CERTIFICATE OF ACCREDITATION

SEL Incorporated Association

Accreditation No.: K

KT678

Corporation Registration No.:

135821-0009191

Address of (Branch site)#1007, Dongtan BIZ Tower, 63-12,

Laboratory: Dongtancheomdansaneop 1-ro, Hwaseong-si, Gyeonggi-do,

Republic of KOREA

Date of Initial Accreditation: November 25, 2015

Validity of Accreditation:

November 25, 2023 ~ November 24, 2027

Scope of Accreditation:

Attached Annex

Date of issue:

October 19, 2023

This testing laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to Joint ISO-ILAC-IAF Communiqué).







Head

Korea Laboratory Accreditation Scheme

No. KT678

02. Chemical Testing

02.025 Indoor and other environments

| Test method | Materials/ Products | Standard designation | Test range | Site | Field testing |
|------------------------------------|-------------------------------|--|---|------|------------------|
| IEC 62321- 4:2013/AMD1:201 7 | Electrotechnic al Products | Determination of certain substances in electrotechnical products - Part 4: Mercury in polymers, metals and electronics by CV-AAS, CV-AFS, ICP-OES and ICP-MS | Hg: > 5 mg/kg | BS | N |
| IEC 62321-5:2013 | Electrotechnic al Products | Determination of certain substances in electrotechnical products - Part 5: Cadmium, lead and chromium in polymers and electronics and cadmium and lead in metals by AAS, AFS, ICP-OES and ICP-MS | - Polymer, electronical products Pb: > 5 mg/kg, Cd: > 2 mg/kg, Cr: > 5 mg/kg - Metal Pb: > 5 mg/kg, Cd: > 2 mg/kg | BS | N |
| IEC 62321-6:2015 | Electrotechnic al Products | Determination of certain substances in electrotechnical products - Part 6: Polybrominated biphenyls and polybrominated diphenyl ethers in polymers by gas chromatograhy -mass spectometry (GC-MS) | PBBs, PBDEs : each > 20 mg/kg | BS | N |
| IEC 62321-7- 1:2015 | Electrotechnic al Products | Determination of certain substances in electrotechnical products - Part 7-1: Hexavalent chromium - Presence of hexavalent chromium (Cr(VI)) in colourless and coloured corrosion-protected coatings on metals by the colorimetric method | < 0.10 μg/cm ² : negative, (0.10 ~ 0.13) μg/cm ² : inconclusive, > 0.13 μg/cm ² : positive | BS | Z |

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| Test method | Materials/ Products | Standard designation | Test range | Site | Field testing |
|---------------------------|-------------------------------|---|---|------|------------------|
| IEC 62321-7- 2:2017 | Electrotechnic al Products | Determination of certain substances in electrotechnical products - Part 7-2: Hexavalent chromium - Determination of hexavalent chromium (Cr(VI)) in polymers and electronics by the colorimetric method | Cr(VI): > 8 mg/kg | BS | N |
| IEC 62321-8:2017 | Electrotechnic al Products | Determination of certain substances in electrotechnical products - Part 8: Phthalates in polymers by gas chromatographymass spectrometry (GC-MS), gas chromatography-mass spectrometry using a pyrolyzer/thermal desorption accessory (Py-TD-GC-MS) | DIBP, DBP, BBP, DEHP, DNOP, DIDP : each > 50 mg/kg | BS | N |
| KS C IEC 62321- 4:2014 | Electrotechnic al Products | Determination of certain substances in electrotechnical products - Part 4: Mercury in polymers, metals and electronics by CV-AAS, CV-AFS, ICP-OES and ICP-MS | Hg:>5 mg/kg | BS | N |
| KS C IEC 62321- 5:2014 | Electrotechnic al Products | Determination of certain substances in electrotechnical products - Part 5: Cadmium, lead and chromium in polymers and electronics and cadmium and lead in metals by AAS, AFS, ICP-OES and ICP-MS | Polymer, electronical products (Pb: > 5 mg/kg, Cd: > 2 mg/kg; Cr: > 5 mg/kg) Metal (Pb: > 5 mg/kg, Cd: > 2 mg/kg) | BS | N |
| KS C IEC 62321- 6:2015 | Electrotechnic al Products | Determination of certain substances in electrotechnical products - Part 6: Polybrominated biphenyls and polybrominated diphenyl ethers in polymers by gas chromatograhy-mass spectometry (GC-MS) | PBBs, PBDEs : each > 20 mg/kg | BS | N |

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| Test method | Materials/ Products | Standard designation | Test range | Site | Field testing |
|-----------------------------|-------------------------------|--|---|------|------------------|
| KS C IEC 62321-7- 1:2015 | Electrotechnic al Products | Determination of certain substances in electrotechnical products - Part 7-1: Hexavalent chromium - Presence of hexavalent chromium (Cr(VI)) in colourless and coloured corrosion-protected coatings on metals by the colorimetric method | < 0.10 μg/cm ² : negative, (0.10 ~ 0.13) μg/cm ² : inconclusive, > 0.13 μg/cm ² : positive | BS | N |
| KS C IEC 62321-7- 2:2017 | Electrotechnic al Products | Determination of certain substances in electrotechnical products - Part 7-2: Hexavalent chromium - Determination of hexavalent chromium (Cr(VI)) in polymers and electronics by the colorimetric method | Cr(VI): > 8 mg/kg | BS | N |

End.