730

SuzhouLab: (0512)62997900

ChangchunLab: (0431)85150908

DalianLab: (0411)87336618

HaerbinLab: (0451)88104561

ZhengzhouLab: (0371)69350670

XinjiangLab: (0991)6684186

ShijiazhuangLab: (0311)85376660

XianLab: (029)89608785

HuhehaoteLab: (0471)3450025

HangzhouLab: (0571)87219096

NingboLab: (0574)87736499

WuhanLab: (027)83997127

HefeiLab: (0551)63843474

GuangzhouLab: (020)89224310

XianmenLab: (0592)5568048

ChengduLab: (028)87702708



扫二维码
关注谱尼测试



Pony Testing International Group

Test Report

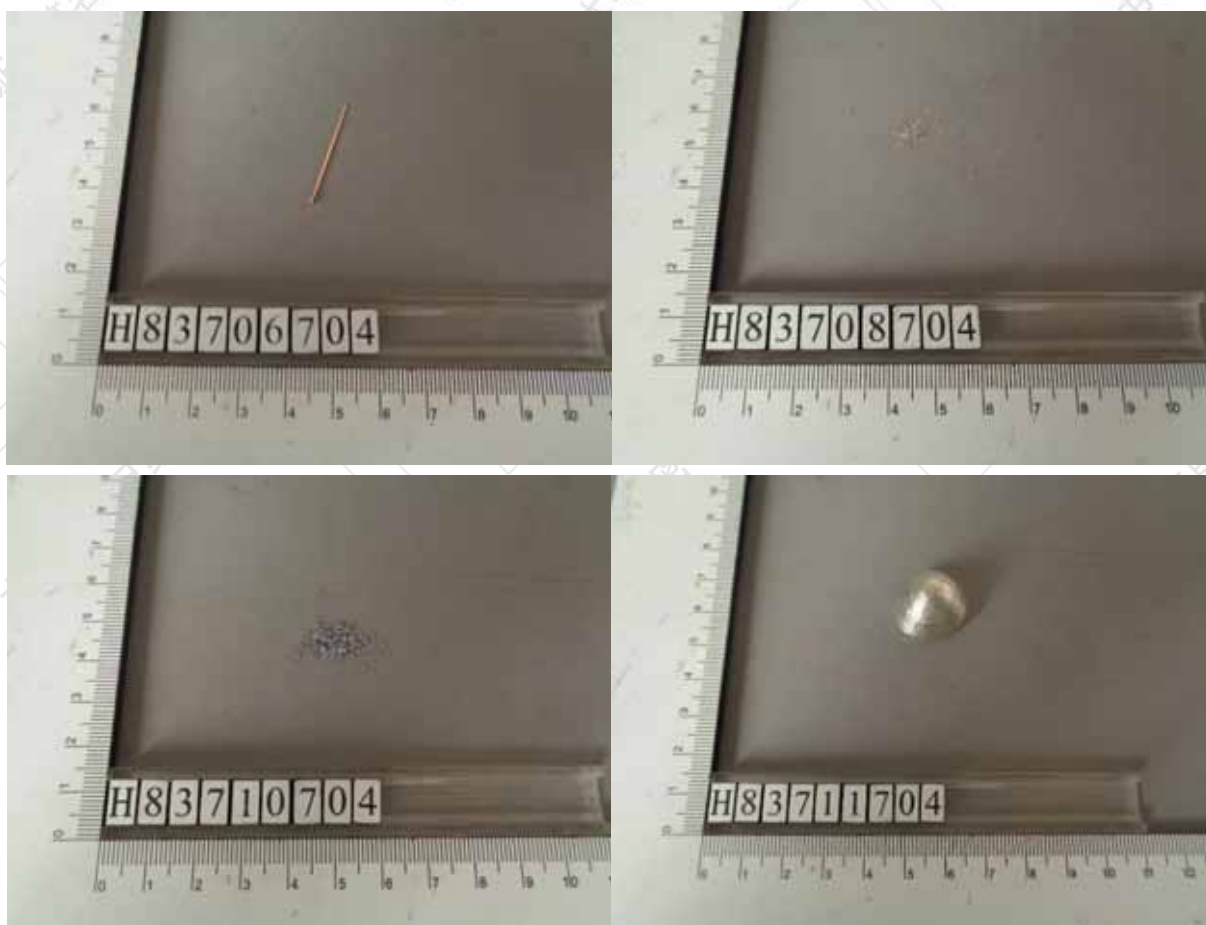
NO.: BMCUJ37H83720704a

Date: 2018.07.05

Page 8 of 13

- Note:
- (1) mg/kg = ppm
 - (2) “—” = Does not stipulate
 - (3) N.D. = Not Detected (<MDL)
 - (4) MDL = Method Detection Limit
 - (5) The most allowable limit value reference to RoHS Directive 2011/65/EU & (EU)2015/863 Annex II
 - (6) Boiling water extraction test:
 - <0.10 $\mu\text{g}/\text{cm}^2$ expressed as “negative”, indicates without hexavalent chromium in the plating
 - 0.10 $\mu\text{g}/\text{cm}^2$ –0.13 $\mu\text{g}/\text{cm}^2$ expressed as “not confirmative”, indicates that it can not be confirmative for the presence of hexavalent chromium in the plating, further test is needed.
 - >0.13 $\mu\text{g}/\text{cm}^2$ expressed as “positive”, indicates that hexavalent chromium is detected in the plating.
 - (7) This test report is to replace the test report No. BMCUJ37H83720704 The No. BMCUJ37H83720704 test report is invalid and of no legal effect. All related information should be referred to the new test report.2018.07.05

Sample No. &Photo:



Pony authenticate the photo on original report only

The page below is blank



©Hotline 400-819-5688

Pony Testing International Group
www.ponytest.com

BeijingLab: (010)82618116

ShanghaiLab: (021)64851999

QingdaoLab: (0532)88706866

ShenzhenLab: (0755)26050909

TianjinLab: (022)27360730

SuzhouLab: (0512)62997900

ChangchunLab: (0431)85150908

DalianLab: (0411)87336618

HaerbinLab: (0451)88104561

ZhengzhouLab: (0371)69350670

XinjiangLab: (0991)6684186

ShijiazhuangLab: (0311)85376660

XianLab: (029)89608785

HuhehaoteLab: (0471)3450025

HangzhouLab: (0571)87219096

NingboLab: (0574)87736499

WuhanLab: (027)83997127

HefeiLab: (0551)63843474

GuangzhouLab: (020)89224310

XianmenLab: (0592)5568048

ChengduLab: (028)87702708



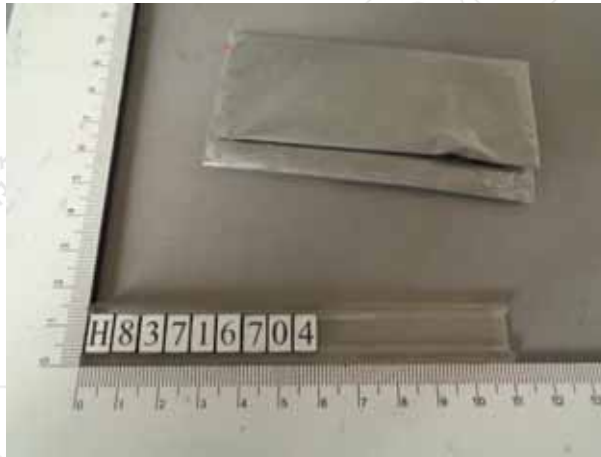
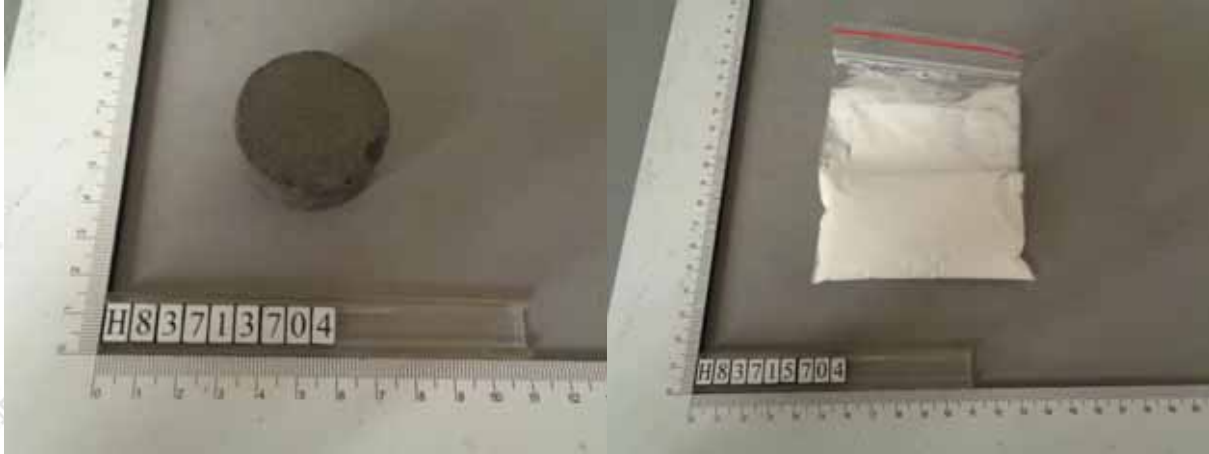
Test Report

NO.: BMCUJ37H83720704a

Date: 2018.07.05

Page 9 of 13

Sample No. &Photo:



Pony authenticate the photo on original report only
The page below is blank



扫二维码
关注诺尼测试



Pony Testing International Group

Test Report

NO.: BMCUJ37H83720704a

Date: 2018.07.05

Page 10 of 13

Measurement Flow-chart

Tested by: Yan Xu

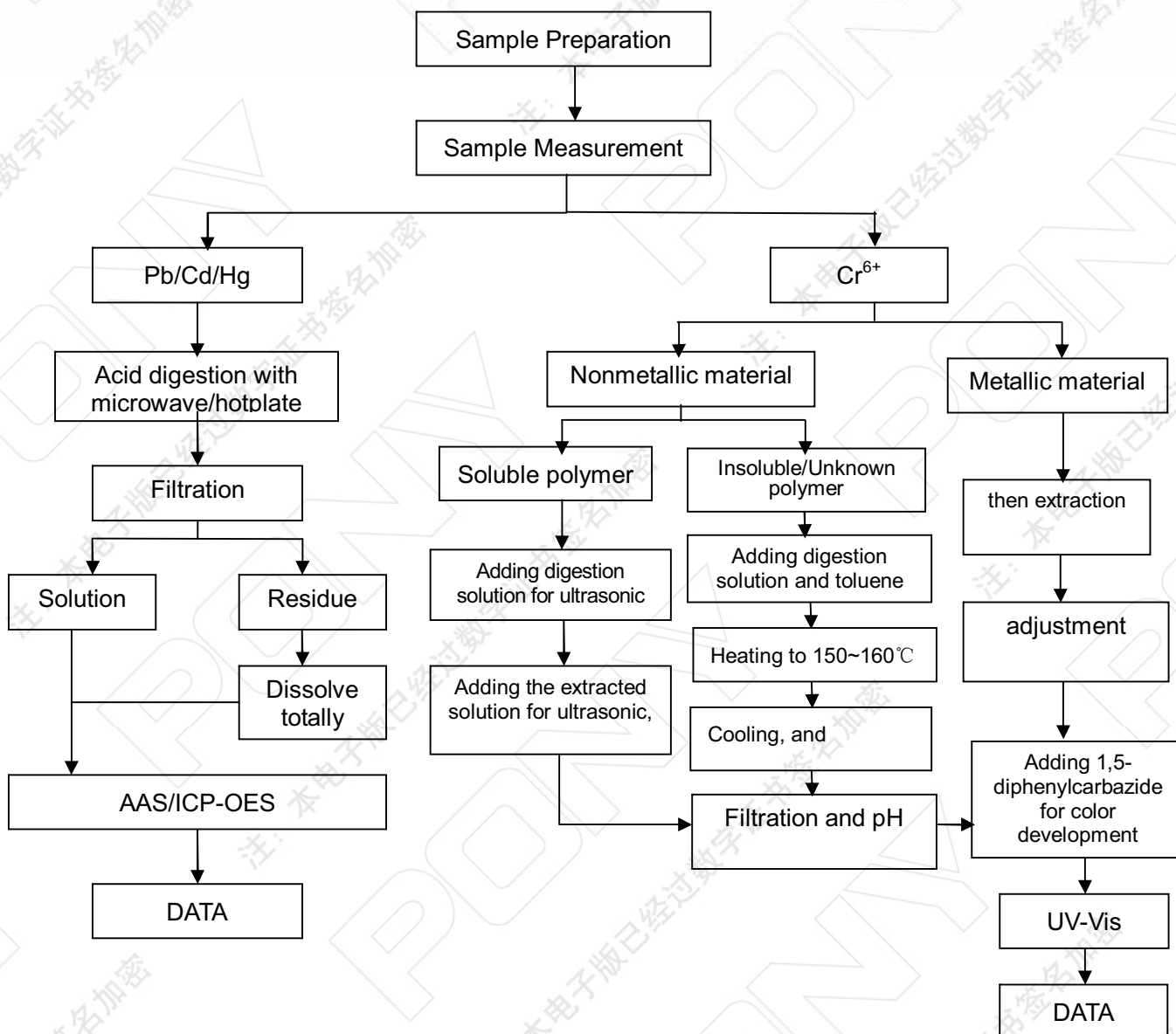
Checked by: Xu Shengxia

Person in charge of the lab: Cao Jia

These Samples Were Dissolved Totally By Pre-conditioning Method According To Below Flow Chart.

(Cr⁶⁺ Test Method Excluded)

The page below is blank



The page below is blank



BeijingLab: (010)82618116

ShanghaiLab: (021)64851999

QingdaoLab: (0532)88706866

ShenzhenLab: (0755)26050909

TianjinLab: (022)27360730

SuzhouLab: (0512)62997900

ChangchunLab: (0431)85150908

DalianLab: (0411)87336618

HaerbinLab: (0451)88104561

ZhengzhouLab: (0371)69350670

XinjiangLab: (0991)6684186

ShijiazhuangLab: (0311)85376660

XianLab: (029)89608785

HuhehaoteLab: (0471)3450025

HangzhouLab: (0571)87219096

NingboLab: (0574)87736499

WuhanLab: (027)83997127

HefeiLab: (0551)63843474

GuangzhouLab: (020)89224310

XianmenLab: (0592)5568048

ChengduLab: (028)87702708



Test Report

NO.: BMCUJ37H83720704a

Date: 2018.07.05

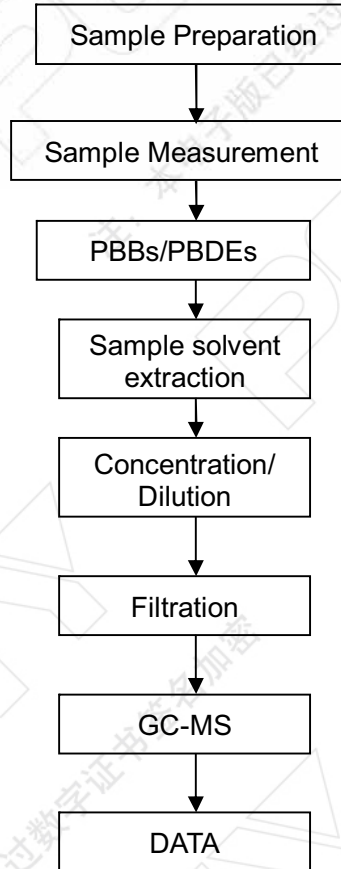
Page 11 of 13

Measurement Flow-chart

Tested by: Tang Yemei

Checked by: Xu Shengxia

Person in charge of the lab: Cao Jia



The page below is blank



Test Report

NO.: BMCUJ37H83720704a

Date: 2018.07.05

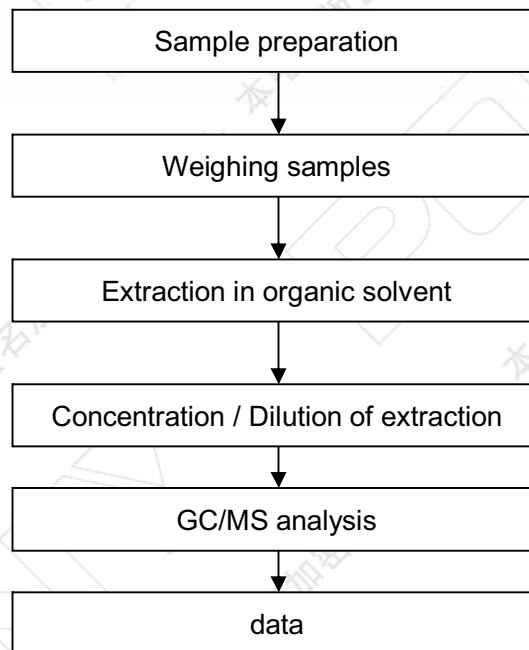
Page 12 of 13

Phthalate Flow Chart

Tested by: Hu Xuegui

Checked by: Xu Shengxia

Person in charge of the lab: Cao Jia



The page below is blank



Test Report

NO.: BMCUJ37H83720704a

Date: 2018.07.05

Page 13 of 13

Element Measurement Flow-chart

Tested by: Shu Wei

Checked by: Xu Shengxia

Person in charge of the lab: Cao Jia

