THE INDUSTRIAL ANALYSIS SERVICE LTD.
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TEST REPORT

Request No. 0228390
Report No. EW260000000434-01
Date of issue: 15 June 2026

To. NGK CERAMIC DEVICE CO. , LTD.

Address: 2701-1 Higashibun, Ohmine-cho, Mine-Shi, Yamaguchi. 759-2212, Japan

Name of sample: Au Plating (Au-non Tl)

Date of receipt of sample: 25 May 2026

Measurement days: 25 May 2026 ～ 15 June 2026

The following is the report on the requested test of the sample

Test Items	Unit	Test result	D.L.	Test Method
Cd	ppm	N.D.	2.0	With reference to IEC62321-5(2013) ICP/MS
Pb	ppm	N.D.	2.0	With reference to IEC62321-5(2013) ICP/MS
Cr6+	ppm	N.D.	1.0	With reference to IEC62321-7-1(2015) Boiling water extraction/UV-VIS
Hg	ppm	N.D.	2.0	With reference to IEC62321-4(2013)/AMD1(2017) ICP/MS
PBBs	ppm	N.D.	5.0	With reference to IEC62321-6(2015) GC/MS
PBDEs	ppm	N.D.	5.0	With reference to IEC62321-6(2015) GC/MS
Bis(2-ethylhexyl) phthalate (DEHP)	ppm	N.D.	50	With reference to IEC62321-8(2017) GC/MS
Butylbenzyl phthalate (BBP)	ppm	N.D.	50	With reference to IEC62321-8(2017) GC/MS
Dibutyl phthalate (DBP)	ppm	N.D.	50	With reference to IEC62321-8(2017) GC/MS
Diisobutyl phthalate (DIBP)	ppm	N.D.	50	With reference to IEC62321-8(2017) GC/MS
F	ppm	N.D.	50	With reference to EN14582(2016) Furnace combustion/IC
Cl	ppm	N.D.	50	With reference to EN14582(2016) Furnace combustion/IC
Br	ppm	N.D.	50	With reference to EN14582(2016) Furnace combustion/IC
I	ppm	N.D.	50	With reference to EN14582(2016) Furnace combustion/IC

Note: The results shown in this test report refer only to the sample(s)tested.
Plating part

N.D. means the analysis result is less than fixed quality lower limit level calculated according to our established precision management condition. This test report may only be quoted in full.
mg/kg=ppm

THE INDUSTRIAL ANALYSIS SERVICE LTD.

TAKANORI YOSHIDA

Test Items	Unit	Test result	D.L.	Test Method
Sb	ppm	N.D.	2.0	With reference to US EPA Method 3050B Acid digestion/ICP/MS
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mg/kg=ppm

Test Items	Unit	Test result	D.L.	Test Method
Monobromobiphenyl (MonoBB)	ppm	N.D.	-	With reference to IEC62321-6(2015) GC/MS
Dibromobiphenyl (DiBB)	ppm	N.D.	-	With reference to IEC62321-6(2015) GC/MS
Tribromobiphenyl (TriBB)	ppm	N.D.	-	With reference to IEC62321-6(2015) GC/MS
Tetrabrobobiphenyl (TetraBB)	ppm	N.D.	-	With reference to IEC62321-6(2015) GC/MS
Pentabromobiphenyl (PentaBB)	ppm	N.D.	-	With reference to IEC62321-6(2015) GC/MS
Hexabromobiphenyl (HexaBB)	ppm	N.D.	-	With reference to IEC62321-6(2015) GC/MS
Heptabromobiphenyl (HeptaBB)	ppm	N.D.	-	With reference to IEC62321-6(2015) GC/MS
Octabromobiphenyl (OctaBB)	ppm	N.D.	-	With reference to IEC62321-6(2015) GC/MS
Nonabromobiphenyl (NonaBB)	ppm	N.D.	-	With reference to IEC62321-6(2015) GC/MS
Decabromobiphenyl (DecaBB)	ppm	N.D.	-	With reference to IEC62321-6(2015) GC/MS
SUM PBBs	ppm	N.D.	5.0	With reference to IEC62321-6(2015) GC/MS
Monobromodiphenylether (MonoBDE)	ppm	N.D.	-	With reference to IEC62321-6(2015) GC/MS
Dibromodiphenylether (DiBDE)	ppm	N.D.	-	With reference to IEC62321-6(2015) GC/MS
Tribromodiphenylether (TriBDE)	ppm	N.D.	-	With reference to IEC62321-6(2015) GC/MS
Tetrabromodiphenylether (TetraBDE)	ppm	N.D.	-	With reference to IEC62321-6(2015) GC/MS
Pentabromodiphenylether (PentaBDE)	ppm	N.D.	-	With reference to IEC62321-6(2015) GC/MS
Hexabromodiphenylether (HexaBDE)	ppm	N.D.	-	With reference to IEC62321-6(2015) GC/MS
Heptabromodiphenylether (HeptaBDE)	ppm	N.D.	-	With reference to IEC62321-6(2015) GC/MS
Octabromodiphenylether (OctaBDE)	ppm	N.D.	-	With reference to IEC62321-6(2015) GC/MS
Nonabromodiphenylether (NonaBDE)	ppm	N.D.	-	With reference to IEC62321-6(2015) GC/MS
Decabromodiphenylether (DecaBDE)	ppm	N.D.	-	With reference to IEC62321-6(2015) GC/MS
SUM PBDEs	ppm	N.D.	5.0	With reference to IEC62321-6(2015) GC/MS
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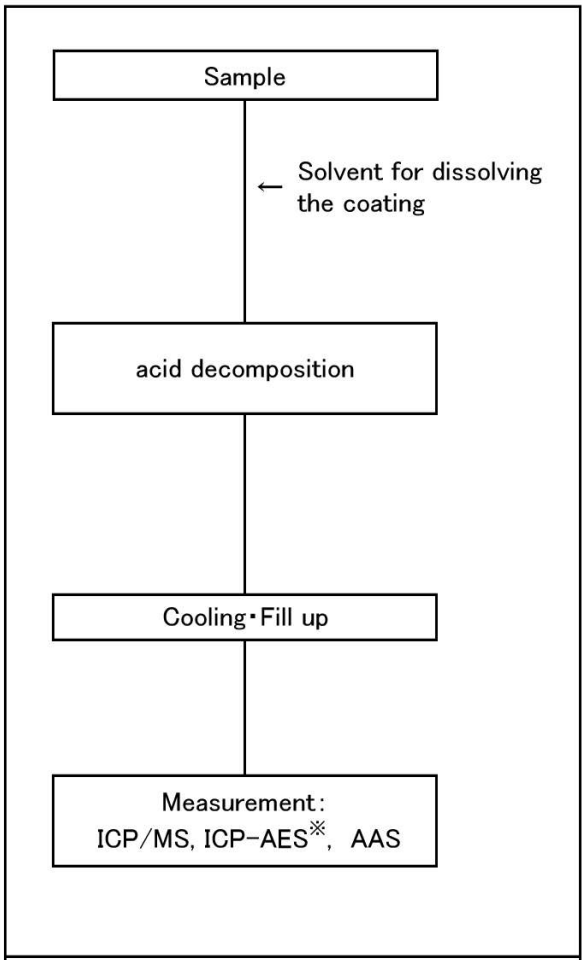
mg/kg=ppm

Flow chart

Report No.	:	EW260000000434-01
Measurement days	:	25 May 2026 ～ 15 June 2026
Operator	:	Wataru Imaoka　　Risa Minowada

Cd, Pb, Hg, Sb



Note

The coating was completely digested.

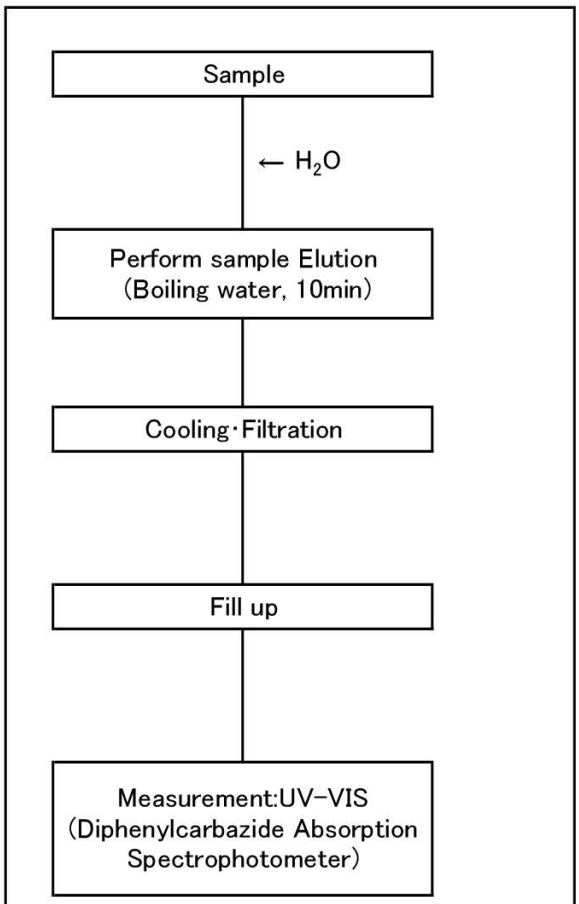
ICP/MS :Agilent Technologies 7700X

ICP-AES : Rigaku CIROS CCD

AAS : HIRANUMA MERCURY ANALYZER HG-200

※It is also called ICP-OES.

Cr6+



Note

Cr^{6+} (ppm)=extracted weight of Cr^{6+} (μg)÷sample weight(g)

※ In the case of plating layer

plating layer sample weight(g) =

surface area(㎠) x coatings thickness(cm) x density(g/㎤)

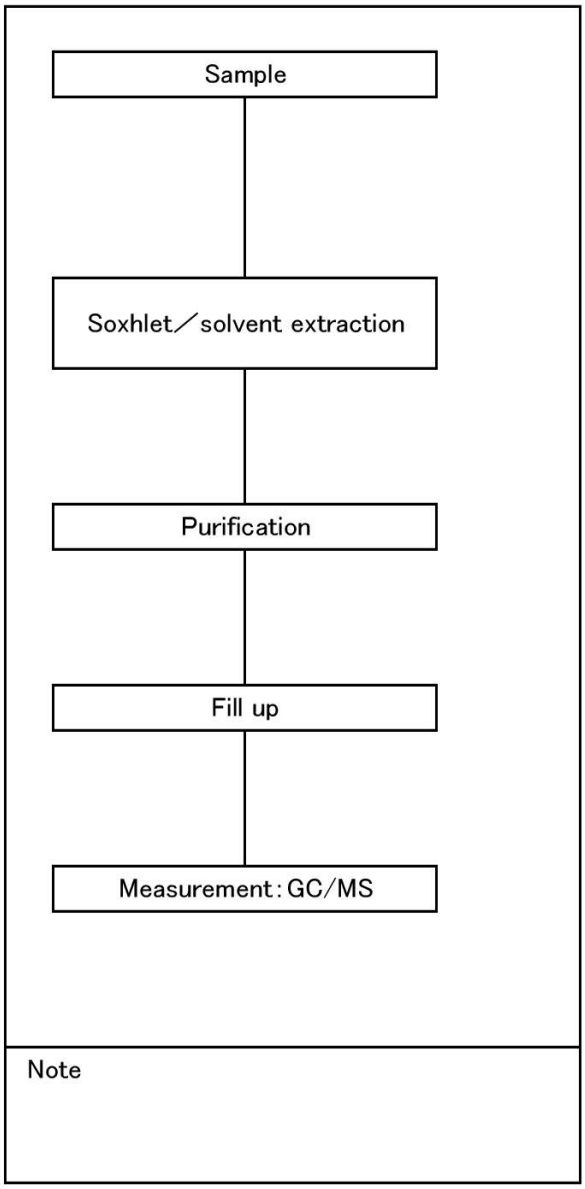
where data of the plating layer used is offered by the client.

UV-VIS : HITACHI High-Technologies U-2910

Flow chart

Report No.	:	EW260000000434-01
Measurement days	:	25 May 2026 ～ 15 June 2026
Operator	:	Yuichi Kuboji

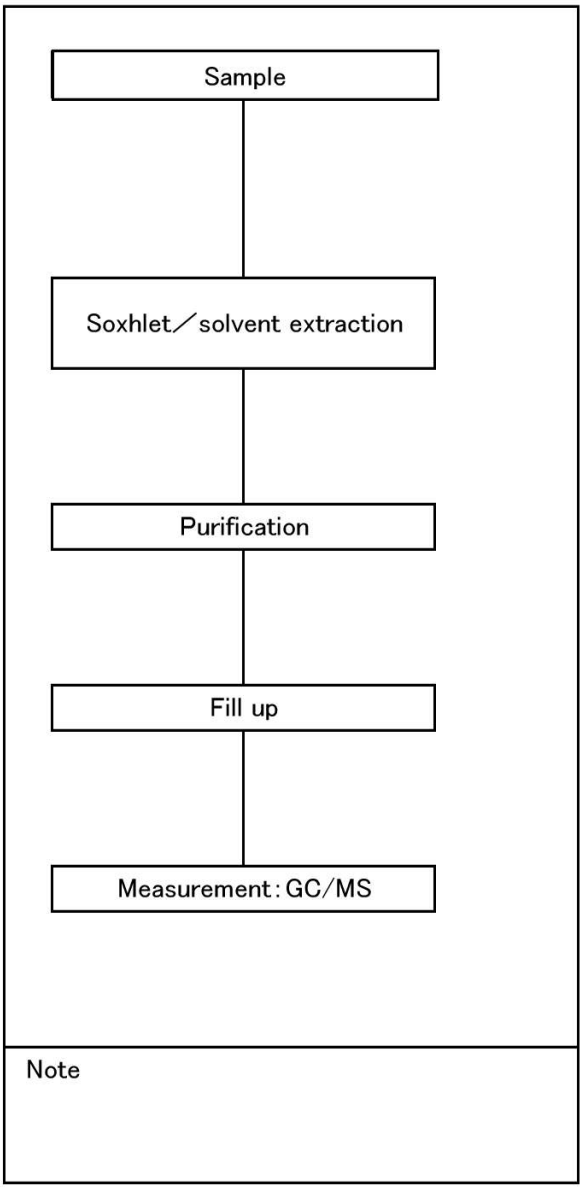
PBBs, PBDEs



Note

GC/MS:Agilent Technologies GC 7890B MS 5977A

phthalates



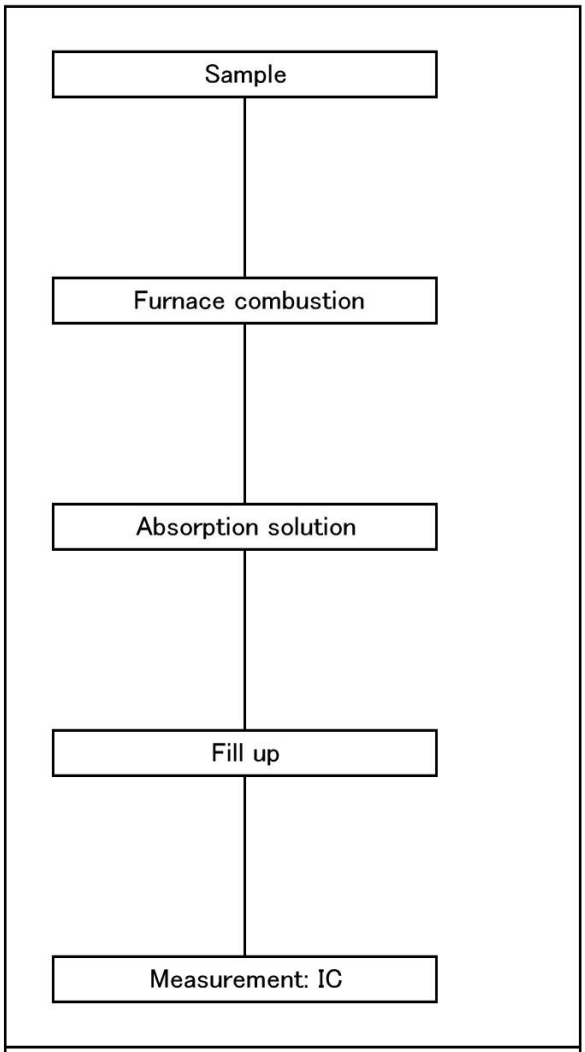
Note

GC/MS : SHIMADZU GCMS-QP2020

Flow chart

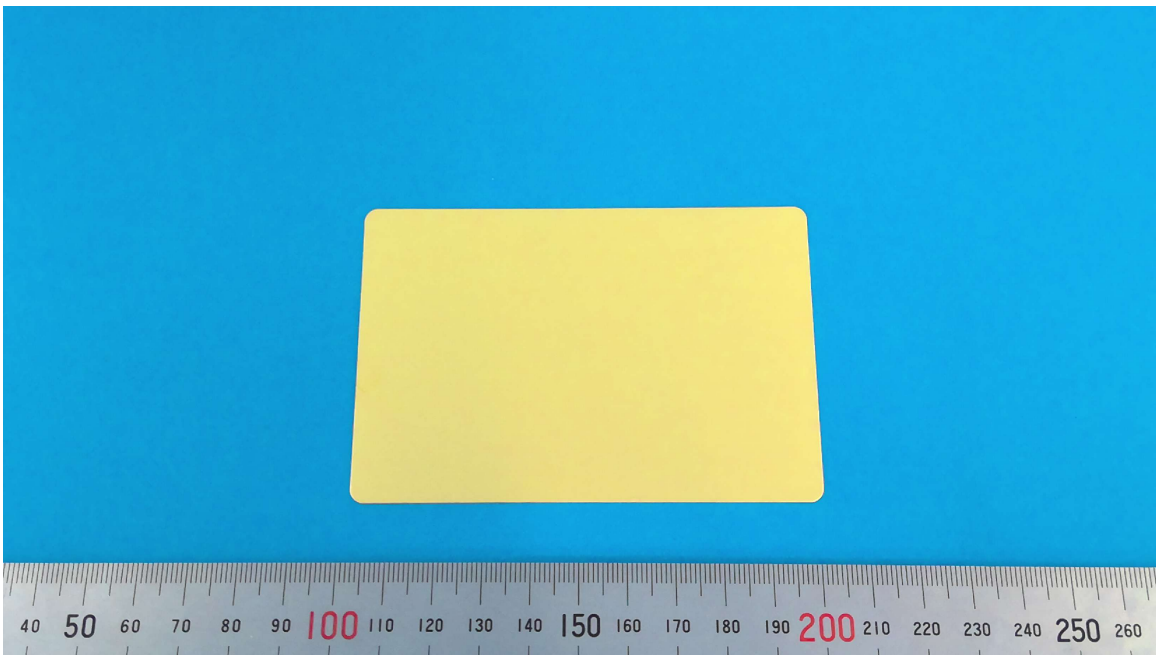
Report No.	:	EW260000000434-01
Measurement days	:	25 May 2026 ～ 15 June 2026
Operator	:	Youko Tajima

F, Cl, Br, I



Note

IC : DIONEX ICS-1100 RFIC


40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260