

## Test Report

No.: ETR24505343M02

Date: 13-Jun-2024

Page: 1 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

The following sample(s) was/were submitted and identified by the applicant as:

Sample Submitted By : Vanguard International Semiconductor Corporation

Sample Name : 2024 VIS FINISHED WAFER

Style/Item No. : VIS LOGIC WAFER BY ALUMINUM PROCESS

Sample Receiving Date : 30-May-2024

Testing Period : 30-May-2024 to 13-Jun-2024

- Test Requested** :
- (1) As specified by client, with reference to RoHS 2011/65/EU Annex II and amending Directive (EU) 2015/863 to determine Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs, DBP, BBP, DEHP, DIBP contents in the submitted sample(s).
  - (2) As specified by client, the sample(s) was/were tested for 5 PBTs with reference to Regulation of Persistent, Bioaccumulative, Toxic (PBT) Chemicals under Toxic Substances Control Act (TSCA) Section 6(h). Please refer to result table for testing item(s).
  - (3) As specified by client, to test PAHs and other item(s).

**Test Results** : Please refer to following pages.

- Conclusion** :
- (1) Based on the performed tests on submitted sample(s), the test results of Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs, DBP, BBP, DEHP, DIBP comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.
  - (2) Based on the performed tests on submitted sample(s), the test result(s) comply with the limits as set by Persistent, Bioaccumulative, Toxic (PBT) Chemicals under Toxic Substances Control Act (TSCA) Section 6(h).
  - (3) Based upon the performed tests on the submitted sample(s), the test results of PAHs (15 items) comply with the limits of PAHs requirement (Category 3) 「Other consumer products」 as set by German Committee on Product Safety (AfPS) GS PAHs.

*Troy Chang*  
Troy Chang / Department Manager  
Signed for and on behalf of  
SGS TAIWAN LTD.  
Chemical Laboratory - Taipei



PIN CODE: DABFD608

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

Date: 13-Jun-2024

Page: 2 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

## Test Part Description

No.1 : WAFER

## Test Result(s)

| Test Item(s)               | Method                                                                              | Unit  | MDL | Result | Limit |
|----------------------------|-------------------------------------------------------------------------------------|-------|-----|--------|-------|
|                            |                                                                                     |       |     | No.1   |       |
| Cadmium (Cd)               | With reference to IEC 62321-5: 2013, analysis was performed by ICP-OES.             | mg/kg | 2   | n.d.   | 100   |
| Lead (Pb)                  | With reference to IEC 62321-5: 2013, analysis was performed by ICP-OES.             | mg/kg | 2   | n.d.   | 1000  |
| Mercury (Hg)               | With reference to IEC 62321-4: 2013+ AMD1: 2017, analysis was performed by ICP-OES. | mg/kg | 2   | n.d.   | 1000  |
| Hexavalent Chromium Cr(VI) | With reference to IEC 62321-7-2: 2017, analysis was performed by UV-VIS.            | mg/kg | 8   | n.d.   | 1000  |
| Monobromobiphenyl          | With reference to IEC 62321-6: 2015, analysis was performed by GC/MS.               | mg/kg | 5   | n.d.   | -     |
| Dibromobiphenyl            |                                                                                     | mg/kg | 5   | n.d.   | -     |
| Tribromobiphenyl           |                                                                                     | mg/kg | 5   | n.d.   | -     |
| Tetrabromobiphenyl         |                                                                                     | mg/kg | 5   | n.d.   | -     |
| Pentabromobiphenyl         |                                                                                     | mg/kg | 5   | n.d.   | -     |
| Hexabromobiphenyl          |                                                                                     | mg/kg | 5   | n.d.   | -     |
| Heptabromobiphenyl         |                                                                                     | mg/kg | 5   | n.d.   | -     |
| Octabromobiphenyl          |                                                                                     | mg/kg | 5   | n.d.   | -     |
| Nonabromobiphenyl          |                                                                                     | mg/kg | 5   | n.d.   | -     |
| Decabromobiphenyl          |                                                                                     | mg/kg | 5   | n.d.   | -     |
| Sum of PBBs                |                                                                                     | mg/kg | -   | n.d.   | 1000  |
| Monobromodiphenyl ether    |                                                                                     | mg/kg | 5   | n.d.   | -     |
| Dibromodiphenyl ether      |                                                                                     | mg/kg | 5   | n.d.   | -     |
| Tribromodiphenyl ether     |                                                                                     | mg/kg | 5   | n.d.   | -     |
| Tetrabromodiphenyl ether   |                                                                                     | mg/kg | 5   | n.d.   | -     |
| Pentabromodiphenyl ether   |                                                                                     | mg/kg | 5   | n.d.   | -     |
| Hexabromodiphenyl ether    |                                                                                     | mg/kg | 5   | n.d.   | -     |
| Heptabromodiphenyl ether   |                                                                                     | mg/kg | 5   | n.d.   | -     |
| Octabromodiphenyl ether    |                                                                                     | mg/kg | 5   | n.d.   | -     |
| Nonabromodiphenyl ether    |                                                                                     | mg/kg | 5   | n.d.   | -     |
| Decabromodiphenyl ether    |                                                                                     | mg/kg | 5   | n.d.   | -     |
| Sum of PBDEs               |                                                                                     | mg/kg | -   | n.d.   | 1000  |

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

Date: 13-Jun-2024

Page: 3 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

| Test Item(s)                                                                                                                                                                                             | Method                                                                                | Unit  | MDL | Result | Limit |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------|-----|--------|-------|
|                                                                                                                                                                                                          |                                                                                       |       |     | No.1   |       |
| Butyl benzyl phthalate (BBP)                                                                                                                                                                             | With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.                 | mg/kg | 50  | n.d.   | 1000  |
| Dibutyl phthalate (DBP)                                                                                                                                                                                  | With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.                 | mg/kg | 50  | n.d.   | 1000  |
| Di-(2-ethylhexyl) phthalate (DEHP)                                                                                                                                                                       | With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.                 | mg/kg | 50  | n.d.   | 1000  |
| Diisobutyl phthalate (DIBP)                                                                                                                                                                              | With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.                 | mg/kg | 50  | n.d.   | 1000  |
| Diisodecyl phthalate (DIDP) (CAS No.: 26761-40-0, 68515-49-1)                                                                                                                                            | With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.                 | mg/kg | 50  | n.d.   | -     |
| Diisononyl phthalate (DINP) (CAS No.: 28553-12-0, 68515-48-0)                                                                                                                                            | With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.                 | mg/kg | 50  | n.d.   | -     |
| Di-n-octyl phthalate (DNOP) (CAS No.: 117-84-0)                                                                                                                                                          | With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.                 | mg/kg | 50  | n.d.   | -     |
| Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified ( $\alpha$ - HBCDD, $\beta$ - HBCDD, $\gamma$ - HBCDD) (CAS No.: 25637-99-4, 3194-55-6 (134237-51-7, 134237-50-6, 134237-52-8)) | With reference to IEC 62321-9: 2021, analysis was performed by GC/MS.                 | mg/kg | 20  | n.d.   | -     |
| Polychlorinated biphenyls (PCBs)                                                                                                                                                                         | With reference to US EPA 3550C: 2007, analysis was performed by GC/MS.                | mg/kg | 0.5 | n.d.   | -     |
| Polychlorinated naphthalene (PCNs)                                                                                                                                                                       | With reference to US EPA 3550C: 2007, analysis was performed by GC/MS.                | mg/kg | 5   | n.d.   | -     |
| Polychlorinated terphenyls (PCTs)                                                                                                                                                                        | With reference to US EPA 3550C: 2007, analysis was performed by GC/MS.                | mg/kg | 0.5 | n.d.   | -     |
| Short Chain Chlorinated Paraffins(C10-C13) (SCCP) (CAS No.: 85535-84-8)                                                                                                                                  | With reference to ISO 18219-1: 2021, analysis was performed by GC/MS.                 | mg/kg | 50  | n.d.   | -     |
| Tetrabromobisphenol A (TBBP-A) (CAS No.: 79-94-7)                                                                                                                                                        | With reference to RSTS-E&E-121, analysis was performed by LC/MS.                      | mg/kg | 10  | n.d.   | -     |
| <b>AZO Dyes</b>                                                                                                                                                                                          |                                                                                       |       |     |        |       |
| 4-aminodiphenyl (CAS No.: 92-67-1)                                                                                                                                                                       | With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD. | mg/kg | 3   | n.d.   | -     |

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

Date: 13-Jun-2024

Page: 4 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

| Test Item(s)                                                  | Method                                                                                | Unit  | MDL | Result | Limit |
|---------------------------------------------------------------|---------------------------------------------------------------------------------------|-------|-----|--------|-------|
|                                                               |                                                                                       |       |     | No.1   |       |
| Benzidine (CAS No.: 92-87-5)                                  | With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD. | mg/kg | 3   | n.d.   | -     |
| 4-chloro-o-toluidine (CAS No.: 95-69-2)                       | With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD. | mg/kg | 3   | n.d.   | -     |
| 2-naphthylamine (CAS No.: 91-59-8)                            | With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD. | mg/kg | 3   | n.d.   | -     |
| o-aminoazotoluene (CAS No.: 97-56-3)                          | With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD. | mg/kg | 3   | n.d.   | -     |
| 5-nitro-o-toluidine (CAS No.: 99-55-8)                        | With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD. | mg/kg | 3   | n.d.   | -     |
| 4-chloroaniline (CAS No.: 106-47-8)                           | With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD. | mg/kg | 3   | n.d.   | -     |
| 2,4-diaminoanisole (CAS No.: 615-05-4)                        | With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD. | mg/kg | 3   | n.d.   | -     |
| 4,4'-diaminodiphenylmethane (MDA) (CAS No.: 101-77-9)         | With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD. | mg/kg | 3   | n.d.   | -     |
| 3,3'-dichlorobenzidine (CAS No.: 91-94-1)                     | With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD. | mg/kg | 3   | n.d.   | -     |
| 3,3'-dimethoxybenzidine (CAS No.: 119-90-4)                   | With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD. | mg/kg | 3   | n.d.   | -     |
| 3,3'-dimethylbenzidine (CAS No.: 119-93-7)                    | With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD. | mg/kg | 3   | n.d.   | -     |
| 3,3'-dimethyl-4,4'-diaminodiphenylmethane (CAS No.: 838-88-0) | With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD. | mg/kg | 3   | n.d.   | -     |

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

Date: 13-Jun-2024

Page: 5 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

| Test Item(s)                                             | Method                                                                                                          | Unit  | MDL | Result   | Limit |
|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-------|-----|----------|-------|
|                                                          |                                                                                                                 |       |     | No.1     |       |
| 2-methoxy-5-methylaniline (CAS No.: 120-71-8)            | With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.                           | mg/kg | 3   | n.d.     | -     |
| 4,4'-methylene-bis-(2-chloroaniline) (CAS No.: 101-14-4) | With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.                           | mg/kg | 3   | n.d.     | -     |
| 4,4'-oxydianiline (CAS No.: 101-80-4)                    | With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.                           | mg/kg | 3   | n.d.     | -     |
| 4,4'-thiodianiline (CAS No.: 139-65-1)                   | With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.                           | mg/kg | 3   | n.d.     | -     |
| o-toluidine (CAS No.: 95-53-4)                           | With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.                           | mg/kg | 3   | n.d.     | -     |
| 2,4-diaminotoluene (CAS No.: 95-80-7)                    | With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.                           | mg/kg | 3   | n.d.     | -     |
| 2,4,5-trimethylaniline (CAS No.: 137-17-7)               | With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.                           | mg/kg | 3   | n.d.     | -     |
| o-anisidine (CAS No.: 90-04-0)                           | With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.                           | mg/kg | 3   | n.d.     | -     |
| 4-aminoazobenzene (CAS No.: 60-09-3)                     | With reference to EN ISO 14362-1: 2017 or/and EN ISO 14362-3: 2017, analysis was performed by GC/MS & HPLC/DAD. | mg/kg | 3   | n.d.     | -     |
| 2,4-xylydine (CAS No.: 95-68-1)                          | With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.                           | mg/kg | 3   | n.d.     | -     |
| 2,6-xylydine (CAS No.: 87-62-7)                          | With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.                           | mg/kg | 3   | n.d.     | -     |
| Polyvinyl chloride (PVC)                                 | With reference to ASTM E1252: 2021, analysis was performed by FT-IR and Flame Test.                             | **    | -   | Negative | -     |

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

Date: 13-Jun-2024

Page: 6 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

| Test Item(s)                        | Method                                                                 | Unit  | MDL  | Result | Limit |
|-------------------------------------|------------------------------------------------------------------------|-------|------|--------|-------|
|                                     |                                                                        |       |      | No.1   |       |
| Formaldehyde (CAS No.: 50-00-0)     | With reference to ISO 17226-1: 2021, analysis was performed by LC/DAD. | mg/kg | 3    | n.d.   | -     |
| Silver(Ag) (CAS No.: 7440-22-4)     | With reference to US EPA 3052: 1996, analysis was performed by ICP-MS. | mg/kg | 1    | n.d.   | -     |
| Arsenic(As) (CAS No.: 7440-38-2)    | With reference to US EPA 3052: 1996, analysis was performed by ICP-MS. | mg/kg | 1    | n.d.   | -     |
| Beryllium(Be) (CAS No.: 7440-41-7)  | With reference to US EPA 3052: 1996, analysis was performed by ICP-MS. | mg/kg | 1    | n.d.   | -     |
| Indium(In) (CAS No.: 7440-74-6)     | With reference to US EPA 3052: 1996, analysis was performed by ICP-MS. | mg/kg | 1    | n.d.   | -     |
| Nickel(Ni) (CAS No.: 7440-02-0)     | With reference to US EPA 3052: 1996, analysis was performed by ICP-MS. | mg/kg | 1    | n.d.   | -     |
| Platinum(Pt) (CAS No.: 7440-06-4)   | With reference to US EPA 3052: 1996, analysis was performed by ICP-MS. | mg/kg | 1    | n.d.   | -     |
| Antimony(Sb) (CAS No.: 7440-36-0)   | With reference to US EPA 3052: 1996, analysis was performed by ICP-MS. | mg/kg | 1    | n.d.   | -     |
| Fluorine (F) (CAS No.: 14762-94-8)  | With reference to BS EN 14582: 2016, analysis was performed by IC.     | mg/kg | 50   | n.d.   | -     |
| Chlorine (Cl) (CAS No.: 22537-15-1) | With reference to BS EN 14582: 2016, analysis was performed by IC.     | mg/kg | 50   | n.d.   | -     |
| Bromine (Br) (CAS No.: 10097-32-2)  | With reference to BS EN 14582: 2016, analysis was performed by IC.     | mg/kg | 50   | n.d.   | -     |
| Iodine (I) (CAS No.: 14362-44-8)    | With reference to BS EN 14582: 2016, analysis was performed by IC.     | mg/kg | 50   | n.d.   | -     |
| Tributyl tin (TBT)                  | With reference to ISO 17353: 2004, analysis was performed by GC/FPD.   | mg/kg | 0.03 | n.d.   | -     |
| Triphenyl tin (TPT)                 | With reference to ISO 17353: 2004, analysis was performed by GC/FPD.   | mg/kg | 0.03 | n.d.   | -     |
| Dibutyl tin (DBT)                   | With reference to ISO 17353: 2004, analysis was performed by GC/FPD.   | mg/kg | 0.03 | n.d.   | -     |
| Dioctyl tin (DOT)                   | With reference to ISO 17353: 2004, analysis was performed by GC/FPD.   | mg/kg | 0.03 | n.d.   | -     |
| Monobutyl tin (MBT)                 | With reference to ISO 17353: 2004, analysis was performed by GC/FPD.   | mg/kg | 0.03 | n.d.   | -     |
| Tetrabutyl tin (TeBT)               | With reference to ISO 17353: 2004, analysis was performed by GC/FPD.   | mg/kg | 0.03 | n.d.   | -     |

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

Date: 13-Jun-2024

Page: 7 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

| Test Item(s)                                                                                                                                                                                                                                                 | Method                                                                               | Unit  | MDL   | Result | Limit |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------|-------|--------|-------|
|                                                                                                                                                                                                                                                              |                                                                                      |       |       | No.1   |       |
| Monooctyl tin (MOT)                                                                                                                                                                                                                                          | With reference to ISO 17353: 2004, analysis was performed by GC/FPD.                 | mg/kg | 0.03  | n.d.   | -     |
| Bis(tributyltin) oxide (TBTO) (CAS No.: 56-35-9)                                                                                                                                                                                                             | Calculated from the result of Tributyl Tin (TBT).                                    | mg/kg | 0.03▲ | n.d.   | -     |
| 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (CAS No.: 15571-58-1)                                                                                                                                                        | Calculated from the result of Dioctyl Tin (DOT).                                     | mg/kg | 0.03▲ | n.d.   | -     |
| Reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE) | Calculated from the results of Dioctyl Tin (DOT) and Monooctyl Tin (MOT).            | mg/kg | 0.03▲ | n.d.   | -     |
| Uranium (U) (Radioactive element) (CAS No.: 7440-61-1)                                                                                                                                                                                                       | With reference to US EPA 3052: 1996 & 6020B: 2014, analysis was performed by ICP-MS. | mg/kg | 1     | n.d.   | -     |
| Thorium (Th) (Radioactive element) (CAS No.: 7440-29-1)                                                                                                                                                                                                      | With reference to US EPA 3052: 1996 & 6020B: 2014, analysis was performed by ICP-MS. | mg/kg | 1     | n.d.   | -     |
| Strontium (Sr) (Radioactive element) (CAS No.: 7440-24-6)                                                                                                                                                                                                    | With reference to US EPA 3052: 1996 & 6020B: 2014, analysis was performed by ICP-MS. | mg/kg | 1     | n.d.   | -     |
| Caesium (Cs) (Radioactive element) (CAS No.: 7440-46-2)                                                                                                                                                                                                      | With reference to US EPA 3052: 1996 & 6020B: 2014, analysis was performed by ICP-MS. | mg/kg | 1     | n.d.   | -     |
| Medium Chain Chlorinated Paraffins(C14-C17) (MCCP) (CAS No.: 85535-85-9)                                                                                                                                                                                     | With reference to ISO 18219-2: 2021, analysis was performed by GC/MS.                | mg/kg | 50    | n.d.   | -     |
| PFOS and its salts (CAS No.: 1763-23-1 and its salts)                                                                                                                                                                                                        | With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.            | mg/kg | 0.01  | n.d.   | -     |
| PFOA and its salts (CAS No.: 335-67-1 and its salts)                                                                                                                                                                                                         | With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.            | mg/kg | 0.01  | n.d.   | -     |

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

Date: 13-Jun-2024

Page: 8 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

| Test Item(s)                                   | Method                                                                  | Unit  | MDL | Result | Limit |
|------------------------------------------------|-------------------------------------------------------------------------|-------|-----|--------|-------|
|                                                |                                                                         |       |     | No.1   |       |
| <b>Polycyclic Aromatic Hydrocarbons (PAHs)</b> |                                                                         |       |     |        |       |
| Benzo[a]pyrene (CAS No.: 50-32-8)              | With reference to AfPS GS 2019:01 PAK, analysis was performed by GC/MS. | mg/kg | 0.2 | n.d.   | Δ     |
| Benzo[e]pyrene (CAS No.: 192-97-2)             |                                                                         | mg/kg | 0.2 | n.d.   | Δ     |
| Benzo[a]anthracene (CAS No.: 56-55-3)          |                                                                         | mg/kg | 0.2 | n.d.   | Δ     |
| Benzo[b]fluoranthene (CAS No.: 205-99-2)       |                                                                         | mg/kg | 0.2 | n.d.   | Δ     |
| Benzo[j]fluoranthene (CAS No.: 205-82-3)       |                                                                         | mg/kg | 0.2 | n.d.   | Δ     |
| Benzo[k]fluoranthene (CAS No.: 207-08-9)       |                                                                         | mg/kg | 0.2 | n.d.   | Δ     |
| Chrysene (CAS No.: 218-01-9)                   |                                                                         | mg/kg | 0.2 | n.d.   | Δ     |
| Dibenzo[a,h]anthracene (CAS No.: 53-70-3)      |                                                                         | mg/kg | 0.2 | n.d.   | Δ     |
| Benzo[g,h,i]perylene (CAS No.: 191-24-2)       |                                                                         | mg/kg | 0.2 | n.d.   | Δ     |
| Indeno[1,2,3-c,d]pyrene (CAS No.: 193-39-5)    |                                                                         | mg/kg | 0.2 | n.d.   | Δ     |
| Anthracene (CAS No.: 120-12-7)                 |                                                                         | mg/kg | 0.2 | n.d.   | Δ     |
| Fluoranthene (CAS No.: 206-44-0)               |                                                                         | mg/kg | 0.2 | n.d.   | Δ     |
| Phenanthrene (CAS No.: 85-01-8)                |                                                                         | mg/kg | 0.2 | n.d.   | Δ     |
| Pyrene (CAS No.: 129-00-0)                     |                                                                         | mg/kg | 0.2 | n.d.   | Δ     |
| Naphthalene (CAS No.: 91-20-3)                 |                                                                         | mg/kg | 0.2 | n.d.   | Δ     |
| <b>Sum of 15 PAHs</b>                          |                                                                         | mg/kg | -   | n.d.   | Δ     |
| Acenaphthylene (CAS No.: 208-96-8)             | With reference to AfPS GS 2019:01 PAK, analysis was performed by GC/MS. | mg/kg | 0.2 | n.d.   | -     |
| Acenaphthene (CAS No.: 83-32-9)                |                                                                         | mg/kg | 0.2 | n.d.   | -     |
| Fluorene (CAS No.: 86-73-7)                    |                                                                         | mg/kg | 0.2 | n.d.   | -     |
| <b>Chlorofluorocarbons (CFCs)</b>              |                                                                         |       |     |        |       |
| CFC-13 (CAS No.: 75-72-9)                      | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.  | mg/kg | 1   | n.d.   | -     |
| CFC-111 (CAS No.: 354-56-3)                    | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.  | mg/kg | 1   | n.d.   | -     |
| CFC-112 (CAS No.: 76-12-0)                     | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.  | mg/kg | 1   | n.d.   | -     |
| CFC-211 (CAS No.: 422-78-6)                    | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.  | mg/kg | 1   | n.d.   | -     |

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

Date: 13-Jun-2024

Page: 9 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

| Test Item(s)                            | Method                                                                 | Unit  | MDL | Result | Limit |
|-----------------------------------------|------------------------------------------------------------------------|-------|-----|--------|-------|
|                                         |                                                                        |       |     | No.1   |       |
| CFC-212 (CAS No.: 3182-26-1)            | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| CFC-213 (CAS No.: 2354-06-5)            | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| CFC-214 (CAS No.: 29255-31-0)           | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| CFC-215 (CAS No.: 4259-43-2)            | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| CFC-216 (CAS No.: 661-97-2)             | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| CFC-217 (CAS No.: 422-86-6)             | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| CFC-12 (CAS No.: 75-71-8)               | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| CFC-11 (CAS No.: 75-69-4)               | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| CFC-115 (CAS No.: 76-15-3)              | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| CFC-114 (CAS No.: 76-14-2)              | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| CFC-113 (CAS No.: 76-13-1)              | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| <b>Hydrochlorofluorocarbons (HCFCs)</b> |                                                                        |       |     |        |       |
| HCFC-21 (CAS No.: 75-43-4)              | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-22 (CAS No.: 75-45-6)              | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-31 (CAS No.: 593-70-4)             | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-121 (CAS No.: 354-14-3)            | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-122 (CAS No.: 354-21-2)            | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-123 (CAS No.: 306-83-2)            | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

Date: 13-Jun-2024

Page: 10 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

| Test Item(s)                   | Method                                                                 | Unit  | MDL | Result | Limit |
|--------------------------------|------------------------------------------------------------------------|-------|-----|--------|-------|
|                                |                                                                        |       |     | No.1   |       |
| HCFC-124 (CAS No.: 2837-89-0)  | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-131 (CAS No.: 359-28-4)   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-132b (CAS No.: 1649-08-7) | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-133a (CAS No.: 75-88-7)   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-142b (CAS No.: 75-68-3)   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-221 (CAS No.: 422-26-4)   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-222 (CAS No.: 422-49-1)   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-223 (CAS No.: 422-52-6)   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-224 (CAS No.: 422-54-8)   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-225ca (CAS No.: 422-56-0) | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-225cb (CAS No.: 507-55-1) | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-226 (CAS No.: 431-87-8)   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-231 (CAS No.: 421-94-3)   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-232 (CAS No.: 460-89-9)   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-233 (CAS No.: 7125-84-0)  | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-234 (CAS No.: 425-94-5)   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-235 (CAS No.: 460-92-4)   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-241 (CAS No.: 666-27-3)   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

Date: 13-Jun-2024

Page: 11 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

| Test Item(s)                   | Method                                                                 | Unit  | MDL | Result | Limit |
|--------------------------------|------------------------------------------------------------------------|-------|-----|--------|-------|
|                                |                                                                        |       |     | No.1   |       |
| HCFC-242 (CAS No.: 460-63-9)   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-244                       | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-251 (CAS No.: 421-41-0)   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-252 (CAS No.: 819-00-1)   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-261 (CAS No.: 420-97-3)   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-262 (CAS No.: 421-02-03)  | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-271 (CAS No.: 430-55-7)   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-141b (CAS No.: 1717-00-6) | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-243 (CAS No.: 460-69-5)   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-253 (CAS No.: 460-35-5)   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-141                       | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-142                       | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-151                       | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HCFC-225                       | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| <b>Halons</b>                  |                                                                        |       |     |        |       |
| Halon-1211 (CAS No.: 353-59-3) | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| Halon-1301 (CAS No.: 75-63-8)  | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| Halon-2402 (CAS No.: 124-73-2) | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

Date: 13-Jun-2024

Page: 12 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

| Test Item(s)                           | Method                                                                 | Unit  | MDL | Result | Limit |
|----------------------------------------|------------------------------------------------------------------------|-------|-----|--------|-------|
|                                        |                                                                        |       |     | No.1   |       |
| Methyl Bromide (CAS No.: 74-83-9)      | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| <b>Hydrobromofluorocarbons (HBFCs)</b> |                                                                        |       |     |        |       |
| HBFC-271B1 (C3H6FBr)                   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-262B1 (C3H5F2Br)                  | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-261B2 (C3H5FBr2)                  | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-253B1 (C3H4F3Br)                  | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-252B2 (C3H4F2Br2)                 | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-251B3 (C3H4FBr3)                  | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-244B1 (C3H3F4Br)                  | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-243B2 (C3H3F3Br2)                 | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-242B3 (C3H3F2Br3)                 | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-241B4 (C3H3FBr4)                  | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-235B1 (C3H2F5Br)                  | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-234B2 (C3H2F4Br2)                 | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-233B3 (C3H2F3Br3)                 | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-232B4 (C3H2F2Br4)                 | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-231B5 (C3H2FBr5)                  | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-226B1 (C3HF6Br)                   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

Date: 13-Jun-2024

Page: 13 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

| Test Item(s)                            | Method                                                                 | Unit  | MDL | Result | Limit |
|-----------------------------------------|------------------------------------------------------------------------|-------|-----|--------|-------|
|                                         |                                                                        |       |     | No.1   |       |
| HBFC-225B2 (C3HF5Br2)                   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-224B3 (C3HF4Br3)                   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-223B4 (C3HF3Br4)                   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-222B5 (C3HF2Br5)                   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-221B6 (C3HFBr6)                    | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-151B1 (C2H4FBr)                    | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-142B1 (C2H3F2Br)                   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-141B2 (C2H3FBr2)                   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-133B1 (C2H2F3Br)                   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-132B2 (C2H2F2Br2)                  | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-131B3 (C2H2FBr3)                   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-124B1 (C2HF4Br)                    | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-123B2 (C2HF3Br2)                   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-122B3 (C2HF2Br3)                   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-121B4 (C2HFBr4)                    | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-31B1 (CH2FBr) (CAS No.: 373-52-4)  | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-22B1 (CHF2Br) (CAS No.: 1511-62-2) | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HBFC-21B2 (CHFBr2) (CAS No.: 1868-53-7) | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

Date: 13-Jun-2024

Page: 14 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

| Test Item(s)                                    | Method                                                                 | Unit  | MDL | Result | Limit |
|-------------------------------------------------|------------------------------------------------------------------------|-------|-----|--------|-------|
|                                                 |                                                                        |       |     | No.1   |       |
| Hydrofluorocarbon (HFCs)                        |                                                                        |       |     |        |       |
| HFC-23 (CHF3) (CAS No.: 75-46-7)                | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HFC-32 (CH2F2) (CAS No.: 75-10-5)               | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HFC-41 (CH3F) (CAS No.: 593-53-3)               | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HFC-43-10mee (C5H2F10)                          | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HFC-125 (C2HF5)                                 | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HFC-134 (C2H2F4)                                | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HFC-134a (CH2FCF3) (CAS No.: 811-97-2)          | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HFC-143 (C2H3F3)                                | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HFC-143a (C2H3F3)                               | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HFC-152a (C2H4F2) (CAS No.: 75-37-6)            | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HFC-227ea (C3HF7) (CAS No.: 431-89-0)           | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HFC-236fa (CAS No.: 431-63-0)                   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HFC-245ca (C3H3F5)                              | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HFC-245fa (C3H3F5)                              | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HFC-365mfc (C4H5F5)                             | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| HFC-236ea (C3H2F6) (CAS No.: 431-63-0)          | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| Perfluorocarbon (PFCs)                          |                                                                        |       |     |        |       |
| 1,4-dihydrooctafluorobutane (CAS No.: 377-36-6) | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

Date: 13-Jun-2024

Page: 15 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

| Test Item(s)                                             | Method                                                                 | Unit  | MDL | Result | Limit |
|----------------------------------------------------------|------------------------------------------------------------------------|-------|-----|--------|-------|
|                                                          |                                                                        |       |     | No.1   |       |
| 2-Perfluoromethylpentane (CAS No.: 355-04-4)             | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| Decafluorobutane (CAS No.: 355-25-9)                     | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| F14 (CAS No.: 75-73-0)                                   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| Fluorocarbon 116 (CAS No.: 76-16-4)                      | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| Freon 218 (CAS No.: 76-19-7)                             | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| Freon C318 (CAS No.: 115-25-3)                           | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| Nonafluor-2- (trifluoromethyl)butane (CAS No.: 594-91-2) | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| Perfluorisobutene (CAS No.: 382-21-8)                    | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| Perfluorohexane (CAS No.: 355-42-0)                      | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| Perfluoro-n-pentane (CAS No.: 678-26-2)                  | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| Perfluor-1-butene (CAS No.: 357-26-6)                    | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| <b>Chlorinate hydrocarbon (CHCs)</b>                     |                                                                        |       |     |        |       |
| 1,1-Dichloropropene (CAS No.: 563-58-6)                  | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| 1,2-Dichloroethane (CAS No.: 107-06-2)                   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| 2,2-Dichloropropane (CAS No.: 594-20-7)                  | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| Carbon tetrachloride (CAS No.: 56-23-5)                  | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| Chloromethane (CAS No.: 74-87-3)                         | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| cis-1,2-Dichloroethene (CAS No.: 156-59-2)               | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

Date: 13-Jun-2024

Page: 16 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

| Test Item(s)                                           | Method                                                                 | Unit  | MDL | Result | Limit |
|--------------------------------------------------------|------------------------------------------------------------------------|-------|-----|--------|-------|
|                                                        |                                                                        |       |     | No.1   |       |
| cis-1,3-Dichloropropene (CAS No.: 10061-01-5)          | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| Hexachlorobutadiene (CAS No.: 87-68-3)                 | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| trans-1,2-Dichloroethene (CAS No.: 156-60-5)           | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| trans-1,3-Dichloropropene (CAS No.: 10061-02-6)        | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| Dichloromethane, Methylene chloride (CAS No.: 75-09-2) | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| 1,2-Dichloropropane (CAS No.: 78-87-5)                 | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| 1,1,1,2-Tetrachloroethane (CAS No.: 630-20-6)          | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| 1,1,1-Trichloroethane (CAS No.: 71-55-6)               | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| 1,1,2-Trichloroethane (CAS No.: 79-00-5)               | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| 1,1,2,2-Tetrachloroethane (CAS No.: 79-34-5)           | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| 1,1-Dichloroethylene (CAS No.: 75-35-4)                | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| 1,1-Dichloroethane (CAS No.: 75-34-3)                  | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| Chloroethane (CAS No.: 75-00-3)                        | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| Tetrachloroethene (CAS No.: 127-18-4)                  | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| Trichloroethylene (CAS No.: 79-01-6)                   | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| 1,3-Dichloropropane (CAS No.: 142-28-9)                | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| Chloroform (CAS No.: 67-66-3)                          | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| 1,2,3-Trichloropropane (CAS No.: 96-18-4)              | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

Date: 13-Jun-2024

Page: 17 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

| Test Item(s)                                                                                          | Method                                                                 | Unit  | MDL | Result | Limit |
|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|-------|-----|--------|-------|
|                                                                                                       |                                                                        |       |     | No.1   |       |
| Sulfur hexafluoride (CAS No.: 2551-62-4)                                                              | With reference to US EPA 5021A: 2014, analysis was performed by GC/MS. | mg/kg | 1   | n.d.   | -     |
| 2-Ethoxyethyl acetate (CAS No.: 111-15-9)                                                             | With reference to US EPA 3550C: 2007, analysis was performed by GC/MS. | mg/kg | 10  | n.d.   | -     |
| Ethylene glycol monomethyl ether acetate (CAS No.: 110-49-6)                                          | With reference to US EPA 3550C: 2007, analysis was performed by GC/MS. | mg/kg | 10  | n.d.   | -     |
| Ethylene glycol monomethyl ether (CAS No.: 109-86-4)                                                  | With reference to US EPA 3550C: 2007, analysis was performed by GC/MS. | mg/kg | 10  | n.d.   | -     |
| 2-Ethoxyethanol (CAS No.: 110-80-5)                                                                   | With reference to US EPA 3550C: 2007, analysis was performed by GC/MS. | mg/kg | 10  | n.d.   | -     |
| Diethylene glycol dimethyl ether (DEGDME) (CAS No.: 111-96-6)                                         | With reference to US EPA 3550C: 2007, analysis was performed by GC/MS. | mg/kg | 10  | n.d.   | -     |
| 1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP) (CAS No.: 71888-89-6)     | With reference to EN 14372: 2004, analysis was performed by GC/MS.     | mg/kg | 100 | n.d.   | -     |
| 1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP) (CAS No.: 68515-42-4) | With reference to EN 14372: 2004, analysis was performed by GC/MS.     | mg/kg | 100 | n.d.   | -     |
| Bis(2-methoxyethyl) phthalate (DMEP) (CAS No.: 117-82-8)                                              | With reference to EN 14372: 2004, analysis was performed by GC/MS.     | mg/kg | 30  | n.d.   | -     |
| Di-n-heptyl phthalate (CAS No.: 3648-21-3)                                                            | With reference to EN 14372: 2004, analysis was performed by GC/MS.     | mg/kg | 30  | n.d.   | -     |
| Diisopentyl phthalate (DIPP) (CAS No.: 605-50-5)                                                      | With reference to EN 14372: 2004, analysis was performed by GC/MS.     | mg/kg | 30  | n.d.   | -     |
| 1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear (DHP) (CAS No.: 68515-50-4)          | With reference to EN 14372: 2004, analysis was performed by GC/MS.     | mg/kg | 100 | n.d.   | -     |
| N-pentyl iso-pentyl phthalate (NPIPP) (CAS No.: 776297-69-9)                                          | With reference to EN 14372: 2004, analysis was performed by GC/MS.     | mg/kg | 30  | n.d.   | -     |
| Di-cyclohexyl phthalate (DCHP) (CAS No.: 84-61-7)                                                     | With reference to EN 14372: 2004, analysis was performed by GC/MS.     | mg/kg | 30  | n.d.   | -     |
| Di-(2-ethylhexyl) phthalate (DEHP) (CAS No.: 117-81-7)                                                | With reference to EN 14372: 2004, analysis was performed by GC/MS.     | mg/kg | 30  | n.d.   | -     |
| Di-ethyl phthalate (DEP) (CAS No.: 84-66-2)                                                           | With reference to EN 14372: 2004, analysis was performed by GC/MS.     | mg/kg | 30  | n.d.   | -     |

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

Date: 13-Jun-2024

Page: 18 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

| Test Item(s)                                                                                            | Method                                                                  | Unit  | MDL | Result | Limit |
|---------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|-------|-----|--------|-------|
|                                                                                                         |                                                                         |       |     | No.1   |       |
| Diisooctyl phthalate (DIOP) (CAS No.: 27554-26-3)                                                       | With reference to EN 14372: 2004, analysis was performed by GC/MS.      | mg/kg | 100 | n.d.   | -     |
| Dimethyl phthalate (DMP) (CAS No.: 131-11-3)                                                            | With reference to EN 14372: 2004, analysis was performed by GC/MS.      | mg/kg | 30  | n.d.   | -     |
| Di-n-nonyl phthalate (DNNP) (CAS No.: 84-76-4)                                                          | With reference to EN 14372: 2004, analysis was performed by GC/MS.      | mg/kg | 30  | n.d.   | -     |
| Di-n-pentyl phthalate (DNPP) (CAS No.: 131-18-0)                                                        | With reference to EN 14372: 2004, analysis was performed by GC/MS.      | mg/kg | 30  | n.d.   | -     |
| Dipropyl phthalate (DPrP) (CAS No.: 131-16-8)                                                           | With reference to EN 14372: 2004, analysis was performed by GC/MS.      | mg/kg | 30  | n.d.   | -     |
| Di-2-ethylhexyl adipate (DEHA) (CAS No.: 103-23-1)                                                      | With reference to EN 14372: 2004, analysis was performed by GC/MS.      | mg/kg | 30  | n.d.   | -     |
| Perchlorate (CAS No.: 14797-73-0)                                                                       | Analysis was performed by IC.                                           | µg/g  | 0.1 | n.d.   | -     |
| Nonylphenol (NP)                                                                                        | With reference to US EPA 3550C: 2007, analysis was performed by LC/MS.  | mg/kg | 10  | n.d.   | -     |
| Tris(2-chloroethyl) phosphate (TCEP) (CAS No.: 115-96-8)                                                | With reference to US EPA 3550C: 2007, analysis was performed by GC/MS.  | mg/kg | 5   | n.d.   | -     |
| Tris(1-chloro-2-propyl) phosphate (TCPP) (CAS No.: 13674-84-5)                                          | With reference to US EPA 3550C: 2007, analysis was performed by GC/MS.  | mg/kg | 5   | n.d.   | -     |
| Tris(1,3-dichloro-2-propyl) phosphate (CAS No.: 13674-87-8)                                             | With reference to US EPA 3550C: 2007, analysis was performed by GC/MS.  | mg/kg | 5   | n.d.   | -     |
| Trixylyl phosphate (CAS No.: 25155-23-1)                                                                | With reference to US EPA 3550C: 2007, analysis was performed by GC/MS.  | mg/kg | 25  | n.d.   | -     |
| 4-Tert-octylphenol (CAS No.: 140-66-9)                                                                  | With reference to US EPA 3550C: 2007, analysis was performed by LC/MS.  | mg/kg | 10  | n.d.   | -     |
| N,N-Dimethylacetamide (DMAC) (CAS No.: 127-19-5)                                                        | With reference to US EPA 3550C: 2007, analysis was performed by GC/MS.  | mg/kg | 10  | n.d.   | -     |
| Phosphorus (P) (CAS No.: 7723-14-0)                                                                     | With reference to US EPA 3052: 1996, analysis was performed by ICP-OES. | mg/kg | 2   | 1680   | -     |
| TBBP-A-bis (CAS No.: 21850-44-2)                                                                        | With reference to US EPA 3550C: 2007, analysis was performed by GC/MS.  | mg/kg | 5   | n.d.   | -     |
| Benzenamine, N-phenyl-, reaction products with styrene and 2,4,4-trimethylpentene (CAS No.: 68921-45-9) | With reference to US EPA 3550C: 2007, analysis was performed by GC/MS.  | mg/kg | 100 | n.d.   | -     |

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

Date: 13-Jun-2024

Page: 19 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

| Test Item(s)                                                                   | Method                                                                                                                                                                                        | Unit  | MDL | Result   | Limit                |
|--------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----|----------|----------------------|
|                                                                                |                                                                                                                                                                                               |       |     | No.1     |                      |
| 2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320) (CAS No.: 3846-71-7)      | With reference to US EPA 3550C: 2007, analysis was performed by GC/MS.                                                                                                                        | mg/kg | 5   | n.d.     | -                    |
| 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328) (CAS No.: 25973-55-1) | With reference to US EPA 3550C: 2007, analysis was performed by GC/MS.                                                                                                                        | mg/kg | 5   | n.d.     | -                    |
| Di-n-hexyl phthalate (DNHP) (CAS No.: 84-75-3)                                 | With reference to EN 14372: 2004, analysis was performed by GC/MS.                                                                                                                            | mg/kg | 30  | n.d.     | -                    |
| Dimethyl fumarate (DMFu) (CAS No.: 624-49-7)                                   | With reference to US EPA 3550C: 2007, analysis was performed by GC/MS.                                                                                                                        | mg/kg | 0.1 | n.d.     | -                    |
| <b>Asbestos</b>                                                                |                                                                                                                                                                                               |       |     |          |                      |
| Actinolite (CAS No.: 77536-66-4)                                               | With reference to EPA 600/R-93/116: 1993, analysis was performed by Stereo Microscope (SM), Dispersion Staining Polarized Light Microscope (DS-PLM) and X-ray Diffraction Spectrometer (XRD). | -     | -   | Negative | -                    |
| Amosite (CAS No.: 12172-73-5)                                                  |                                                                                                                                                                                               | -     | -   | Negative | -                    |
| Anthophyllite (CAS No.: 77536-67-5)                                            |                                                                                                                                                                                               | -     | -   | Negative | -                    |
| Chrysotile (CAS No.: 12001-29-5)                                               |                                                                                                                                                                                               | -     | -   | Negative | -                    |
| Crocidolite (CAS No.: 12001-28-4)                                              |                                                                                                                                                                                               | -     | -   | Negative | -                    |
| Tremolite (CAS No.: 77536-68-6)                                                |                                                                                                                                                                                               | -     | -   | Negative | -                    |
| Decabromodiphenyl ether (DecaBDE) (CAS No.: 1163-19-5)                         | With reference to US EPA 3550C: 2007, analysis was performed by GC/MS.                                                                                                                        | mg/kg | 5   | n.d.     | Prohibited / N/A(*3) |
| Phenol, isopropylated, phosphate (3:1) (PIP 3:1) (CAS No.: 68937-41-7)         | With reference to US EPA 3550C: 2007, analysis was performed by GC/MS.                                                                                                                        | mg/kg | 5   | n.d.     | Prohibited / N/A(*1) |
| 2,4,6-Tris(tert-butyl)phenol (2,4,6-TTBP) (CAS No.: 732-26-3)                  | With reference to US EPA 3550C: 2007, analysis was performed by GC/MS.                                                                                                                        | mg/kg | 5   | n.d.     | 3000 / N/A(*2)       |
| Pentachlorothiophenol (PCTP) (CAS No.: 133-49-3)                               | With reference to US EPA 3550C: 2007, analysis was performed by GC/MS.                                                                                                                        | mg/kg | 5   | n.d.     | 10000                |
| Hexachlorobutadiene (HCBD) (CAS No.: 87-68-3)                                  | With reference to US EPA 3550C: 2007, analysis was performed by GC/MS.                                                                                                                        | mg/kg | 5   | n.d.     | Prohibited           |

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

Date: 13-Jun-2024

Page: 20 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

## Note :

1. mg/kg = ppm ; 0.1wt% = 0.1% = 1000ppm
2. MDL = Method Detection Limit
3. n.d. = Not Detected ( Less than MDL)
4. "-" = Not Regulated
5. \*\*= Qualitative analysis (No Unit)
6. Negative = Undetectable ; Positive = Detectable
7. Testing range of asbestos qualitative analysis is from less than 0.1% to 100%. The judgment criterion: asbestos fibers being found is shown as "Positive"; asbestos fibers not being found is shown as "Negative".
8. ▲ : The MDL was evaluated for element / tested substance.

Conversion Formula :  $AX = A \times F$

| AX                                                                                     | A                  | F      |
|----------------------------------------------------------------------------------------|--------------------|--------|
| Bis(tributyltin)oxide (TBTO)                                                           | Tributyl Tin (TBT) | 1.0276 |
| 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE) | Dioctyl Tin (DOT)  | 2.1782 |

Parameter Conversion Table : [https://eecloud.sgs.com/Region\\_TW/DocDownload.aspx?name=Others](https://eecloud.sgs.com/Region_TW/DocDownload.aspx?name=Others)

9. Unless otherwise stated , the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w=0) stated in ILAC-G8:09/2019. According to this rule, the judgement of conformity is based on the comparing test results with limits.
10. Detail explanation of the regulation is available at the following link.  
<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-R/part-751?toc=1>
11. N/A(\*1) : The submitted sample is exempted from the regulated scope if it is anyone of the following :
  - Hydraulic fluids for aviation or military
  - Lubricants and grease
  - New and replacement parts for motor and aerospace vehicles
  - Manufacture of cyanoacrylate adhesives in closed systems
  - Specialized engine air filters for locomotive and marine applications
  - Plastic for recycling from PIP (3:1)-containing products or articles
  - Finished products or articles made of plastic recycled from PIP (3:1)-containing products or articles
  - Processing and distribution in commerce of PIP (3:1)-containing articles, before October 31, 2024
12. N/A(\*2) : The submitted sample is exempted from the regulated scope if it is not oil and lubricant additives.
13. N/A(\*3) : The submitted sample is exempted from the regulated scope if it is anyone of the following :  
Exempts processing and distribution for recycling of DecaBDE-containing plastic from products or articles and DecaBDE-containing products or articles made from such recycled plastic.
14. This is the additional test report of ETR24505343.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

Date: 13-Jun-2024

Page: 21 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

## PAHs Remark :

### △ AfPS (German commission for Product Safety): GS PAHs requirements

| Parameter               | Category 1                                                                                                                                                                                   | Category 2                                                                                                                                               |                            | Category 3                                                                                                           |                            |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|----------------------------------------------------------------------------------------------------------------------|----------------------------|
|                         | Materials intended to be placed in the mouth, or materials in toys (Directive 2009/48/EC) or articles for children up to 3 years of age with intended long-term skin contact (> 30 seconds). | Materials that are not in Category 1, with intended or foreseeable long-term skin contact (> 30 seconds) or short-term repetitive contact with the skin. |                            | Materials not covered by Category 1 or 2, with intended or foreseeable short-term skin contact ( $\leq 30$ seconds). |                            |
|                         |                                                                                                                                                                                              | a. Use by children under 14                                                                                                                              | b. Other consumer products | a. Use by children under 14                                                                                          | b. Other consumer products |
| Naphthalene             | < 1                                                                                                                                                                                          | < 2                                                                                                                                                      |                            | < 10                                                                                                                 |                            |
| Phenanthrene            | < 1 Sum                                                                                                                                                                                      | < 5 Sum                                                                                                                                                  | < 10 Sum                   | < 20 Sum                                                                                                             | < 50 Sum                   |
| Anthracene              |                                                                                                                                                                                              |                                                                                                                                                          |                            |                                                                                                                      |                            |
| Fluoranthene            |                                                                                                                                                                                              |                                                                                                                                                          |                            |                                                                                                                      |                            |
| Pyrene                  |                                                                                                                                                                                              |                                                                                                                                                          |                            |                                                                                                                      |                            |
| Benzo[a]anthracene      | < 0.2                                                                                                                                                                                        | < 0.2                                                                                                                                                    | < 0.5                      | < 0.5                                                                                                                | < 1                        |
| Chrysene                | < 0.2                                                                                                                                                                                        | < 0.2                                                                                                                                                    | < 0.5                      | < 0.5                                                                                                                | < 1                        |
| Benzo[b]fluoranthene    | < 0.2                                                                                                                                                                                        | < 0.2                                                                                                                                                    | < 0.5                      | < 0.5                                                                                                                | < 1                        |
| Benzo[j]fluoranthene    | < 0.2                                                                                                                                                                                        | < 0.2                                                                                                                                                    | < 0.5                      | < 0.5                                                                                                                | < 1                        |
| Benzo[k]fluoranthene    | < 0.2                                                                                                                                                                                        | < 0.2                                                                                                                                                    | < 0.5                      | < 0.5                                                                                                                | < 1                        |
| Benzo[a]pyrene          | < 0.2                                                                                                                                                                                        | < 0.2                                                                                                                                                    | < 0.5                      | < 0.5                                                                                                                | < 1                        |
| Benzo[e]pyrene          | < 0.2                                                                                                                                                                                        | < 0.2                                                                                                                                                    | < 0.5                      | < 0.5                                                                                                                | < 1                        |
| Indeno[1,2,3-c,d]pyrene | < 0.2                                                                                                                                                                                        | < 0.2                                                                                                                                                    | < 0.5                      | < 0.5                                                                                                                | < 1                        |
| Dibenzo[a,h]anthracene  | < 0.2                                                                                                                                                                                        | < 0.2                                                                                                                                                    | < 0.5                      | < 0.5                                                                                                                | < 1                        |
| Benzo[g,h,i]perylene    | < 0.2                                                                                                                                                                                        | < 0.2                                                                                                                                                    | < 0.5                      | < 0.5                                                                                                                | < 1                        |
| Sum of 15 PAH           | < 1                                                                                                                                                                                          | < 5                                                                                                                                                      | < 10                       | < 20                                                                                                                 | < 50                       |

Unit : mg/kg

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

Date: 13-Jun-2024

Page: 22 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

## PFAS Remark :

The quantitative technology of PFAS is to analyze the specific structure of PFAS substances. However, PFAS acid and its salts with the same carbon number group have the same specific structure that can be identified. The tested results of the analyzed specific structure cannot be distinguished to identify the contribution from PFAS acid or its salts. Therefore, the tested results display the sum of concentrations of PFAS acids and its salts with the same carbon number group. The concentration of PFAS substances in the below table have been included in the tested results, please refer to the table for relevant information: (The listed PFAS substances are examples only, it do not include all PFAS salts with the same carbon number group.)

| Group Name                    | Substance Name                                                                                                      | CAS No.     |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------|-------------|
| PFOS, its salts & derivatives | Perfluorooctane sulfonates (PFOS)                                                                                   | 1763-23-1   |
|                               | Potassium perfluorooctanesulfonate (PFOS-K)                                                                         | 2795-39-3   |
|                               | Perfluorooctanesulfonic acid, lithium salt (PFOS-Li)                                                                | 29457-72-5  |
|                               | Perfluorooctanesulfonic acid, ammonium salt (PFOS-NH <sub>4</sub> )                                                 | 29081-56-9  |
|                               | Perfluorooctane sulfonate diethanolamine salt (PFOS-NH(OH) <sub>2</sub> )                                           | 70225-14-8  |
|                               | Perfluorooctanesulfonic acid, tetraethylammonium salt (PFOS-N(C <sub>2</sub> H <sub>5</sub> ) <sub>4</sub> )        | 56773-42-3  |
|                               | N-decyl-N,N-dimethyldecyl-1-aminium<br>1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptadecafluorooctane-1-sulfonate (PFOS-DDA) | 251099-16-8 |
|                               | Tetrabutylammonium perfluorooctanesulfonate (PFOS-N(C <sub>4</sub> H <sub>9</sub> ) <sub>4</sub> )                  | 111873-33-7 |
|                               | Perfluorooctane sulfonyl fluoride (POSF)                                                                            | 307-35-7    |
|                               | Perfluorooctanesulfonic acid, magnesium salt (PFOS-Mg)                                                              | 91036-71-4  |
|                               | Perfluorooctanesulfonic acid, sodium salt (PFOS-Na)                                                                 | 4021-47-0   |
|                               | Piperidine 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctanesulfonate                                         | 71463-74-6  |
|                               |                                                                                                                     |             |
| PFOA, its salts & derivatives | Perfluorooctanoic acid (PFOA)                                                                                       | 335-67-1    |
|                               | Sodium perfluorooctanoate (PFOA-Na)                                                                                 | 335-95-5    |
|                               | Potassium perfluorooctanoate (PFOA-K)                                                                               | 2395-00-8   |
|                               | Silver perfluorooctanoate (PFOA-Ag)                                                                                 | 335-93-3    |
|                               | Perfluorooctanoyl fluoride (PFOA-F)                                                                                 | 335-66-0    |
|                               | Ammonium pentadecafluorooctanoate (APFO)                                                                            | 3825-26-1   |
|                               | Lithium perfluorooctanoate (PFOA-Li)                                                                                | 17125-58-5  |
|                               | Cobalt perfluorooctanoate (PFOA-Co)                                                                                 | 35965-01-6  |

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.



# Test Report

No.: ETR24505343M02

Date: 13-Jun-2024

Page: 23 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

| Group Name                    | Substance Name                                                                                         | CAS No.    |
|-------------------------------|--------------------------------------------------------------------------------------------------------|------------|
| PFOA, its salts & derivatives | Cesium perfluorooctanoate (PFOA-Cs)                                                                    | 17125-60-9 |
|                               | Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-, chromium(3+) (PFOA-Cr(3 <sup>+</sup> )) | 68141-02-6 |
|                               | Pentadecafluorooctanoic acid--piperazine (2/1)PFOA-NH(C <sub>4</sub> H <sub>10</sub> N)                | 423-52-9   |
|                               | Pentadecafluorooctanoate (anion)                                                                       | 45285-51-6 |
|                               | Perfluorooctanoic Anhydride                                                                            | 33496-48-9 |

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

Date: 13-Jun-2024

Page: 24 of 48

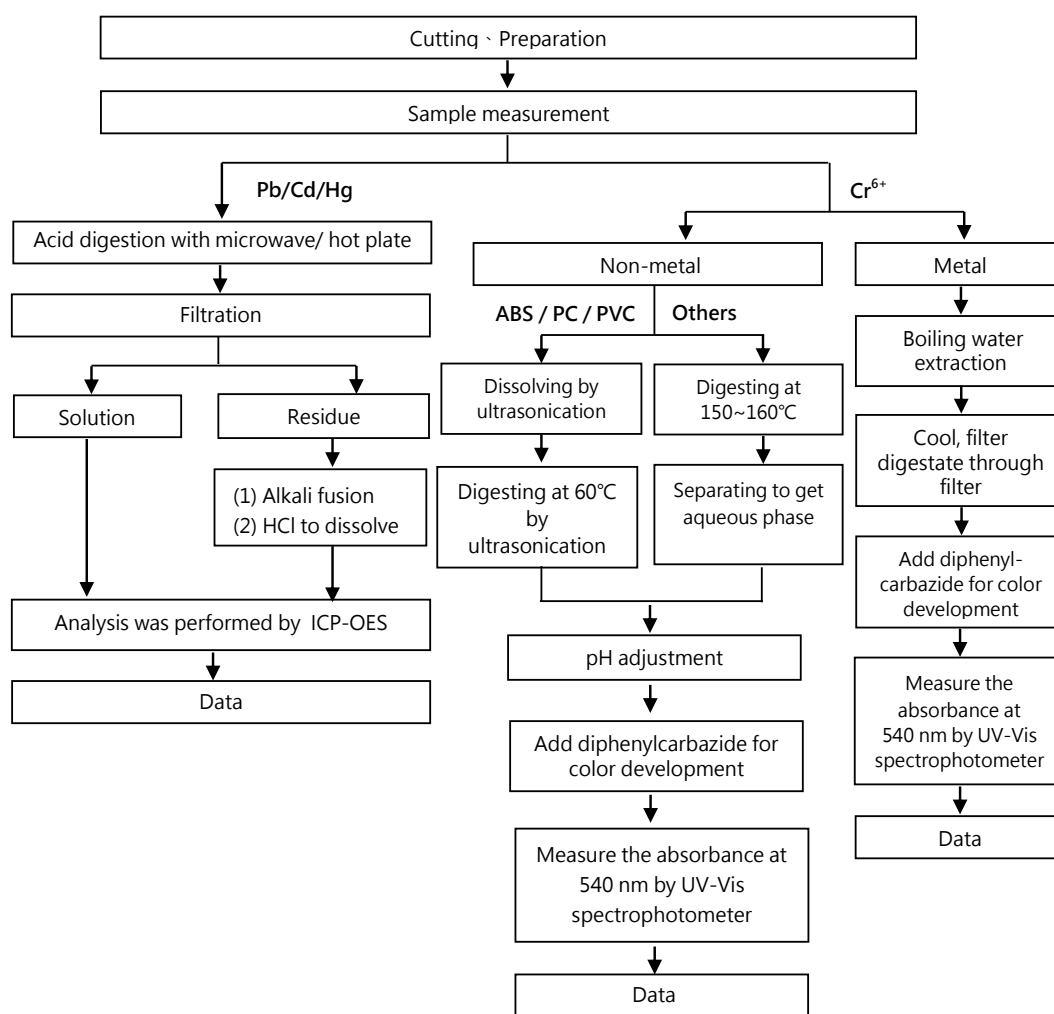
Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

## Analytical flow chart of heavy metal

These samples were dissolved totally by pre-conditioning method according to below flow chart.

(  $\text{Cr}^{6+}$  test method excluded )



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

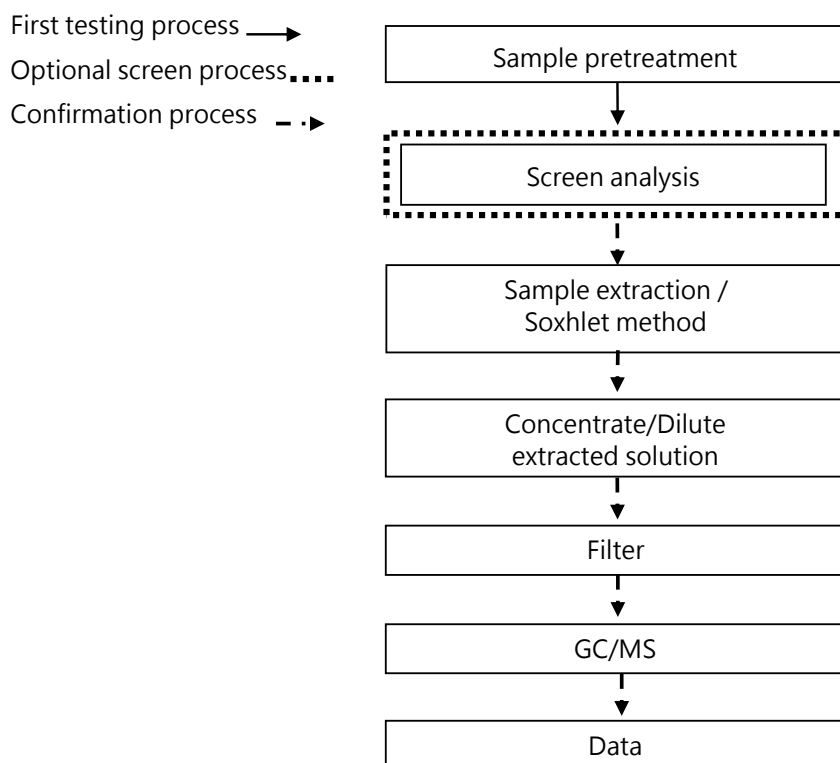
Date: 13-Jun-2024

Page: 25 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

## Analytical flow chart – PBBs / PBDEs



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

Date: 13-Jun-2024

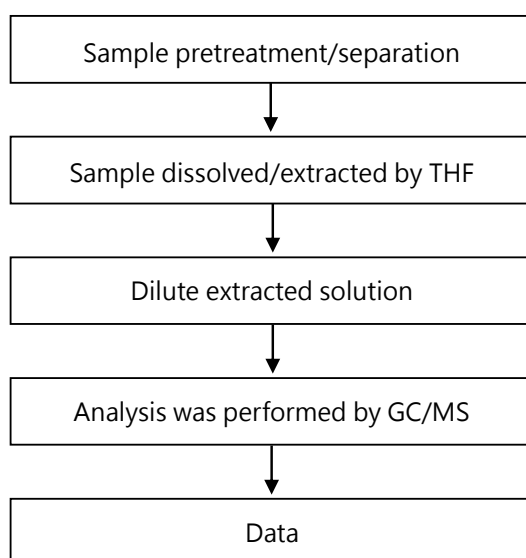
Page: 26 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

## Analytical flow chart - Phthalate

【Test method: IEC 62321-8】



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

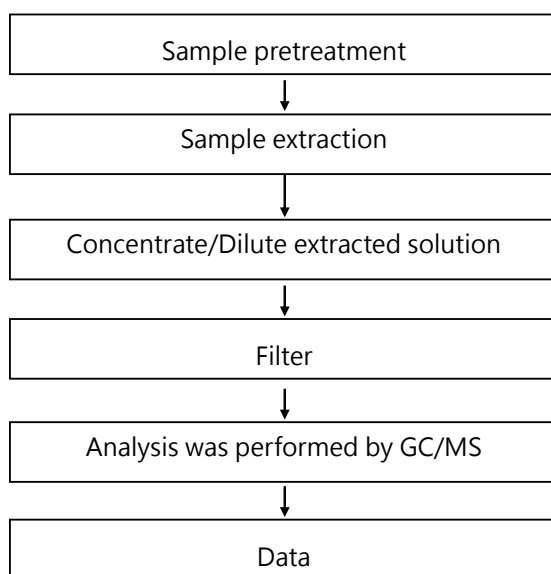
Date: 13-Jun-2024

Page: 27 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

## Analytical flow chart - HBCDD



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

Date: 13-Jun-2024

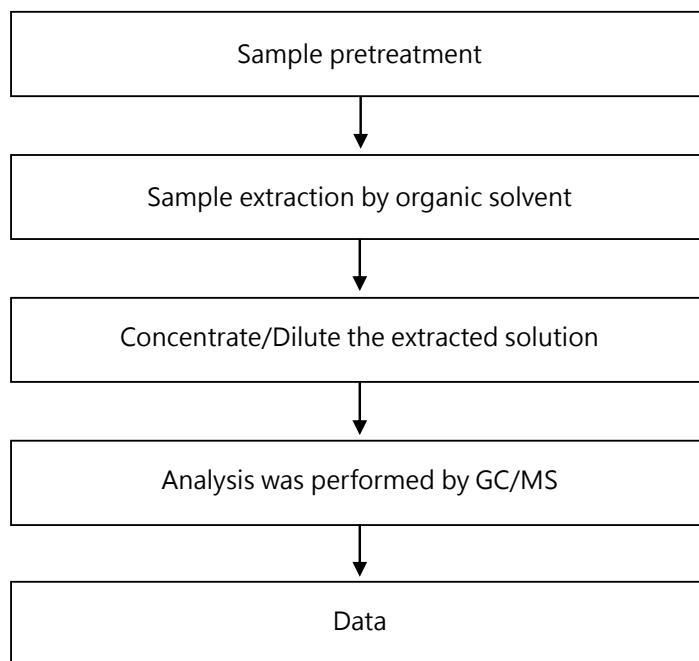
Page: 28 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

## Analytical flow chart

\* Apply to: PCBs, PCNs, PCTs, Mirex, Chlorinated Paraffins, DBBT



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

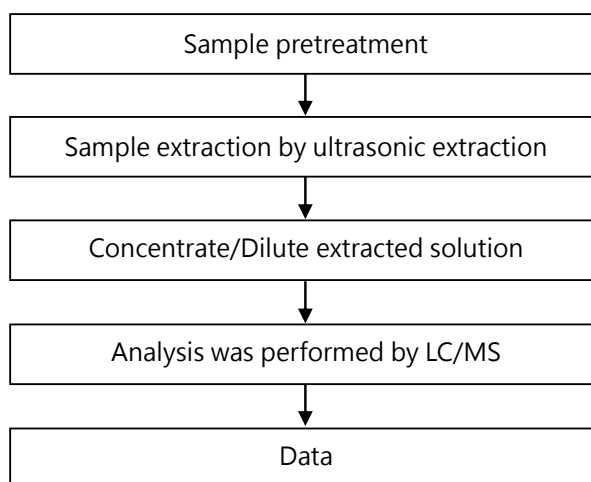
Date: 13-Jun-2024

Page: 29 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

## Analytical flow chart - TBBP-A



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

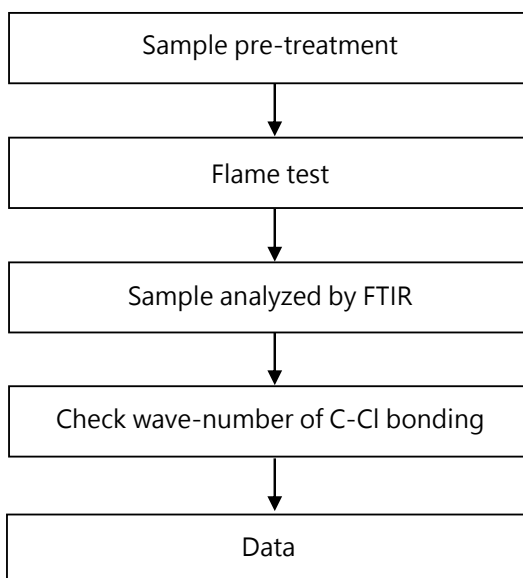
Date: 13-Jun-2024

Page: 30 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

## Analysis flow chart - PVC



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

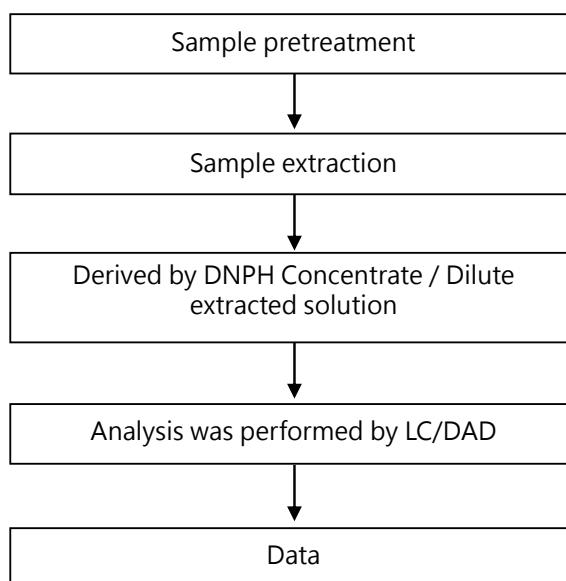
Date: 13-Jun-2024

Page: 31 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

## Analytical flow chart - Formaldehyde



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

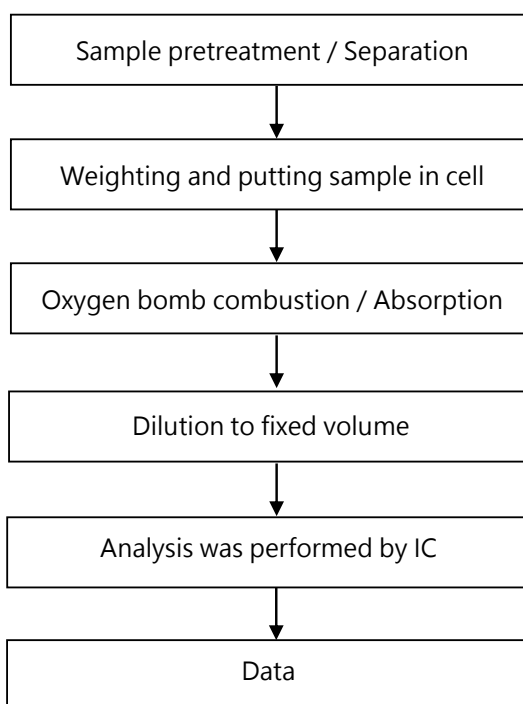
Date: 13-Jun-2024

Page: 32 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

## Analytical flow chart - Halogen



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

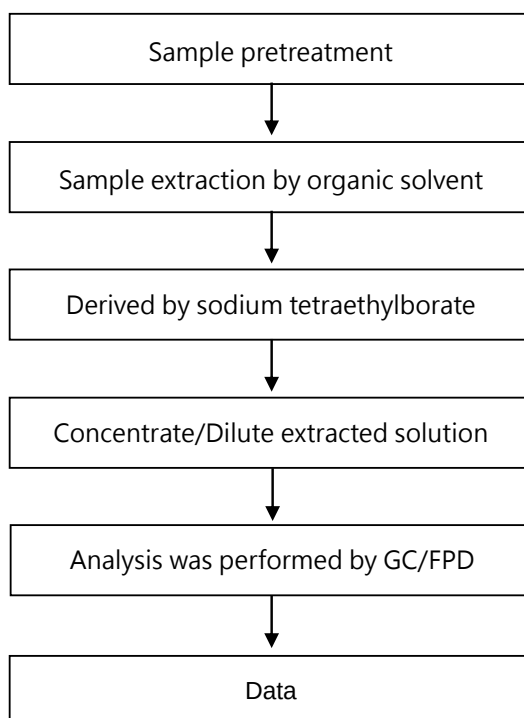
Date: 13-Jun-2024

Page: 33 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

## Analytical flow chart - Organic-Tin



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

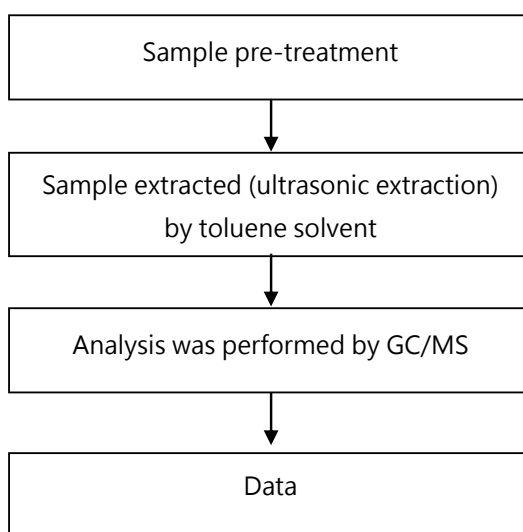
Date: 13-Jun-2024

Page: 34 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

## Analytical flow chart - PAHs (Polycyclic Aromatic Hydrocarbons)



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

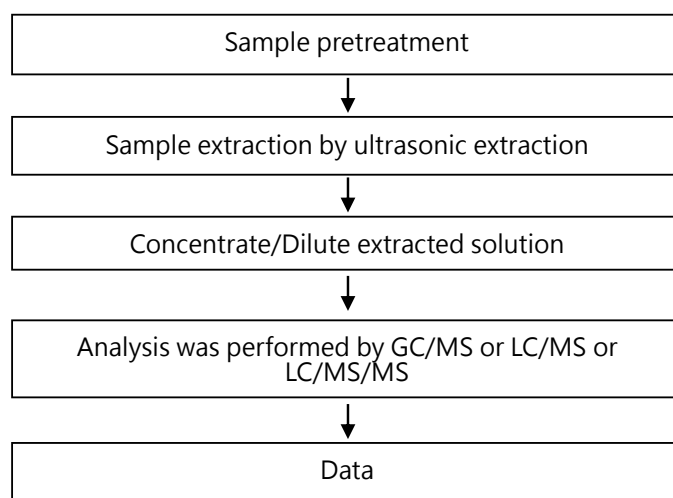
Date: 13-Jun-2024

Page: 35 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

## Analytical flow chart – PFAS (including PFOA/PFOS/its related compound, etc.)



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

Date: 13-Jun-2024

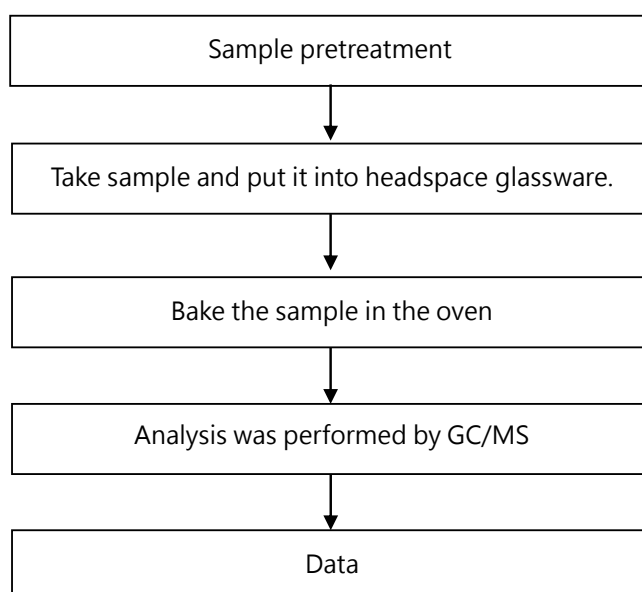
Page: 36 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

## Analytical flow chart of volatile organic compounds (VOCs)

【Reference method : US EPA 5021A】



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

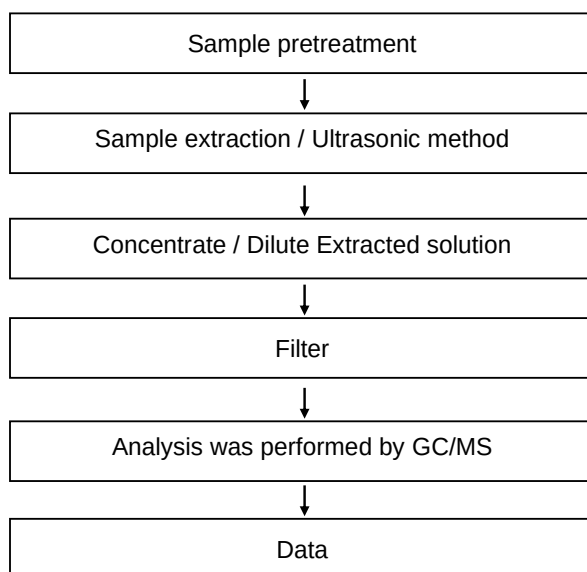
Date: 13-Jun-2024

Page: 37 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

## Analytical flow chart - Ethylene glycol ether



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

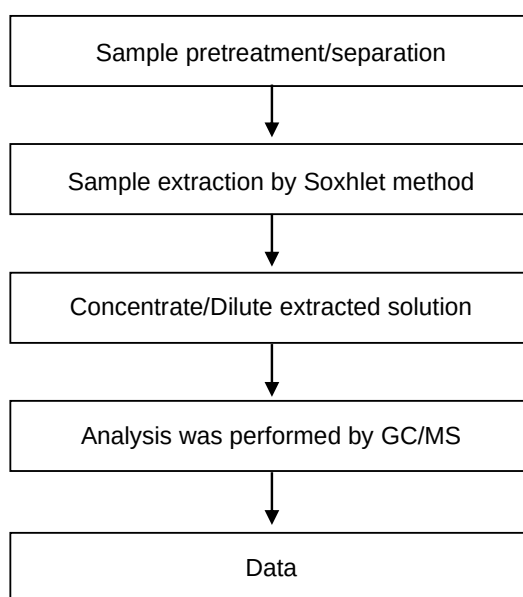
Date: 13-Jun-2024

Page: 38 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

## Analytical flow chart - Phthalate



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

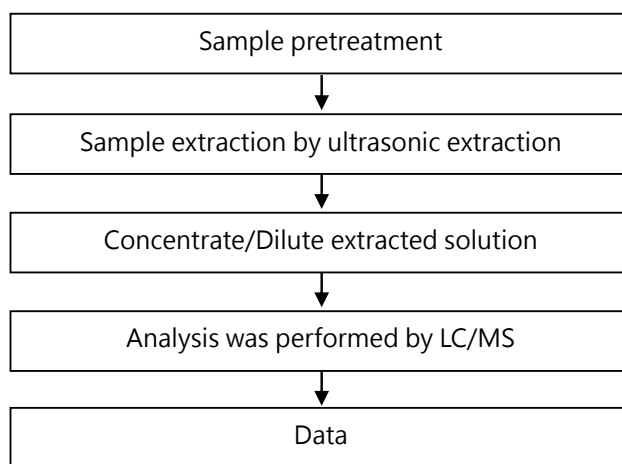
Date: 13-Jun-2024

Page: 39 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

## Analytical flow chart - NP、OP、4-t-OP、NPEO、OPEO



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

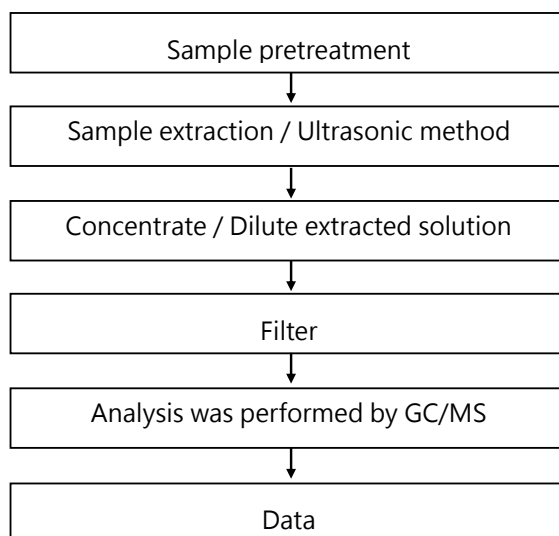
Date: 13-Jun-2024

Page: 40 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

## Analytical flow chart - Organic phosphorus compounds



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

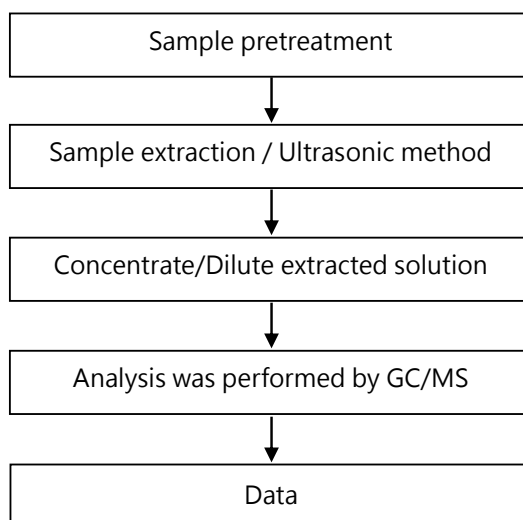
Date: 13-Jun-2024

Page: 41 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

## Analytical flow chart of N,N-Dimethylacetamide



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

Date: 13-Jun-2024

Page: 42 of 48

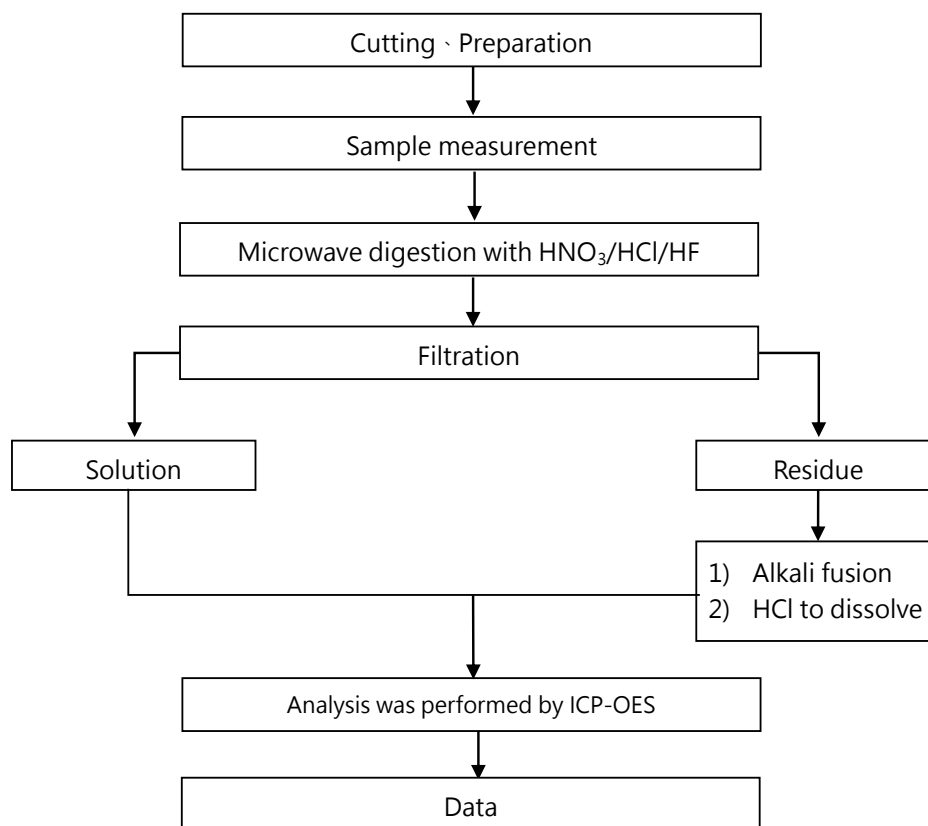
Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

## Analytical flow chart of elements (Heavy metal included)

These samples were dissolved totally by pre-conditioning method according to below flow chart.

【Reference method : US EPA 3051A 、US EPA 3052】



\* US EPA 3051A method does not add HF.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

Date: 13-Jun-2024

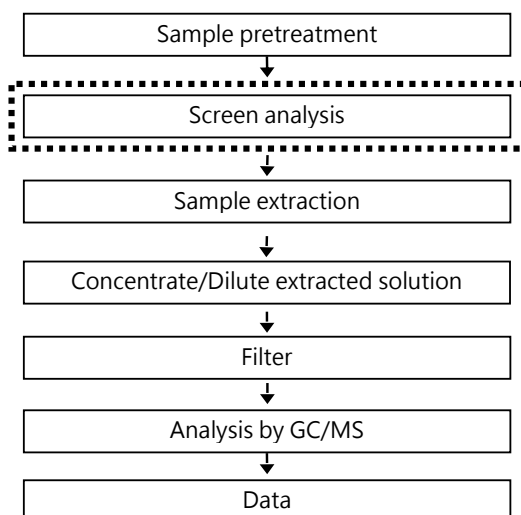
Page: 43 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

## Analytical flow chart - TBBP-A-bis

First testing process —————→  
 Optional screen process .....→  
 Confirmation process - - - - -→



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

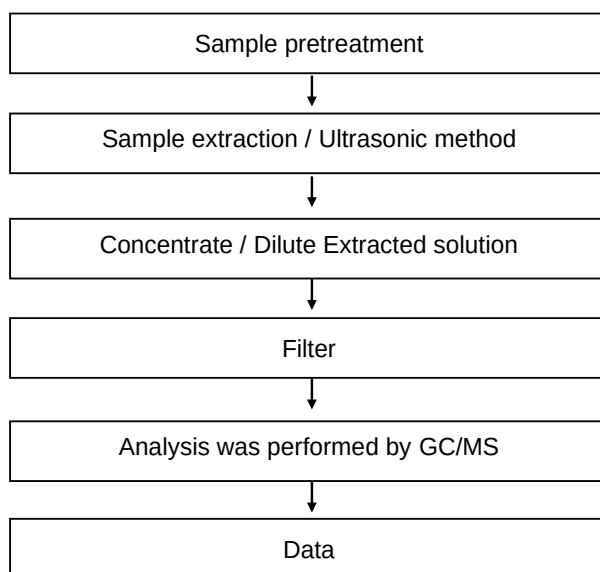
Date: 13-Jun-2024

Page: 44 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

## Analytical flow chart - BNST



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

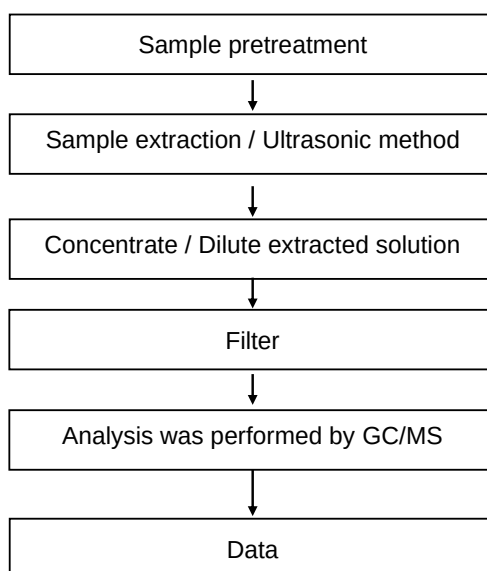
Date: 13-Jun-2024

Page: 45 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

## Analytical flow chart - Dimethyl Fumarate



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

Date: 13-Jun-2024

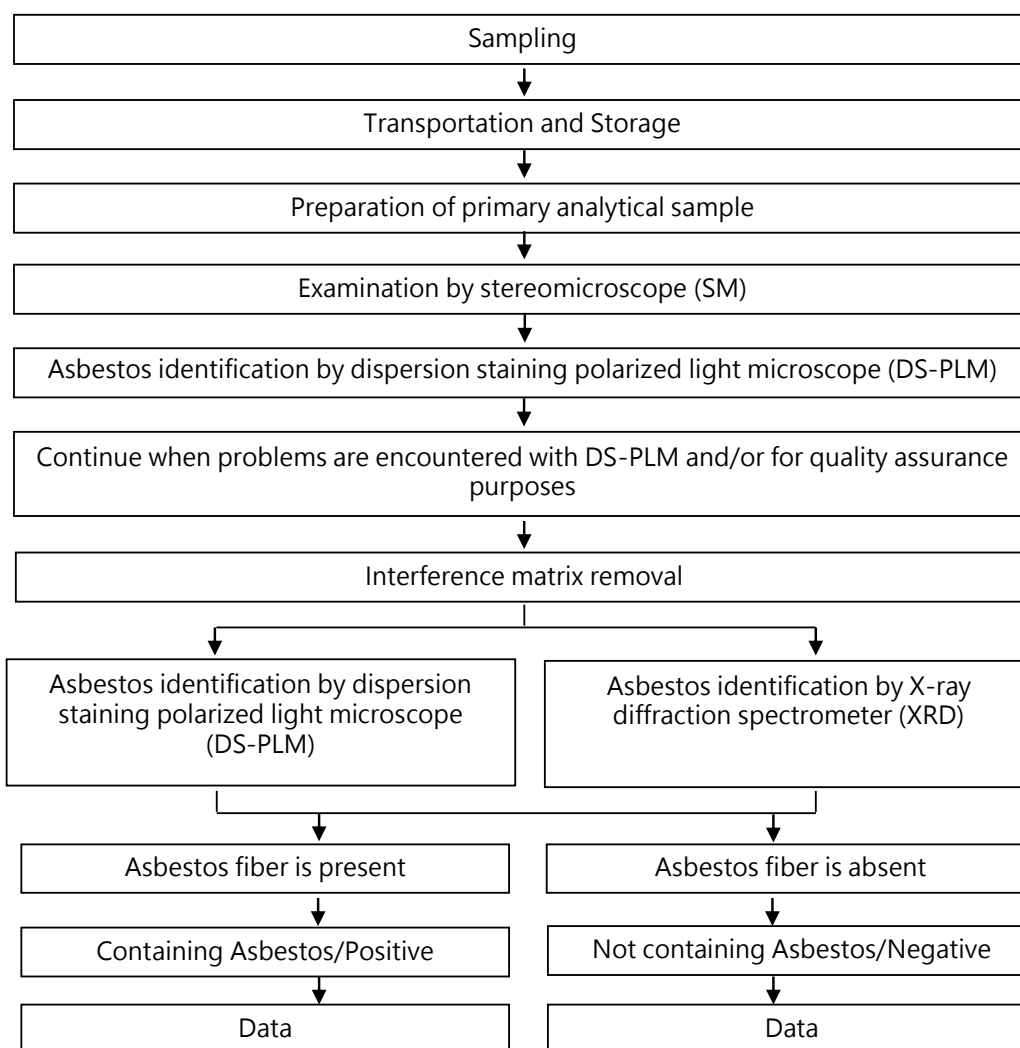
Page: 46 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

## Analysis flow chart for determination of Asbestos

【Reference method: EPA 600/R-93/116】



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

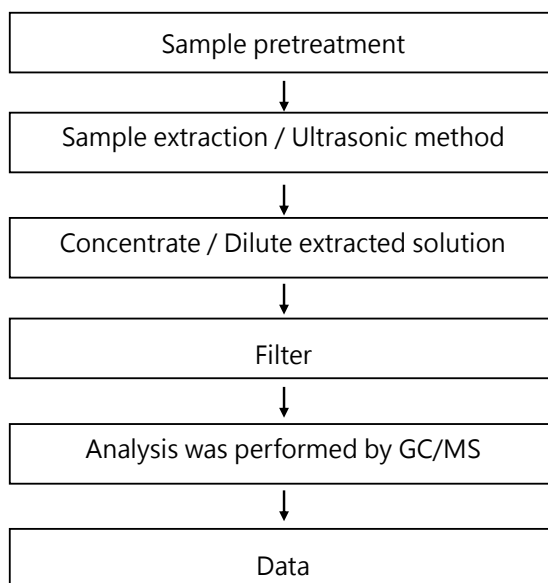
Date: 13-Jun-2024

Page: 47 of 48

Vanguard International Semiconductor Corporation

No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

## Analytical flow chart - Persistent, Bioaccumulative, Toxic (PBTs)



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# Test Report

No.: ETR24505343M02

Date: 13-Jun-2024

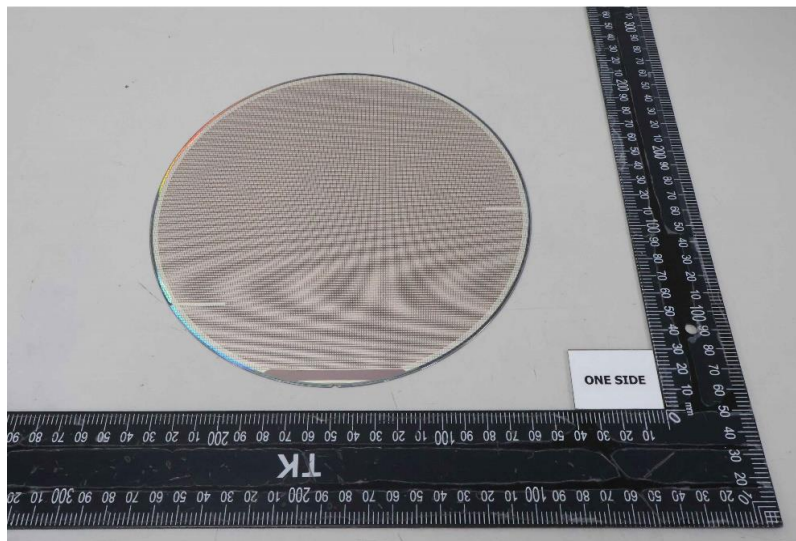
Page: 48 of 48

Vanguard International Semiconductor Corporation

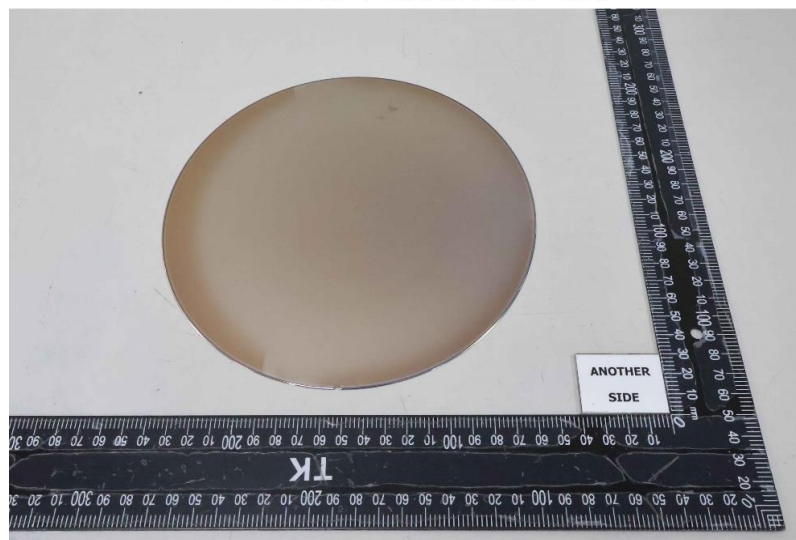
No. 123, Park Ave-3rd., Hsinchu Science Park, Hsinchu, Taiwan, R. O. C.

\* The tested sample / part is marked by an arrow if it's shown on the photo. \*

## ETR24505343



## ETR24505343



\*\* End of Report \*\*

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.