



## THE INDUSTRIAL ANALYSIS SERVICE LTD.

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2-11-7 Yatsuka Souka Saitama 340-0028 Japan

## TEST REPORT

Request No. 59002510186

Report No. EW250000000825-01

Date of issue: 11 November 2025

To. NGK Electronics Devices, Inc.

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

Name of sample: Pd Plating

Date of receipt of sample: 3 November 2025

Measurement days: 3 November 2025 ~ 11 November 2025

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

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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 |
| Tetrabromobiphenyl (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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|                                            |      |             |      |                                          |

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

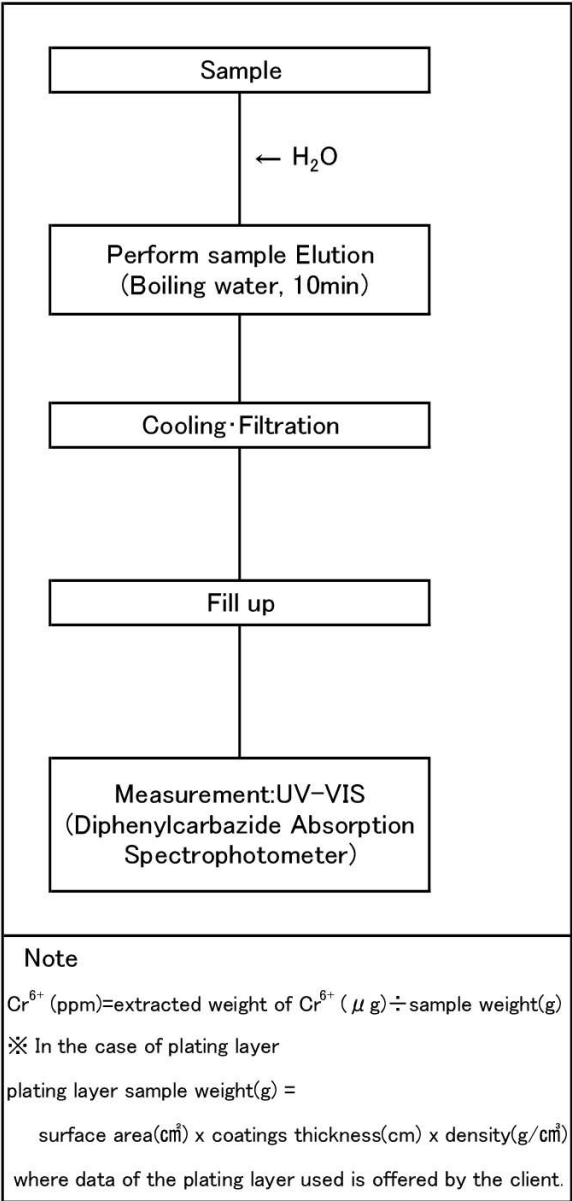
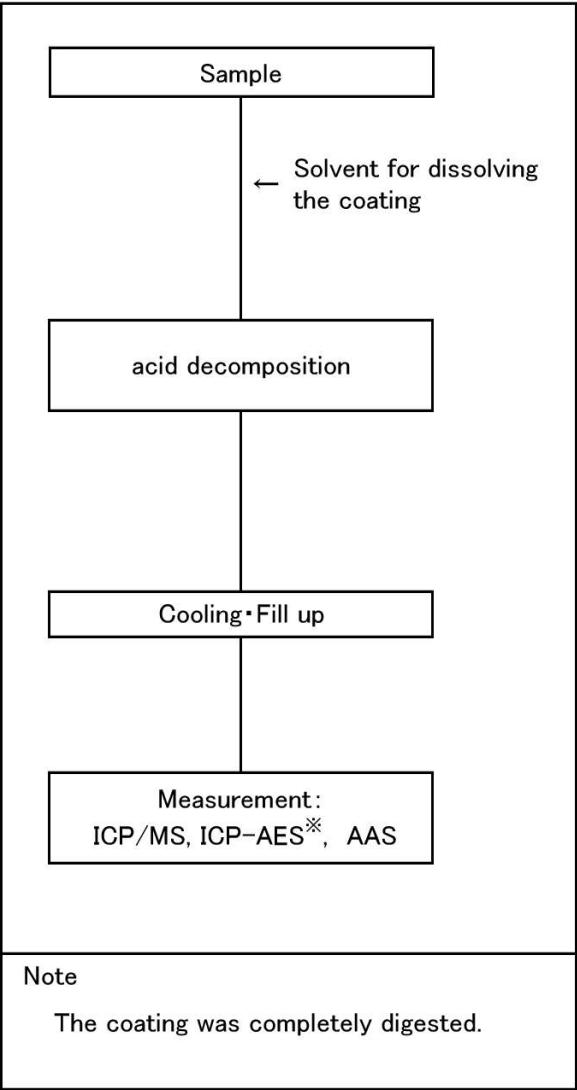
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mg/kg=ppm

Flow chart

|                  |                                      |
|------------------|--------------------------------------|
| Report No.       | : EW250000000825-01                  |
| Measurement days | : 3 November 2025 ~ 11 November 2025 |
| Operator         | : Wataru Imaoka      Risa Minowada   |

Cd, Pb, Hg, Sb

Cr6+



ICP/MS :Agilent Technologies 7700X  
ICP-AES : Rigaku CIROS CCD  
AAS : HIRANUMA MERCURY ANALYZER HG-200

※It is also called ICP-OES.

UV-VIS : HITACHI High-Technologies U-2910

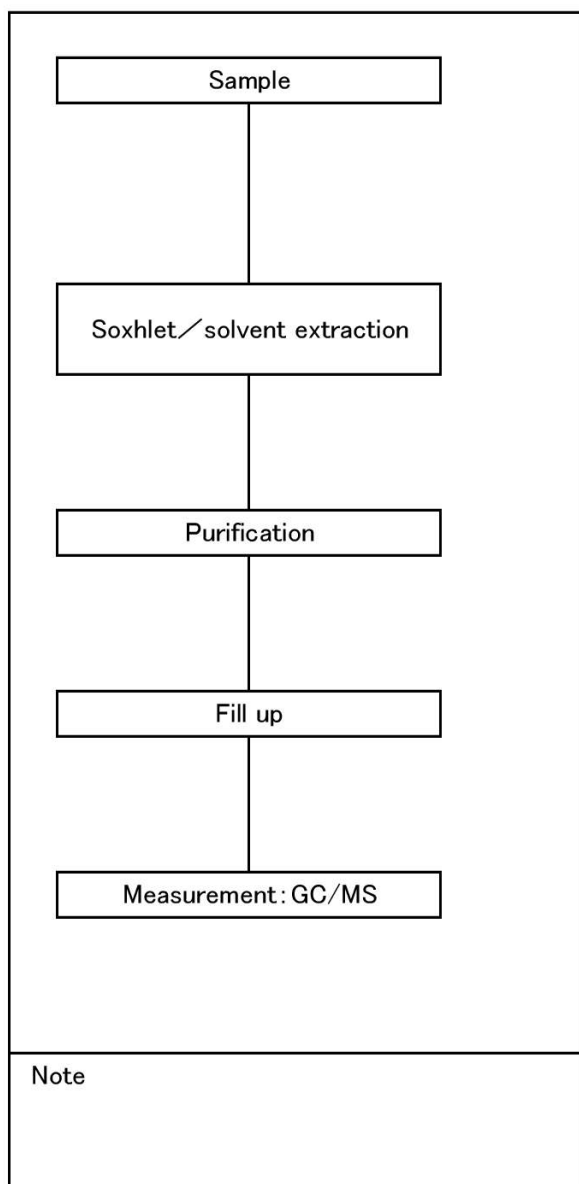
Flow chart

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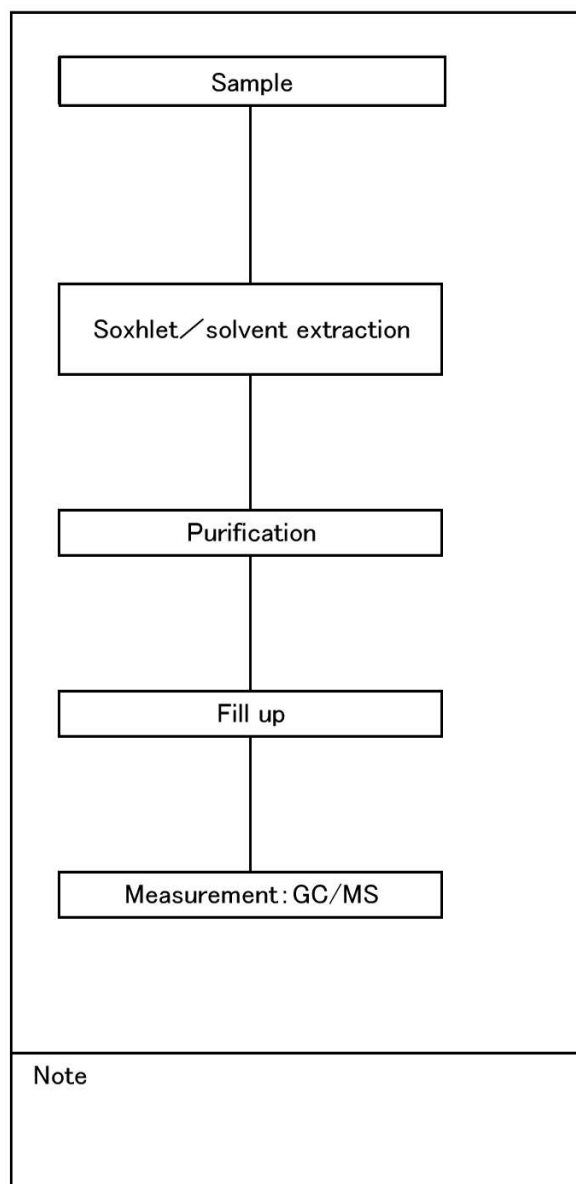
Operator : Yuichi Kuboji

PBBs, PBDEs



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

phthalates



GC/MS : SHIMADZU GCMS-QP2020

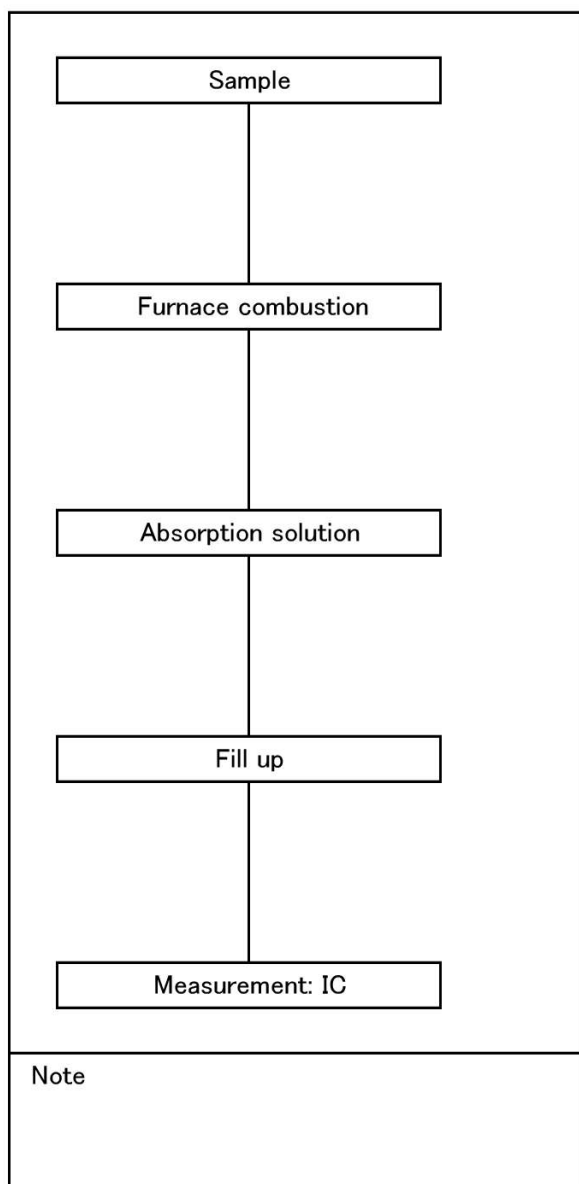
Flow chart

Report No. : EW250000000825-01

Measurement days : 3 November 2025 ~ 11 November 2025

Operator : Youko Tajima

F, Cl, Br, I



IC : DIONEX ICS-1100 RFIC

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