

## RoHS & Halogen Free & REACH Compliance Declaration Letter

### ● EU RoHS Compliance Declaration

We guarantee that the following products comply with the EU RoHS 2.0 Directive 2011/65/EU and the delegated RoHS (EU) 2015/863.

- EU RoHS 10 Substance:

| Substance                             | Use/Non-use | Threshold , Exemption   |
|---------------------------------------|-------------|---|
| Lead and compounds                    | Use         | 0.1% (1,000ppm),<br>Exemption 7 (c) – I: Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound |
| Mercury and compounds                 | Non-use     | 0.1% (1,000ppm)   |
| Cadmium and compounds                 | Non-use     | 0.1% (1,000ppm)   |
| Hexavalent chromium compound          | Non-use     | 0.1% (1,000ppm)   |
| Polybrominated biphenyls(PBB)         | Non-use     | 0.1% (1,000ppm)   |
| Polybrominated biphenyl ethers (PBDE) | Non-use     | 0.1% (1,000ppm)   |
| Bis(2-ethy(hexyl)phthalate)(DEHP)     | Non-use     | 0.1% (1,000ppm)   |
| Benzyl butyl phthalate(BBP)           | Non-use     | 0.1% (1,000ppm)   |
| Dibutyl phthalate(DBP)                | Non-use     | 0.1% (1,000ppm)   |
| Diisbutyl phthalate(DIBP)             | Non-use     | 0.1% (1,000ppm)   |

- Products list

| Products       | Family               | Type      | status                       | Exemption No. |
|----------------|----------------------|-----------|------------------------------|---------------|
| Chip Resistors | RMC_Automotive Grade | Resistors | Compliance with exemption    | 7(c)- I       |
|                |                      | Jumper    | Compliance without exemption | -             |
| Chip Resistors | RACA                 | Resistors | Compliance with exemption    | 7(c)- I       |
|                |                      | Jumper    | Compliance without exemption | -             |
| Chip Resistors | RMC                  | Resistors | Compliance with exemption    | 7(c)- I       |
|                |                      | Jumper    | Compliance without exemption | -             |

| Products        | Family | Type      | status                       | Exemption No. |
|-----------------|--------|-----------|------------------------------|---------------|
| Chip Resistors  | RGC    | Resistors | Compliance with exemption    | 7(c)- I       |
| Chip Resistors  | RNC    | Resistors | Compliance without exemption | -             |
| Chip Resistors  | RMPC   | Resistors | Compliance without exemption | -             |
|                 |        | Jumper    | Compliance without exemption | -             |
| Chip Resistors  | RMCH   | Resistors | Compliance with exemption    | 7(c)- I       |
|                 |        | Jumper    | Compliance without exemption | -             |
| Chip Resistors  | TWMC   | Resistors | Compliance with exemption    | 7(c)- I       |
| Chip Resistors  | RMGW   | Resistors | Compliance with exemption    | 7(c)- I       |
|                 |        | Jumper    | Compliance without exemption | -             |
| Chip Resistors  | RMAW   | Resistors | Compliance with exemption    | 7(c)- I       |
|                 |        | Jumper    | Compliance without exemption | -             |
| Chip Resistors  | FCR    | Resistors | Compliance with exemption    | 7(c)- I       |
| Chip Resistors  | RHC    | Resistors | Compliance with exemption    | 7(c)- I       |
| Chip Resistors  | RVC    | Resistors | Compliance with exemption    | 7(c)- I       |
| Chip Resistors  | RZC    | Resistors | Compliance with exemption    | 7(c)- I       |
| Chip Resistors  | RVAC   | Resistors | Compliance with exemption    | 7(c)- I       |
| Chip Resistors  | RPC    | Resistors | Compliance with exemption    | 7(c)- I       |
| Chip Resistors  | RPCH   | Resistors | Compliance with exemption    | 7(c)- I       |
| Chip Resistors  | RBX    | Resistors | Compliance with exemption    | 7(c)- I       |
| Chip Resistors  | RPGW   | Resistors | Compliance with exemption    | 7(c)- I       |
| Chip Resistors  | RLC    | Resistors | Compliance with exemption    | 7(c)- I       |
| Chip Resistors  | RCC    | Resistors | Compliance without exemption | -             |
| Chip Resistors  | TWLC   | Resistors | Compliance with exemption    | 7(c)- I       |
| Chip Resistors  | RLP    | Resistors | Compliance without exemption | -             |
| Chip Resistors  | MLP    | Resistors | Compliance without exemption | -             |
| Chip Resistors  | MLP63C | Resistors | Compliance without exemption | -             |
| Chip Resistors  | WLP63  | Resistors | Compliance without exemption | -             |
| Chip Resistors  | FRC    | Resistors | Compliance with exemption    | 7(c)- I       |
| Chip Resistors  | RAC    | Resistors | Compliance with exemption    | 7(c)- I       |
|                 |        | Jumper    | Compliance without exemption | -             |
| Chip Resistors  | RAAW   | Resistors | Compliance with exemption    | 7(c)- I       |
| LTC Thermistors | LTC    | Resistors | Compliance without exemption | -             |
| Chip Fuses      | FCC    | Fuses     | Compliance without exemption | -             |
| Chip Fuses      | FHC    | Fuses     | Compliance without exemption | -             |

| Products        | Family  | Type            | status                       | Exemption No. |
|-----------------|---------|-----------------|------------------------------|---------------|
| Chip Fuses      | FMC     | Fuses           | Compliance without exemption | -             |
| Chip Fuses      | FCCR    | Fuses           | Compliance without exemption | -             |
| Chip Fuses      | SBF32   | Fuses           | Compliance without exemption | -             |
| Chip Fuses      | HFC32   | Fuses           | Compliance without exemption | -             |
| Attenuator      | RAC101A | Attenuator      | Compliance with exemption    | 7(c)- I       |
| ESD Suppressors | SPGA    | ESD Suppressors | Compliance without exemption | -             |
| ESD Suppressors | SPC     | ESD Suppressors | Compliance without exemption | -             |
| ESD Suppressors | HSPC    | ESD Suppressors | Compliance without exemption | -             |
| Lead Resistors  | RC      | Resistors       | Compliance without exemption | -             |

## ● China RoHS Compliance Declaration

We guarantee that the All Kamaya product comply with the China RoHS 2.

- China RoHS 6 Substance:

| Substance                             | Use/Non-use | Threshold / containing substance |
|---------------------------------------|-------------|----------------------------------|
| Lead and compounds                    | Use         | 0.1% (1,000ppm) / Lead oxide     |
| Mercury and compounds                 | Non-use     | 0.1% (1,000ppm)                  |
| Cadmium and compounds                 | Non-use     | 0.1% (1,000ppm)                  |
| Hexavalent chromium compound          | Non-use     | 0.1% (1,000ppm)                  |
| Polybrominated biphenyls(PBB)         | Non-use     | 0.1% (1,000ppm)                  |
| Polybrominated biphenyl ethers (PBDE) | Non-use     | 0.1% (1,000ppm)                  |

※At our company, the environmental conservation usage period is set to 10 years as the duration for normal environmental conditions of use.

## ● Halogen free Compliance

We hereby declare that our Product delivered by us are compliant with Halogen free requirement.

Bromine (Br) and compound : =< 900ppm

Chlorine (Cl) and compound : =< 900ppm

Total of bromine (Br) and compound + chlorine (Cl) and compound : =< 1500ppm

※Except the substance and material which is used in the process. The control subject is Halogen in the final part. Our parts comply the requirement above with analysis data.

## ● REACH Compliance Declaration (SVHC 30<sup>th</sup>-240)

We hereby certify that no substances set forth below exceeds any threshold in our products, which are delivered directly from us.

※About Lead oxide(CAS No.1317-36-8) of SVHC.

The Lead oxide is contained in a part of Kamaya product. This is the one that contains it as an element of the glass material. Because the glass is UVCB substance (substance of unknown or variable composition, complex reaction products or biological materials), it is off the subject. Therefore, the Lead oxide that the Kamaya product contains is off the subject.

### - Candidate list of SVHC published by ECHA

| No. | Substances Name   | EC No                      | Date of inclusion |
|-----|---|----------------------------|-------------------|
|     |   | ( CAS No )                 |                   |
| 240 | Oligomerisation and alkylation reaction products of 2-propene and phenol<br>Phenol, methylstyrenated  | 700-960-7<br>-             | 2024/1/23         |
| 239 | Bumetrizole (UV-326)  | 223-445-4<br>(3896-11-5)   | 2024/1/23         |
| 238 | 2-(dimethylamino)-2-[(4-methylphenyl)methyl]-1-[4-(morpholin-4-yl)phenyl]butan-1-one  | 438-340-0<br>(119344-86-4) | 2024/1/23         |
| 237 | 2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol (UV-329)  | 221-989-5<br>(3147-75-9)   | 2024/1/23         |
| 236 | 2,4,6-tri-tert-butylphenol  | 211-989-5<br>(732-26-3)    | 2024/1/23         |
| 235 | Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide   | 278-355-8<br>(75980-60-8)  | 2023/6/14         |
| 234 | Bis(4-chlorophenyl) sulphone  | 201-247-9<br>(80-07-9)     | 2023/6/14         |
| 233 | 1,1'-[ethane-1,2-diylbis(oxy)]bis[2,4,6-tribromobenzene]  | 253-692-3<br>(37853-59-1)  | 2023/1/17         |
| 232 | 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol  | 201-236-9<br>(79-94-7)     | 2023/1/17         |
| 231 | 4,4'-sulphonyldiphenol  | 201-250-5<br>(80-09-1)     | 2023/1/17         |
| 230 | Barium diboron tetraoxide   | 237-222-4<br>(13701-59-2)  | 2023/1/17         |
| 229 | Bis(2-ethylhexyl) tetrabromophthalate covering any of the individual isomers and/or combinations thereof<br>Bis(2-ethylhexyl) tetrabromophthalate | 247-426-5<br>(26040-51-7)  | 2023/1/17         |
| 228 | Isobutyl 4-hydroxybenzoate  | 224-208-8<br>(4247-02-3)   | 2023/1/17         |

| No. | Substances Name  | EC No   | Date of inclusion |
|-----|--|---|-------------------|
|     |  | ( CAS No )  |                   |
| 227 | Melamine   | 203-615-4<br>(108-78-1)   | 2023/1/17         |
| 226 | Perfluoroheptanoic acid and its salts<br>Ammonium perfluoroheptanoate<br>potassium perfluoroheptanoate<br>Perfluoroheptanoic acid<br>Sodium perfluoroheptanoate                        | 228-098-2<br>(6130-43-4)<br>-<br>(21049-36-5)<br>206-798-9<br>(375-85-9)<br>243-518-4<br>(20109-59-5) | 2023/1/17         |
| 225 | reaction mass of 2,2,3,3,5,5,6,6-octafluoro-4-(1,1,1,2,3,3,3-heptafluoropropan-2-yl)morpholine and 2,2,3,3,5,5,6,6-octafluoro-4-(heptafluoropropyl)morpholine                          | 473-390-7<br>-  | 2023/1/17         |
| 224 | N-(hydroxymethyl)acrylamide  | 213-103-2<br>(924-42-5)   | 2022/6/10         |
| 223 | tris(2-methoxyethoxy)vinylsilane   | 213-934-0<br>(1067-53-4)  | 2022/1/17         |
| 222 | S-(tricyclo[5.2.1.0 <sup>2,6</sup> ]deca-3-en-8(or 9)-yl) O-(isopropyl or isobutyl or 2-ethylhexyl) O-(isopropyl or isobutyl or 2-ethylhexyl) phosphorodithioate                       | 401-850-9<br>(255881-94-8)  | 2022/1/17         |
| 221 | 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol (DBMC)  | 204-327-1<br>(119-47-1)   | 2022/1/17         |
| 220 | (±)-1,7,7-trimethyl-3-[(4-methylphenyl)methylene]bicyclo[2.2.1]heptan-2-one covering any of the individual isomers and/or combinations thereof (4-MBC)                                 | -   | 2022/1/17         |
| 219 | 2-(4-tert-butylbenzyl)propionaldehyde and its individual stereoisomers   | -   | 2021/7/8          |
| 218 | Orthoboric acid, sodium salt   | 237-560-2<br>(13840-56-7)   | 2021/7/8          |
| 217 | 2,2-bis(bromomethyl)propane1,3-diol (BMP);<br>2,2-dimethylpropan-1-ol, tribromo derivative/3-bromo-2,2-bis(bromomethyl)-1-propanol (TBNPA);<br>2,3-dibromo-1-propanol (2,3-DBPA)       | 221-967-7<br>(3296-90-0)<br>253-057-0<br>(36483-57-5)<br>202-480-9<br>(1522-92-5)<br>(96-13-9)        | 2021/7/8          |
| 216 | Glutaral   | 203-856-5<br>(111-30-8)   | 2021/7/8          |
| 215 | Medium-chain chlorinated paraffins (MCCP)<br>(UVCB substances consisting of more than or equal to 80% linear chloroalkanes with carbon chain lengths within the range from C14 to C17) | -   | 2021/7/8          |
| 214 | Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP)    | -   | 2021/7/8          |
| 213 | 1,4-dioxane  | 204-661-8<br>(123-91-1)   | 2021/7/8          |
| 212 | 4,4'-(1-methylpropylidene)bisphenol  | 201-025-1<br>(77-40-7)  | 2021/7/8          |
| 211 | Bis(2-(2-methoxyethoxy)ethyl)ether   | 205-594-7<br>(143-24-8)   | 2021/1/19         |

| No. | Substances Name  | EC No                                  | Date of inclusion |
|-----|--|--|-------------------|
|     |  | ( CAS No )                             |                   |
| 210 | Diocetyl tin dilaurate, stannane, dioctyl-, bis(coco acyloxy) derivs., and any other stannane, dioctyl-, bis(fatty acyloxy) derivs. wherein C12 is the predominant carbon number of the fatty acyloxy moiety | -                                      | 2021/1/19         |
| 209 | Dibutylbis(pentane-2,4-dionato-O,O')tin  | 245-152-0<br>(22673-19-4)              | 2020/6/25         |
| 208 | butyl 4-hydroxybenzoate(Butylparaben)  | 202-318-7<br>(94-26-8)                 | 2020/6/25         |
| 207 | 2-methylimidazole  | 211-765-7<br>(693-98-1)                | 2020/6/25         |
| 206 | 1-vinylimidazole   | 214-012-0<br>(1072-63-5)               | 2020/6/25         |
| 205 | Diisohexyl phthalate   | 276-090-2<br>(71850-09-4)              | 2020/1/16         |
| 204 | 2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone  | 404-360-3<br>(119313-12-1)             | 2020/1/16         |
| 203 | 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one   | 400-600-6<br>(71868-10-5)              | 2020/1/16         |
| 202 | Perfluorobutane sulfonic acid (PFBS) and its salts   | -                                      | 2020/1/16         |
| 201 | 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy) propionic acid, its salts and its acyl halides  | -                                      | 2019/7/16         |
| 200 | 2-methoxyethyl acetate   | (203-772-9)<br>(110-49-6)              | 2019/7/16         |
| 199 | 4-tert-butylphenol   | (202-679-0)<br>(98-54-4)               | 2019/7/16         |
| 198 | This (4-nonylphenyl, branched and linear) phosphite (TNPP) with $\geq 0.1\%$ w/w of 4-nonylphenol, branched and linear (4-NP)  | -                                      | 2019/7/16         |
| 197 | 2,2-bis(4'-hydroxyphenyl)-4-methylpentane  | 401-720-1<br>(6807-17-6)               | 2019/1/15         |
| 196 | Benzo[k]fluoranthene   | 205-916-6<br>(207-08-9)                | 2019/1/15         |
| 195 | Fluoranthene   | 205-912-4<br>(206-44-0)<br>93951-69-0) | 2019/1/15         |
| 194 | Phenanthrene   | 201-581-5<br>(85-01-8)                 | 2019/1/15         |
| 193 | Pyrene   | 204-927-3<br>(129-00-0,<br>1718-52-1)  | 2019/1/15         |
| 192 | 1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan-2-one  | 239-139-9<br>(15087-24-8)              | 2019/1/15         |
| 191 | Benzene-1,2,4-tricarboxylic acid 1,2-anhydride (trimellitic anhydride)   | 209-008-0<br>(552-30-7)                | 2018/6/27         |
| 190 | Benzo[ghi]perylene   | 205-883-8<br>(191-24-2)                | 2018/6/27         |
| 189 | Decamethylcyclopentasiloxane   | 208-764-9<br>(541-02-6)                | 2018/6/27         |
| 188 | Dicyclohexyl phthalate (DCHP)  | 201-545-9<br>(84-61-7)                 | 2018/6/27         |
| 187 | Disodium octaborate  | 234-541-0<br>(12008-41-2)              | 2018/6/27         |

| No. | Substances Name   | EC No                                    | Date of inclusion |
|-----|---|--|-------------------|
|     |   | ( CAS No )                               |                   |
| 186 | Dodecamethylcyclohexasiloxane   | 208-762-8<br>(540-97-6)                  | 2018/6/27         |
| 185 | Ethylenediamine   | 203-468-6<br>(107-15-3)                  | 2018/6/27         |
| 184 | Lead  | 231-100-4<br>(7439-92-1)                 | 2018/6/27         |
| 183 | Octamethylcyclotetrasiloxane  | 209-136-7<br>(556-67-2)                  | 2018/6/27         |
| 182 | Terphenyl, hydrogenated   | 262-967-7<br>(61788-32-7)                | 2018/6/27         |
| 181 | Benz[a]anthracene   | 200-280-6<br>(56-55-3<br>1718-53-2)      | 2018/1/15         |
| 180 | Cadmium carbonate   | 208-168-9<br>(513-78-0)                  | 2018/1/15         |
| 179 | Cadmium hydroxide   | 244-168-5<br>(21041-95-2)                | 2018/1/15         |
| 178 | Cadmium nitrate   | 233-710-6<br>(1022-68-1<br>10325-94-7)   | 2018/1/15         |
| 177 | Chrysene  | 205-923-4<br>(218-01-9<br>1719-03-5)     | 2018/1/15         |
| 176 | 1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo [12.2.1.16.,9.02,13.05,10] octadeca-7,15-diene("Dechlorane plus"™) [covering any of its individual anti -and syn -isomers or any combination thereof]   | -  | 2018/1/15         |
| 175 | Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP) with ≥0.1% w/w 4-heptylphenol, branched and linear (4-HPbl)   | -  | 2018/1/15         |
| 174 | Perfluorohexane-1-sulphonic acid and its salts  | 206-587-1<br>(355-46-4)                  | 2017/7/7          |
| 173 | 4,4'-isopropylidenediphenol (bisphenol A)   | 201-245-8<br>(80-05-7)                   | 2017/1/12         |
| 172 | Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts  | (335-76-2)<br>(3830-45-3)<br>(3108-42-7) | 2017/1/12         |
| 171 | p-(1,1-dimethylpropyl)phenol  | 201-280-9<br>(80-46-6)                   | 2017/1/12         |
| 170 | 4-Heptylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 7 covalently bound predominantly in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof] | -  | 2017/1/12         |
| 169 | Benzo[def]chrysene (Benzo[a]pyrene)   | 200-028-5<br>(50-32-8)                   | 2016/6/20         |
| 168 | 1,3-propanesultone  | 214-317-9<br>(1120-71-4)                 | 2015/12/17        |
| 167 | 2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)  | 223-383-8<br>(3864-99-1)                 | 2015/12/17        |

| No. | Substances Name  | EC No  | Date of inclusion |
|-----|--|--|-------------------|
|     |  | ( CAS No )   |                   |
| 166 | 2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)   | 253-037-1<br>(36437-37-3)                              | 2015/12/17        |
| 165 | Nitrobenzene   | 202-716-0<br>(98-95-3)                                 | 2015/12/17        |
| 164 | Perfluorononan-1-oic acid<br>(2,2,3,3,4,4,5,5,6,6,7,7,<br>8,8,9,9,9-heptadecafluorononanoic acid<br>and its sodium and ammonium salts  | 206-801-3<br>(375-95-1)<br>(21049-39-8)<br>(4149-60-4) | 2015/12/17        |
| 163 | 1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ? 0.3% of dihexyl phthalate (EC No. 201-559-5)  | 271-094-0<br>272-013-1<br>(68515-51-5)<br>(68648-93-1) | 2015/6/15         |
| 162 | 5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2] [covering any of the individual stereoisomers of [1] and [2] or any combination thereof]                    | -  | 2015/6/15         |
| 161 | 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)   | 247-384-8<br>(25973-55-1)                              | 2014/12/17        |
| 160 | Cadmium sulphate   | 233-331-6<br>(10124-36-4)<br>(31119-53-6)              | 2014/12/17        |
| 159 | 2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)   | 223-346-6<br>(3846-71-7)                               | 2014/12/17        |
| 158 | 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)   | 239-622-4<br>(15571-58-1)                              | 2014/12/17        |
| 157 | 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) | -  | 2014/12/17        |
| 156 | Cadmium fluoride   | 232-222-0<br>(7790-79-6)                               | 2014/12/17        |
| 155 | 1,2-Benzenedicarboxylic acid,dihexyl ester,branched and linear   | 271-093-5<br>(68515-50-4)                              | 2014/6/16         |
| 154 | Sodium perborate;perboric acid,sodium salt   | 239-172-9<br>234-390-0                                 | 2014/6/16         |
| 153 | Sodium peroxometaborate  | 231-556-4<br>(7632-04-4)                               | 2014/6/16         |
| 152 | Cadmium chloride   | 233-296-7<br>(10108-64-2)                              | 2014/6/16         |
| 151 | Cadmium sulphide   | 1306-23-6  | 2013/12/16        |
| 150 | Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo] -5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38)  | 1937-37-7  | 2013/12/16        |
| 149 | Dihexyl phthalate  | 84-75-3  | 2013/12/16        |
| 148 | Imidazolidine-2-thione; 2-imidazoline-2-thiol  | 96-45-7  | 2013/12/16        |
| 147 | Trixylyl phosphate   | 25155-23-1   | 2013/12/16        |
| 146 | Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)   | 573-58-0   | 2013/12/16        |
| 145 | Lead di(acetate)   | 301-04-2   | 2013/12/16        |



| No. | Substances Name  | EC No  | Date of inclusion |
|-----|--|--|-------------------|
|     |  | ( CAS No )   |                   |
| 144 | Cadmium  | 231-152-8<br>(7440-43-9)   | 2013/6/20         |
| 143 | Ammonium pentadecafluorooctanoate (APFO)   | 223-320-4<br>(3825-26-1)   | 2013/6/20         |
| 142 | Pentadecafluorooctanoic acid (PFOA)  | 206-397-9<br>(335-67-1)  | 2013/6/20         |
| 141 | Dipentyl phthalate (DPP)   | 205-017-9<br>(131-18-0)  | 2013/6/20         |
| 140 | 4-Nonylphenol, branched and linear, ethoxylated  | -  | 2013/6/20         |
| 139 | Cadmium oxide  | 215-146-2<br>(1306-19-0)   | 2013/6/20         |
| 138 | Pyrochlore, antimony lead yellow   | 232-382-1<br>(8012-00-8)   | 2012/12/19        |
| 137 | 6-methoxy-m-toluidine (p-cresidine)  | 204-419-1<br>(120-71-8)  | 2012/12/19        |
| 136 | Henicosafleuroundecanoic acid  | 218-165-4<br>(2058-94-8)   | 2012/12/19        |
| 135 | Hexahydromethylphthalic anhydride,<br>Hexahydro-4-methylphthalic anhydride,<br>Hexahydro-1-methylphthalic anhydride,<br>Hexahydro-3-methylphthalic anhydride | 247-094-1<br>243-072-0<br>256-356-4<br>260-566-1<br>(25550-51-0<br>19438-60-9<br>48122-14-1<br>57110-29-9) | 2012/12/19        |
| 134 | Cyclohexane-1,2-dicarboxylic anhydride<br>(Hexahydrophthalic anhydride - HHPA)   | 201-604-9<br>236-086-3<br>238-009-9<br>(85-42-7<br>13149-00-3<br>14166-21-3)                               | 2012/12/19        |
| 133 | Dibutyltin dichloride (DBT)  | 211-670-0<br>(683-18-1)  | 2012/12/19        |
| 132 | Lead bis(tetrafluoroborate)  | 237-486-0<br>(13814-96-5)  | 2012/12/19        |
| 131 | Lead dinitrate   | 233-245-9<br>(10099-74-8)  | 2012/12/19        |
| 130 | Silicic acid, lead salt  | 234-363-3<br>(11120-22-2)  | 2012/12/19        |
| 129 | 4-Aminoazobenzene; 4-Phenylazoaniline  | 200-453-6<br>(60-09-3)   | 2012/12/19        |
| 128 | Lead titanium zirconium oxide  | 235-727-4<br>(12626-81-2)  | 2012/12/19        |
| 127 | Lead monoxide (Lead oxide)   | 215-267-0<br>(1317-36-8)   | 2012/12/19        |
| 126 | o-Toluidine; 2-Aminotoluene  | 202-429-0<br>(95-53-4)   | 2012/12/19        |
| 125 | 3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine   | 421-150-7<br>(143860-04-2)   | 2012/12/19        |
| 124 | Silicic acid, barium salt, lead-doped  | 272-271-5<br>(68784-75-8)  | 2012/12/19        |
| 123 | Basic lead carbonate (trilead bis(carbonate)dihydroxide)   | 215-290-6<br>(1319-46-6)   | 2012/12/19        |

| No. | Substances Name   | EC No                     | Date of inclusion |
|-----|---|---------------------------|-------------------|
|     |   | ( CAS No )                |                   |
| 122 | Furan   | 203-727-3<br>(110-00-9)   | 2012/12/19        |
| 121 | N,N-dimethylformamide; dimethyl formamide   | 200-679-5<br>(68-12-2)    | 2012/12/19        |
| 120 | 4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated<br>[covering well-defined substances and UVCB substances, polymers and homologues]  | -                         | 2012/12/19        |
| 119 | 4-Nonylphenol, branched and linear<br>[substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof] | -                         | 2012/12/19        |
| 118 | 4,4'-methylenedi-o-toluidine  | 212-658-8<br>(838-88-0)   | 2012/12/19        |
| 117 | Diethyl sulphate  | 200-589-6<br>(64-67-5)    | 2012/12/19        |
| 116 | Dimethyl sulphate   | 201-058-1<br>(77-78-1)    | 2012/12/19        |
| 115 | Lead oxide sulfate (basic lead sulfate)   | 234-853-7<br>(12036-76-9) | 2012/12/19        |
| 114 | Lead titanium trioxide  | 235-038-9<br>(12060-00-3) | 2012/12/19        |
| 113 | Acetic acid, lead salt, basic   | 257-175-3<br>(51404-69-4) | 2012/12/19        |
| 112 | [Phthalato(2-)]dioxotrilead (dibasic lead phthalate)  | 273-688-5<br>(69011-06-9) | 2012/12/19        |
| 111 | Bis(pentabromophenyl) ether<br>(decabromodiphenyl ether; DecaBDE)   | 214-604-9<br>(1163-19-5)  | 2012/12/19        |
| 110 | N-methylacetamide   | 201-182-6<br>(79-16-3)    | 2012/12/19        |
| 109 | Dinoseb   | 201-861-7<br>(88-85-7)    | 2012/12/19        |
| 108 | 1,2-Diethoxyethane  | 211-076-1<br>(629-14-1)   | 2012/12/19        |
| 107 | Tetralead trioxide sulphate   | 235-380-9<br>(12202-17-4) | 2012/12/19        |
| 106 | N-pentyl-isopentylphthalate   | (776297-69-9)             | 2012/12/19        |
| 105 | Dioxobis(stearato)trilead   | 235-702-8<br>(12578-12-0) | 2012/12/19        |
| 104 | Tetraethyllead  | 201-075-4<br>(78-00-2)    | 2012/12/19        |
| 103 | Pentalead tetraoxide sulphate   | 235-067-7<br>(12065-90-6) | 2012/12/19        |
| 102 | Pentacosfluorotridecanoic acid  | 276-745-2<br>(72629-94-8) | 2012/12/19        |
| 101 | Tricosfluorododecanoic acid   | 206-203-2<br>(307-55-1)   | 2012/12/19        |

| No. | Substances Name  | EC No                     | Date of inclusion |
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|     |  | ( CAS No )                |                   |
| 100 | Heptacosfluorotetradecanoic acid   | 206-803-4<br>(376-06-7)   | 2012/12/19        |
| 99  | 1-bromopropane; n-propyl bromide   | 203-445-0<br>(106-94-5)   | 2012/12/19        |
| 98  | Methoxy acetic acid  | 210-894-6<br>(625-45-6)   | 2012/12/19        |
| 97  | 4-methyl-m-phenylenediamine (2,4-toluene-diamine)  | 202-453-1<br>(95-80-7)    | 2012/12/19        |
| 96  | Propylene oxide; 1,2-epoxypropane; methyloxirane   | 200-879-2<br>(75-56-9)    | 2012/12/19        |
| 95  | Trilead dioxide phosphonate  | 235-252-2<br>(12141-20-7) | 2012/12/19        |
| 94  | o-aminoazotoluene  | 202-591-2<br>(97-56-3)    | 2012/12/19        |
| 93  | 1,2-Benzenedicarboxylic acid, dipentylester, branched and linear   | 284-032-2<br>(84777-06-0) | 2012/12/19        |
| 92  | 4,4'-oxydianiline and its salts  | 202-977-0<br>(101-80-4)   | 2012/12/19        |
| 91  | Lead tetroxide (orange lead)   | 215-235-6<br>(1314-41-6)  | 2012/12/19        |
| 90  | Biphenyl-4-ylamine   | 202-177-1<br>(92-67-1)    | 2012/12/19        |
| 89  | Diisopentylphthalate (DIPP)  | 210-088-4<br>(605-50-5)   | 2012/12/19        |
| 88  | Fatty acids, C16-18, lead salts  | 292-966-7<br>(91031-62-8) | 2012/12/19        |
| 87  | Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))  | 204-650-8<br>(123-77-3)   | 2012/12/19        |
| 86  | Sulfurous acid, lead salt, dibasic   | 263-467-1<br>(62229-08-7) | 2012/12/19        |
| 85  | Lead cyanamidate   | 244-073-9<br>(20837-86-9) | 2012/12/19        |
| 84  | 1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)  | 203-977-3<br>(112-49-2)   | 2012/6/18         |
| 83  | 1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)  | 203-794-9<br>(110-71-4)   | 2012/6/18         |
| 82  | Diboron trioxide   | 215-125-8<br>(1303-86-2)  | 2012/6/18         |
| 81  | Formamide  | 200-842-0<br>(75-12-7)    | 2012/6/18         |
| 80  | Lead(II) bis(methanesulfonate)   | 401-750-5<br>(17570-76-2) | 2012/6/18         |
| 79  | 1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC)   | 219-514-3<br>(2451-62-9)  | 2012/6/18         |
| 78  | 1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β-TGIC)                                  | 423-400-0<br>(59653-74-6) | 2012/6/18         |
| 77  | 4,4'-bis(dimethylamino)benzophenone (Michler's ketone)   | 202-027-5<br>(90-94-8)    | 2012/6/18         |
| 76  | N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)   | 202-959-2<br>(101-61-1)   | 2012/6/18         |
| 75  | [4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3) | 208-953-6<br>(548-62-9)   | 2012/6/18         |

| No. | Substances Name  | EC No                       | Date of inclusion        |
|-----|--|-----------------------------|--------------------------|
|     |  | ( CAS No )                  |                          |
| 74  | [4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene] cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26) | 219-943-6<br>(2580-56-5)    | 2012/6/18                |
| 73  | $\alpha,\alpha$ -Bis[4-(dimethylamino)phenyl]-4 (phenylamino) naphthalene-1-methanol (C.I. Solvent Blue 4)                                 | 229-851-8<br>(6786-83-0)    | 2012/6/18                |
| 72  | 4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol  | 209-218-2<br>(561-41-1)     | 2012/6/18                |
| 71  | Zirconia Aluminosilicate Refractory Ceramic Fibres   |                             | 2011/12/19               |
| 70  | Calcium arsenate   | 231-904-5<br>( 7778-44-1 )  | 2011/12/19               |
| 69  | Bis(2-methoxyethyl) ether  | 203-924-4<br>( 111-96-6 )   | 2011/12/19               |
| 68  | Aluminosilicate Refractory Ceramic Fibres  |                             | 2011/12/19               |
| 67  | Potassium hydroxyoctaoxodizincatedichromate  | 234-329-8<br>( 11103-86-9 ) | 2011/12/19               |
| 66  | Lead dipicrate   | 229-335-2<br>( 6477-64-1 )  | 2011/12/19               |
| 65  | N,N-dimethylacetamide  | 204-826-4<br>( 127-19-5 )   | 2011/12/19               |
| 64  | Arsenic acid   | 231-901-9<br>( 7778-39-4 )  | 2011/12/19               |
| 63  | 2-Methoxyaniline; o-Anisidine  | 201-963-1<br>( 90-04-0 )    | 2011/12/19               |
| 62  | Trilead diarsenate   | 222-979-5<br>( 3687-31-8 )  | 2011/12/19               |
| 61  | 1,2-dichloroethane   | 203-458-1<br>( 107-06-2 )   | 2011/12/19               |
| 60  | Pentazinc chromate octahydroxide   | 256-418-0<br>(49663-84-5)   | 2011/12/19               |
| 59  | 4-(1,1,3,3-tetramethylbutyl)phenol   | 205-426-2<br>( 140-66-9 )   | 2011/12/19               |
| 58  | Formaldehyde, oligomeric reaction products with aniline  | 500-036-1<br>( 25214-70-4 ) | 2011/12/19               |
| 57  | Bis(2-methoxyethyl) phthalate  | 204-212-6<br>( 117-82-8 )   | 2011/12/19               |
| 56  | Lead diazide, Lead azide   | 236-542-1<br>( 13424-46-9 ) | 2011/12/19               |
| 55  | Lead styphnate   | 239-290-0<br>( 15245-44-0 ) | 2011/12/19               |
| 54  | 2,2'-dichloro-4,4'-methylenedianiline  | 202-918-9<br>( 101-14-4 )   | 2011/12/19               |
| 53  | Phenolphthalein  | 201-004-7<br>( 77-09-8 )    | 2011/12/19               |
| 52  | Dichromium tris(chromate)  | 246-356-2<br>( 24613-89-6 ) | 2011/12/19               |
| 51  | Cobalt dichloride  | 231-589-4<br>( 7646-79-9 )  | 2011/06/20<br>2008/10/08 |
| 50  | 1,2,3-Trichloropropane   | 202-486-1<br>( 96-18-4 )    | 2011/6/20                |
| 49  | 1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters  | 271-084-6<br>( 68515-42-4 ) | 2011/6/20                |
| 48  | 1-Methyl-2-pyrrolidone   | 212-828-1<br>( 872-50-4 )   | 2011/6/20                |

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| 47  | Hydrazine  | 206-114-9<br>( 302-01-2<br>7803-57-8 )                 | 2011/6/20         |
| 46  | Strontium chromate   | 232-142-6<br>( 7789-06-2 )                             | 2011/6/20         |
| 45  | 2-Ethoxyethyl acetate  | 203-839-2<br>( 111-15-9 )                              | 2011/6/20         |
| 44  | 1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich       | 276-158-1<br>( 71888-89-6 )                            | 2011/6/20         |
| 43  | Chromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid | 231-801-5<br>236-881-5<br>( 7738-94-5<br>13530-68-2 )  | 2010/12/15        |
| 42  | Cobalt( II ) carbonate   | 208-169-4<br>( 513-79-1 )                              | 2010/12/15        |
| 41  | Cobalt( II ) diacetate   | 200-755-8<br>( 71-48-7 )                               | 2010/12/15        |
| 40  | 2-Methoxyethanol   | 203-713-7<br>( 109-86-4 )                              | 2010/12/15        |
| 39  | Chromium trioxide  | 215-607-8<br>( 1333-82-0 )                             | 2010/12/15        |
| 38  | Cobalt( II ) dinitrate   | 233-402-1<br>( 10141-05-6 )                            | 2010/12/15        |
| 37  | Cobalt( II ) sulphate  | 233-334-2<br>( 10124-43-3 )                            | 2010/12/15        |
| 36  | 2-Ethoxyethanol  | 203-804-1<br>( 110-80-5 )                              | 2010/12/15        |
| 35  | Disodium tetraborate, anhydrous  | 215-540-4<br>( 1303-96-4<br>1330-43-4<br>12179-04-3 )  | 2010/6/18         |
| 34  | Tetraboron disodium heptaoxide, hydrate                                    | 235-541-3<br>( 12267-73-1 )                            | 2010/6/18         |
| 33  | Potassium dichromate   | 231-906-6<br>( 7778-50-9 )                             | 2010/6/18         |
| 32  | Ammonium dichromate  | 232-143-1<br>( 7789-09-5 )                             | 2010/6/18         |
| 31  | Trichloroethylene  | 201-167-4<br>( 79-01-6 )                               | 2010/6/18         |
| 30  | Sodium chromate  | 231-889-5<br>( 7775-11-3 )                             | 2010/6/18         |
| 29  | Potassium chromate   | 232-140-5<br>( 7789-00-6 )                             | 2010/6/18         |
| 28  | Boric acid   | 233-139-2<br>234-343-4<br>( 10043-35-3<br>11113-50-1 ) | 2010/6/18         |
| 27  | Acrylamide   | 201-173-7<br>( 79-06-1 )                               | 2010/3/3          |
| 26  | Lead chromate molybdate sulphate red (C.I. Pigment Red 104)                | 235-759-9<br>( 12656-85-8 )                            | 2010/1/13         |
| 25  | Lead chromate  | 231-846-0<br>( 7758-97-6 )                             | 2010/1/13         |

| No. | Substances Name  | EC No   | Date of inclusion |
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|     |  | ( CAS No )  |                   |
| 24  | Anthracene oil, anthracene-low                                 | 292-604-8<br>( 90640-82-7 )                           | 2010/1/13         |
| 23  | 2,4-Dinitrotoluene   | 204-450-0<br>( 121-14-2 )                             | 2010/1/13         |
| 22  | Tris(2-chloroethyl)phosphate                                   | 204-118-5<br>( 115-96-8 )                             | 2010/1/13         |
| 21  | Anthracene oil, anthracene paste, anthracene fraction          | 295-275-9<br>( 91995-15-2 )                           | 2010/1/13         |
| 20  | Anthracene oil   | 292-602-7<br>( 90640-80-5 )                           | 2010/1/13         |
| 19  | Pitch, coal tar, high temp.                                    | 266-028-2<br>( 65996-93-2 )                           | 2010/1/13         |
| 18  | Lead sulfochromate yellow<br>(C.I. Pigment Yellow 34)          | 215-693-7<br>( 1344-37-2 )                            | 2010/1/13         |
| 17  | Anthracene oil, anthracene paste, distn. lights                | 295-278-5<br>( 91995-17-4 )                           | 2010/1/13         |
| 16  | Diisobutyl phthalate   | 201-553-2<br>( 84-69-5 )                              | 2010/1/13         |
| 15  | Anthracene oil, anthracene paste                               | 292-603-2<br>( 90640-81-6 )                           | 2010/1/13         |
| 14  | Sodium dichromate  | 234-190-3<br>(7789-12-0<br>10588-01-9)                | 2008/10/28        |
| 13  | 5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)             | 201-329-4<br>( 81-15-2 )                              | 2008/10/28        |
| 12  | 2,4,4'- Diaminodiphenylmethane                                 | 202-974-4<br>( 101-77-9 )                             | 2008/10/28        |
| 11  | Bis(tributyltin)oxide (TBTO)                                   | 200-268-0<br>( 56-35-9 )                              | 2008/10/28        |
| 10  | Triethyl arsenate  | 427-700-2<br>( 15606-95-8 )                           | 2008/10/28        |
| 9   | Dibutyl phthalate (DBP)  | 201-557-4<br>( 84-74-2 )                              | 2008/10/28        |
| 8   | Diarsenic trioxide   | 215-481-4<br>( 1327-53-3 )                            | 2008/10/28        |
| 7   | Anthracene   | 204-371-1<br>( 120-12-7 )                             | 2008/10/28        |
| 6   | Alkanes, C10-13, chloro<br>(Short Chain Chlorinated Paraffins) | 287-476-5<br>( 85535-84-8 )                           | 2008/10/28        |
| 5   | Lead hydrogen arsenate   | 232-064-2<br>( 7784-40-9 )                            | 2008/10/28        |
| 4   | Benzyl butyl phthalate (BBP)                                   | 201-622-7<br>( 85-68-7 )                              | 2008/10/28        |
| 3   | Hexabromocyclododecane (HBCDD)                                 | 247-148-4<br>221-695-9<br>( 25637-99-4<br>3194-55-6 ) | 2008/10/28        |
| 2   | Diarsenic pentaoxide   | 215-116-9<br>( 1303-28-2 )                            | 2008/10/28        |
| 1   | Bis (2-ethylhexyl)phthalate (DEHP)                             | 204-211-0<br>( 117-81-7 )                             | 2008/10/28        |

Name : Makoto Suzuki

*Makoto. Suzuki*

Designation : Assistant General Manager

Dept : Quality Assurance Department

Company : KAMAYA ELECTRIC Co.,LTD.

Date : 7-Feb-2024

