Test Report No. F690101/LF-CTSAYAA26-36320

Issued Date : 2026. 07. 22

POONGSAN CORPORATION
94 Sanam-ro, Onsan-eup
Ulju-gun, Ulsan
Korea

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

SGS File No.	:	AYAA26-36320
Product Name	:	C5210-Tin Plated
Item No./Part No.	:	Phosphorus Bronze
Received Date	:	2026. 07. 08
Test Period	:	2026. 07. 08 to 2026. 07. 22
Conclusion	:	Based on the performed tests on selected part of submitted samples, the results of Cadmium, Lead, Mercury, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP), and Diisobutyl phthalate (DIBP) comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.
Test Results	:	For further details, please refer to following page(s)

Monet Jeong

Monet Jeong

Technical Manager / SGS Korea Co., Ltd

This test report is limited to the samples and sample names provided by the client and does not guarantee the quality of all the client's products. It shall not be used for public relation, advertisement, lawsuit and shall not be used by excepts from it. This test report can be checked through the <http://rohs.kr.sgs.com/checkreport/main>. This test report is not related to KS Q ISO/IEC 17025 and Korea Laboratory Accreditation Scheme.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at https://www.sgs.com/en/terms-and-conditions/terms-e-document . 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 instructions, 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).

Sample No. : AYAA26-36320.001
Sample Description : C5210-Tin Plated
Item No./Part No. : Phosphorus Bronze
Materials : N/A

Heavy Metals

Test Items	Unit	Test Method	MDL	Results
Cadmium (Cd)	mg/kg	With reference to IEC 62321-5 : 2013, by ICP-OES	0.5	N.D.
Lead (Pb)	mg/kg	With reference to IEC 62321-5 : 2013, by ICP-OES	5	28.6
Mercury (Hg)	mg/kg	With reference to IEC 62321-4 : 2013+AMD1:2017CSV, by ICP-OES	2	N.D.
Hexavalent Chromium (Cr VI)++	$\mu g/cm^2$	With reference to IEC 62321-7-1 : 2015, by UV-Vis	0.1	N.D.

Flame Retardants-PBBs/PBDEs

Test Items	Unit	Test Method	MDL	Results
Monobromobiphenyl	mg/kg	With reference to IEC 62321-6 : 2015, by GC-MS	5	N.D.
Dibromobiphenyl	mg/kg	With reference to IEC 62321-6 : 2015, by GC-MS	5	N.D.
Tribromobiphenyl	mg/kg	With reference to IEC 62321-6 : 2015, by GC-MS	5	N.D.
Tetrabromobiphenyl	mg/kg	With reference to IEC 62321-6 : 2015, by GC-MS	5	N.D.
Pentabromobiphenyl	mg/kg	With reference to IEC 62321-6 : 2015, by GC-MS	5	N.D.
Hexabromobiphenyl	mg/kg	With reference to IEC 62321-6 : 2015, by GC-MS	5	N.D.
Heptabromobiphenyl	mg/kg	With reference to IEC 62321-6 : 2015, by GC-MS	5	N.D.
Octabromobiphenyl	mg/kg	With reference to IEC 62321-6 : 2015, by GC-MS	5	N.D.
Nonabromobiphenyl	mg/kg	With reference to IEC 62321-6 : 2015, by GC-MS	5	N.D.
Decabromobiphenyl	mg/kg	With reference to IEC 62321-6 : 2015, by GC-MS	5	N.D.
Monobromodiphenyl ether	mg/kg	With reference to IEC 62321-6 : 2015, by GC-MS	5	N.D.
Dibromodiphenyl ether	mg/kg	With reference to IEC 62321-6 : 2015, by GC-MS	5	N.D.
Tribromodiphenyl ether	mg/kg	With reference to IEC 62321-6 : 2015, by GC-MS	5	N.D.
Tetrabromodiphenyl ether	mg/kg	With reference to IEC 62321-6 : 2015, by GC-MS	5	N.D.
Pentabromodiphenyl ether	mg/kg	With reference to IEC 62321-6 : 2015, by GC-MS	5	N.D.
Hexabromodiphenyl ether	mg/kg	With reference to IEC 62321-6 : 2015, by GC-MS	5	N.D.
Heptabromodiphenyl ether	mg/kg	With reference to IEC 62321-6 : 2015, by GC-MS	5	N.D.
Octabromodiphenyl ether	mg/kg	With reference to IEC 62321-6 : 2015, by GC-MS	5	N.D.
Nonabromodiphenyl ether	mg/kg	With reference to IEC 62321-6 : 2015, by GC-MS	5	N.D.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at https://www.sgs.com/en/terms-and-conditions/terms-e-document . 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 instructions, 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).

SGS Korea Co.,Ltd.
322, The O valley, 76, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do, Korea 14117
t +82 (0)31 4608 000 f +82 (0)31 4608 059 http://www.sgsgroup.kr

Member of the SGS Group (Société Générale de Surveillance)

Sample No. : AYAA26-36320.001
Sample Description : C5210-Tin Plated
Item No./Part No. : Phosphorus Bronze
Materials : N/A

Flame Retardants-PBBs/PBDEs

Test Items	Unit	Test Method	MDL	Results
Decabromodiphenyl ether	mg/kg	With reference to IEC 62321-6 : 2015, by GC-MS	5	N.D.

Phthalates

Test Items	Unit	Test Method	MDL	Results
Di-isobutyl phthalate (DIBP)	mg/kg	With reference to IEC 62321-8: 2017, by GC-MS	50	N.D.
Di-butyl phthalate (DBP)	mg/kg	With reference to IEC 62321-8: 2017, by GC-MS	50	N.D.
Benzyl butyl phthalate (BBP)	mg/kg	With reference to IEC 62321-8: 2017, by GC-MS	50	N.D.
Di-(2-ethylhexyl) phthalate (DEHP)	mg/kg	With reference to IEC 62321-8: 2017, by GC-MS	50	N.D.

NOTE:
(1) N.D. = Not detected. (<MDL)
(2) mg/kg = ppm, ug/kg = ppb, mg/L = ppm
(3) MDL = Method Detection Limit
(4) - = No regulation
(5) ** = Qualitative analysis (No Unit)
(6) Negative = Undetectable / Positive = Detectable
(7) + = a. The result of Hexavalent Chromium (Cr(VI)) is “ND” as the result of Chromium (Cr) is “ND”, and confirmation test of Hexavalent Chromium (Cr(VI)) is not required.
b. If the content of Total Chromium (Cr) is greater than the MDL of Hexavalent Chromium (Cr(VI)), it is the result of hexavalent Chromium by UV-VIS.
(8) ++= a. The sample is positive for Cr VI if the Cr VI concentration is greater than 0.13 ug/cm2. The sample coating is considered to contain Cr VI.
b. The sample is negative for Cr VI if Cr VI is ND(concentration less than 0.10 ug/cm2). The coating is considered a non-Cr VI based coating.
c. The result between 0.10 ug/cm2 and 0.13 ug/cm2 is considered to be inconclusive – unavoidable coating variations may influence the determination.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at https://www.sgs.com/en/terms-and-conditions/terms-e-document . 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 instructions, 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).

SGS Korea Co.,Ltd.
322, The O valley, 76, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do, Korea 14117
t +82 (0)31 4608 000 f +82 (0)31 4608 059 http://www.sgsgroup.kr

Member of the SGS Group (Société Générale de Surveillance)

Picture of Sample as Received:

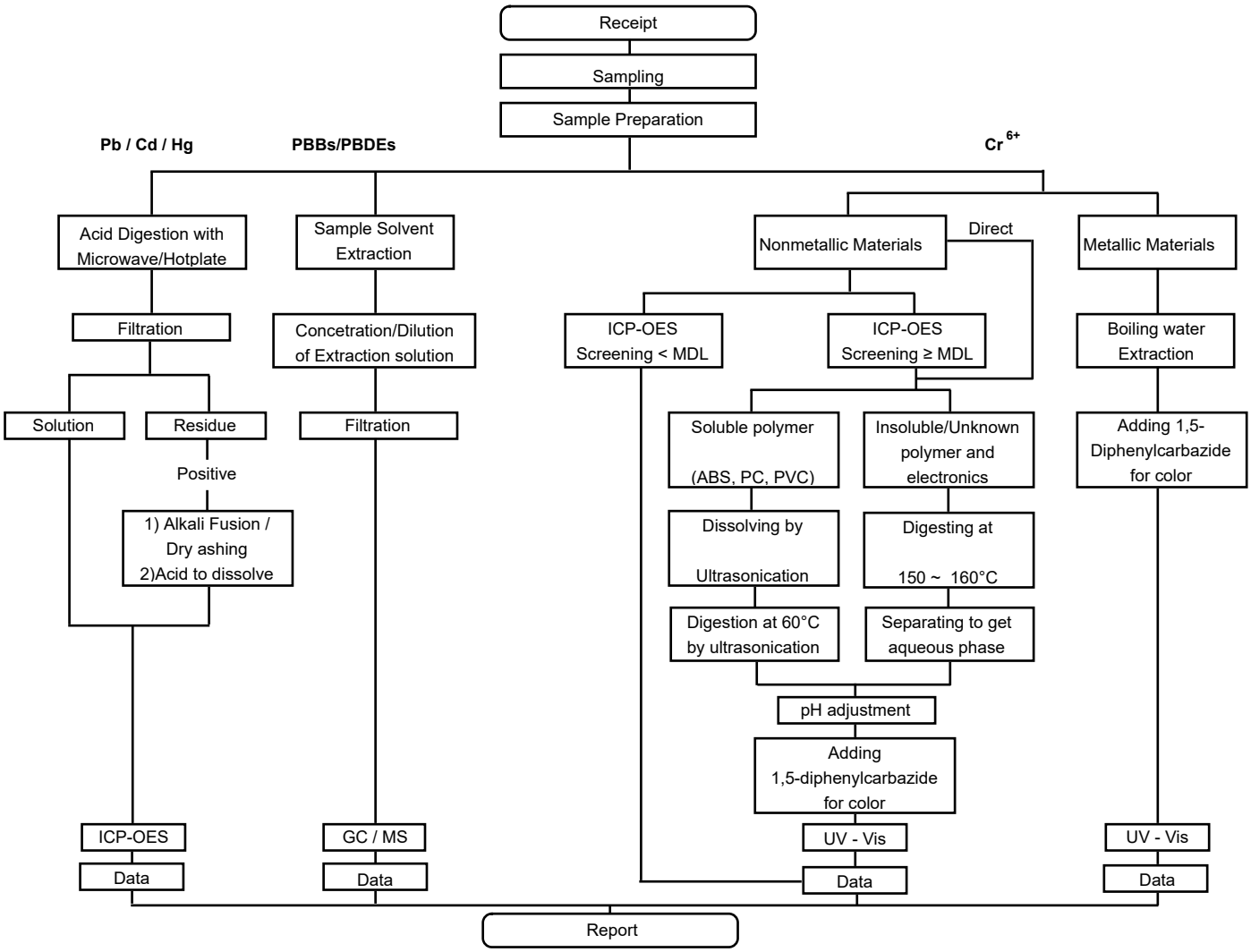
AYAA26-36320.001

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at https://www.sgs.com/en/terms-and-conditions/terms-e-document . 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 instructions, 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).

SGS Korea Co.,Ltd.
322, The O valley, 76, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do, Korea 14117
t +82 (0)31 4608 000 f +82 (0)31 4608 059 http://www.sgsgroup.kr

Member of the SGS Group (Société Générale de Surveillance)

Flow Chart for RoHS Pb / Cd / Hg / Cr^{6+}/ PBBs&PBDEs Test



The samples were dissolved totally at the acid digestion step of the above flow chart for Cd, Pb, Hg.

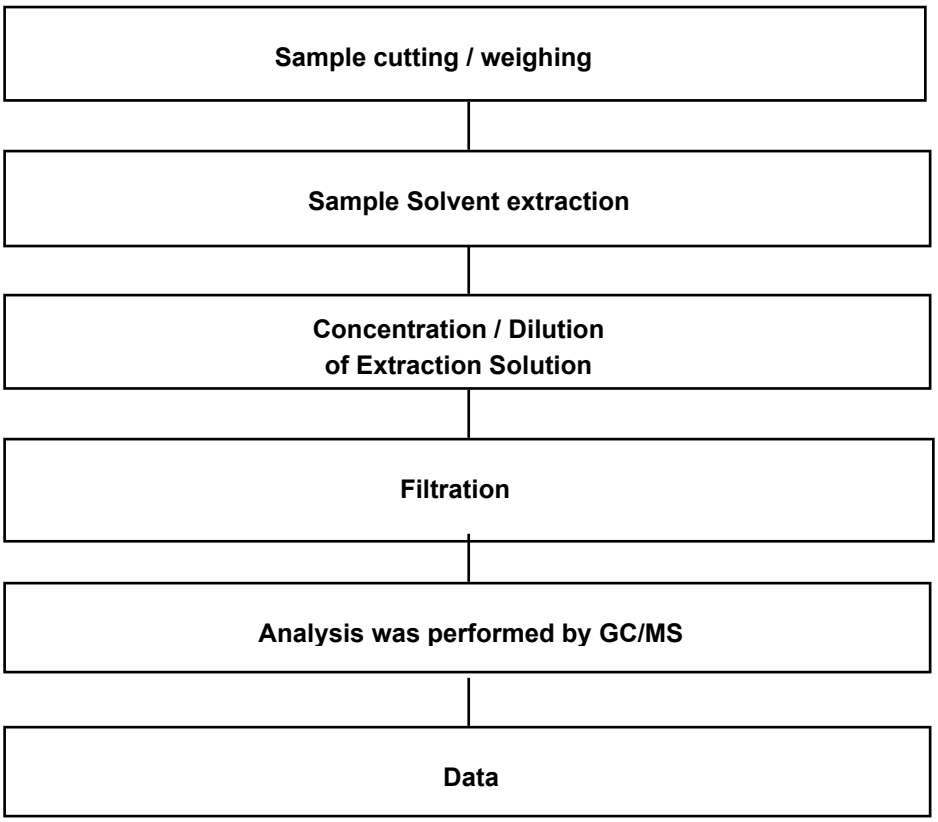
Technician : Aubrey Kim, Minyoung Han, Dongoh kim
Supervisor: Monet Jeong

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at https://www.sgs.com/en/terms-and-conditions/terms-e-document . 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 instructions, 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).

SGS Korea Co.,Ltd. 322, The O valley, 76, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do, Korea 14117
t +82 (0)31 4608 000 f +82 (0)31 4608 059 http://www.sgsgroup.kr

Member of the SGS Group (Société Générale de Surveillance)

Flow Chart for PhthalateTest



- Technician : Soomi Kim
- Supervisor : Jieun Lee

*** 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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at https://www.sgs.com/en/terms-and-conditions/terms-e-document . 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 instructions, 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).

SGS Korea Co.,Ltd.
322, The O valley, 76, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do, Korea 14117
t +82 (0)31 4608 000 f +82 (0)31 4608 059 http://www.sgsgroup.kr

Member of the SGS Group (Société Générale de Surveillance)