# List of Banned and Controlled Substances (Revised May/23/2024)

This list was prepared based on the IEC62474 DB substance list.

| Classification |   |
|----------------|---|
|                | Substances indicated in the Reportable Application(s) column are banned from being added intentionally.       |
| Danneu         | Content level must not exceed the threshold level, if indicated.  |
| Banned候補       | 法規制にもとづき新規採用品への含有を禁止するとともに、従来品も代替期限を定め積極的に代替を進める。   |
| Controlled     | Content levels that exceed the threshold level must be reported. Content levels below the threshold level are |
| Controlled     | treated as no content.  |

# [NOTE]

1. Substances that exceed the threshold content level must be reported, regardless of classification. The definition of "molded parts" conforms to the definition in respective laws and regulations.

2. Due to the use of specific substances in special applications, do not ban or report a substance if specified accordingly on drawings or other documentation. However, their content is prohibited unless expressly permitted in drawings or other documentation.

3. There are applications of substances listed in REACH annex XVII that are allowed to use for a limited period. For such applications, Shimadzu permits usage up to one year prior to the indicated time limit.

4. Indications such as "Must comply with RoHS" and "Must satisfy RoHS standards" in Shimadzu drawings, specifications or other documentation mean that the content of substances banned by the RoHS Directive (indicated by "Banned under RoHS" in the remarks column below) must not exceed the specified threshold value.

5. Similarly, "Must not contain any banned substances per Shimadzu Green Procurement Standards" indicates that the content of banned substances must not exceed the threshold value. Applications exempt from the RoHS Directive are indicated in the attached RoHS Directive Exemptions - Table 1 (MT83-6029) and RoHS Directive Exemptions - Table 2 (MT83-6030).

# ■List of Substance group

|    | 131 01 000          |                                      | group                     |                  |   |  |  |                   |
|----|---------------------|--------------------------------------|---------------------------|------------------|---|--|--|-------------------|
| No | Classifi-<br>cation | JGPSSI<br>Classifi-<br>cation<br>No. | Substance Group           | CAS No.          | Reportable<br>Application(s)  | Threshold Level (Reporting level)  | Key Legal and Regulatory or Industry Standard/Agreement Citation   | Remarks           |
| 1  | Banned              | 00010                                | Cadmium/cadmium compounds | See another list | All, except batteries   | 0.01% by weight (100 ppm)<br>of homogeneous materials                              | ANNEX XVII of REACH Regulation (EC) No 1907/2006;Directive<br>2011/65/EU; <b>Chine RoHS;</b> Korea RoHS; Japan J-MOSS; US/CA SB-<br>20/50; Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006<br>(Candidate list of SVHC for authorization 20.06.2013)   | Banned under RoHS |
|    | Banned              | 00011                                | Cadmium/cadmium compounds |                  | Batteries   | 0.001% by weight (10 ppm) of<br>cadmium in battery                                 | Korean Quality Management and Safety Control of Industrial Products Act;<br><b>EU Batteries Regulation: Regulation(EU) 2023/1542;</b> Chinese Standard<br>GB 24427-2009 "Limitation of mercury,cadmium and lead contents for<br>alkaline and non-alkaline zinc manganese dioxide batteries"                      |                   |
| 2  | Banned              | 00012                                | Chromium VI compounds     | See another list | All   | 0.1% by weight (1 000 ppm)<br>of chromium (VI) in<br>homogeneous materials         | Directive 2011/65/EU; <b>Chine RoHS;</b> Korea RoHS; Japan J-MOSS;<br>US/CA SB-20/50   | Banned under RoHS |
|    | Banned              | 00021                                | Lead/lead compounds       | See another list | All, except as noted below  | 0.1% by weight (1 000 ppm)<br>of lead in homogeneous<br>materials                  | Directive 2011/65/EU; ANNEX XVII of REACH Regulation (EC) No<br>1907/2006; <b>Chine RoHS;</b> Korea RoHS; Japan J-MOSS; US/CA SB-<br>20/50   | Banned under RoHS |
|    | Banned              |                                      | Lead/lead compounds       |                  | Lead in PVC Articles  | 0.1% by weight (1 000 ppm)   | ANNEX XVII of REACH Regulation (EC) No 1907/2006   |                   |
|    | Banned              | 00022                                | Lead/lead compounds       |                  | Consumer products<br>designed or intended<br>primarily for children 12<br>years of age or younger   | 0.01% by weight (100 ppm) of<br>lead in the children's product                     | U.S. Consumer Product Safety Improvement Act as amended by HB 2715   |                   |
| 3  | Banned              | 00023                                | Lead/lead compounds       |                  | Paint and similar surface<br>coatings of toys and other<br>articles intended for use by<br>children | 0.009% by weight (90 ppm) of<br>lead in surface coating                            | U.S. Consumer Product Safety Improvement Act   |                   |
|    | Banned              | 00024                                | Lead/lead compounds       |                  | Cables/cords with thermoset<br>or thermoplastic coatings  | 0.03% by weight (300 ppm) of<br>lead in surface coating                            | US/CA Proposition 65 Case law  |                   |
|    | Banned              | 00025                                | Lead/lead compounds       |                  | Batteries   | 0.004% by weight (40 ppm) of<br>lead in battery                                    | <u>EU Batteries Regulation: Regulation(EU) 2023/1542;</u> Chinese Standard GB 24427-2009 "Limitation of mercury, cadmium and lead contents for alkaline and non-alkaline zinc manganese dioxide batteries"   |                   |
|    | Banned              | 00029                                | Mercury/mercury compounds |                  | All, except batteries   | Intentionally added or 0.1% (1<br>000 ppm) of mercury in<br>homogeneous material 8 | Vermont act relating to comprehensive management of exposure to<br>mercury; Rhode Island General Laws 23-24.9 and amendment of 2007;<br>Louisiana Mercury Risk Reduction Act; ANNEX XVII of REACH<br>Regulation (EC) No 1907/2006; Directive 2011/65/EU; Chine RoHS;<br>Korea RoHS; Japan J-MOSS; US/CA SB-20/50 | Banned under RoHS |

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|-----|---------------------|--------------------------------------|--|------------------|--|--|--|---------|
| 4   | Banned              | 00030                                | Mercury/mercury compounds                | See another list | Batteries  | Intentionally added or<br>0.0001% by weight (1 ppm) of<br>mercury in the battery 8<br>(1ppm) | Rhode Island & Connecticut Mercury Reduction and Education Acts; New<br>York Env Law § 27-0719 Battery Management and Disposal; Taiwan<br>Restrictions on the Manufacture, Import, and Sale of Dry Cell Batteries;<br>Korea: Law on quality management and control of safety of industrial<br>products Battery regulation; <b>EU Batteries Regulation: Regulation(EU)</b><br>2023/1542; Chinese Standard GB 24427-2009 "Limitation of mercury,<br>cadmium and lead contents for alkaline and non-alkaline zinc manganese<br>dioxide batteries" |         |
| 5   | Banned              | 00031                                | Nickel                                   | 7440-02-0        | All, where prolonged skin<br>contact is expected | Intentionally added  | ANNEX XVII of REACH Regulation (EC) No 1907/2006   |         |
| 6   | Banned              | 00054                                | Tributyl Tin Oxide (TBTO)                | 56-35-9          | All  | Intentionally added or 0.1% by<br>weight (1,000 ppm) of the<br>product                       | Japan Law concerning the evaluation of chemical substances<br>Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate<br>list of SVHC for authorization 28.10.2008)  |         |
| 7   | Banned              | 00055                                | Tri-substiituted organostannic compounds | See another list |  | 0.1% by weight (1,000 ppm)<br>of tin in a material   | ANNEX XVII of REACH Regulation (EC) No 1907/2006 and Commission<br>Regulation (EU) No 276/2010;<br>Japan Law concerning the evaluation of chemical substances<br>Norwegian product regulation  |         |
| 8   | Banned              | 00014                                | Dibutyltin (DBT) compounds               | See another list |  | 0.1% by weight (1,000 ppm)<br>of tin in a material   | ANNEX XVII of REACH Regulation (EC) No 1907/2006 and Commission<br>Regulation (EU) No 276/2010   |         |

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|-----|---------------------|--------------------------------------|---|------------------|------------------------------|--|--|-------------------|
| 9   | Banned              | 00015                                | Dioctyltin (DOT) compounds                                | See another list |                              | 0.1% by weight (1,000 ppm)<br>of tin in a material   | ANNEX XVII of REACH Regulation (EC) No 1907/2006 and Commission<br>Regulation (EU) No 276/2010   |                   |
| 10  | Banned              | 00044                                | Polybrominated Biphenyls (PBBs)                           | See another list | All                          | 0.1% by weight (1,000 ppm) in<br>homogeneous material  | Directive 2011/65/EU; Chine RoHS; Korea RoHS; Japan J-MOSS   | Banned under RoHS |
| 11  | Banned              | 00045                                | Polybrominated Diphenylethers (PBDEs)                     | See another list |                              | 0.1% by weight (1,000 ppm) in<br>homogeneous material  | Directive 2011/65/EU; <b>Chine RoHS</b> ; Korea RoHS; Japan J-MOSS, Japan Law concerning the evaluation of chemical substances   | Banned under RoHS |
| 12  | Banned              | 00046                                | Polychlorinated Biphenyls (PCBs) and specific substitutes | See another list | All                          | Intentionally added  | Japan Law concerning the evaluation of chemical substances;<br>ANNEX XVII of REACH Regulation (EC) No 1907/2006;<br>US TSCA.   |                   |
| 13  | Banned              | 00047                                | Polychlorinated Terphenyls (PCTs)                         | See another list |                              | 0.005% by weight (50 ppm) in<br>material   | ANNEX XVII of REACH Regulation (EC) No 1907/2006;  |                   |
| 14  | Banned              | 00048                                | Polychlorinated Naphthalenes (more than 3 chlorine atoms) | See another list | All                          | Intentionally added  | Japan Law concerning the evaluation of chemical substances<br>Stockholm convention on Persistent Organic Pollutants;<br>EU POPs Regulation   |                   |
| 15  | Banned              | 00033                                | Perchlorates  | See another list |                              | 0.0000006% by weight (0.006<br>ppm) of the product   | US/ California - Perchlorate Contamination Prevention Act of 2003  |                   |
| 16  | Banned              | 00124                                | Perfluorooctane sulfonate (PFOS)                          | See another list | All                          | Intentionally added or 1<br>microgram/m2 of coated<br>material or 0.1% by weight<br>(1,000 ppm) of the Article | Stockholm convention on Persistent Organic Pollutants; EU POPs<br>Regulation; Canadian Environmental Protection Act SOR/ 2008-178;<br>Japan Law concerning the evaluation of chemical substances |                   |
|     |                     |                                      |   |                  |                              |  |  |                   |

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|-----|---------------------|--------------------------------------|--|------------------|---|---|---|---------|
| 17  | Banned              |                                      | Fluorinated greenhouse gases (PFC, SF6,<br>HFC)                | See another list | All   | Intentionally added   | EU Reg. No. 517/2014  |         |
| 18  | Banned              | 00003                                | Asbestos   | See another list | All   | Intentionally added   | ANNEX XVII of REACH Regulation (EC) No 1907/2006; US TSCA; Swiss<br>Ordinance on Reduction of Risk from Chemical Products   |         |
| 19  | Banned              |                                      | Azocolourants and azodyes which form certain aromatic amines   | See another list | Textiles and<br>leather   | 0.003% by weight (30 ppm) of<br>the finished textile/leather<br>product 1 | ANNEX XVII of REACH<br>Regulation (EC) No 1907/2006;  |         |
| 20  | Banned              | 00032                                | Ozone Depleting Substances                                     | See another list | All   | Intentionally added   | Montreal Protocol EU EC No. 2037/2000<br>EC 1005/2009<br>US Clean Air Act   |         |
| 21  | Banned              | 00049                                | Radioactive substances   | See another list | All   | Intentionally added   | Radiation Protection Law Directive 2013/59/Euratom, Act on Regulation of Nuclear Source Materials, Nuclear Fuel Materials, and Reactors(Japan), Act on Regulation of Radioisotopes and Others(Japan), NRC Regulation Title 10 CFR Part 20(US) |         |
|     | Banned              | 00019                                | Formaldehyde   |                  | Textiles  | 0.0075% by weight (75 ppm) of textile product                             | Austria - BGB I 1990/194: Formaldehydverordnung, §2, 12/2/1990;<br>Lithuanian Hygiene Norm HN 96:2000 (Hygiene standards and regulations)   |         |
| 22  | Banned              |                                      | Formaldehyde   |                  | Composite wood (plywood,<br>particle board, medium<br>density fiberboard) products<br>or components | Intentionally added   | US/CA CARB Rule<br>US Federal Law 111-199/TSCA<br>Section 601   |         |
| 23  | Banned              |                                      | Phenol,2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-<br>dimethylethyl) | 3846-71-7        | All   |   | Japan Law concerning the evaluation of chemical substances<br>Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate<br>list of SVHC for authorization 17.12.2014)   |         |

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|-----|---------------------|--------------------------------------|--|------------------|--|---|--|--|
| 24  | Banned              | 00036                                | Selected Phthalates Group 1 (BBP, DBP,<br>DEHP)              | See another list | Children's toy or child care<br>article  | 0.1% by weight (1,000 ppm) in<br>plasticized material                 | ANNEX XVII of REACH Regulation (EC) No 1907/2006; U.S. Consumer<br>Product Safety Improvement Act              | The threshold level is the<br>sum of the phthalate<br>concentrations |
| 25  | Banned              |                                      | Selected Phthalates Group 2 (DIDP, DINP,<br>DNOP)            | See another list | Children's toy or child care<br>article that can be placed in<br>a child's mouth | 0.1% by weight (1,000 ppm) in<br>plasticized material                 | ANNEX XVII of REACH Regulation (EC) No 1907/2006; U.S. Consumer<br>Product Safety Improvement Act              | The threshold level is the<br>sum of the phthalate<br>concentrations |
| 26  | Banned              | 00016                                | Dimethyl fumarate  | 624-49-7         | All  | 0.00001% by weight (0.1<br>ppm) in a material                         | COMMISSION DECISION 2009/251/EC  |  |
| 27  | Banned              | 00001                                | Diarsenic Pentoxide  | 1303-28-2        | All  | 0.1% by weight<br>(1,000 ppm) of the Article                          | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 28.10.2008) | ANNEX XIV of REACH<br>Sunset date:21.05.2015                         |
| 28  | Banned              | 00002                                | Diarsenic Trioxide   | 1327-53-3        | All  | 0.1% by weight<br>(1,000 ppm) of the Article                          | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 28.10.2008) | ANNEX XIV of REACH<br>Sunset date: 21.05.2015                        |
| 29  | Banned              | 00020                                | Hexabromocyclododecane(HBCDD) and all major diastereoisomers | See another list | All  | Intentionally added or 0.01%<br>by weight (100 ppm) of the<br>Article | POPs: Persistent Organic Pollutants<br>EU POPs Regulation  | ANNEX XIV of REACH<br>Sunset date:21.08.2015                         |

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|-----|---------------------|--------------------------------------|--|------------------|------------------------------|--|--|---|
| 30  | Banned              | 00052                                | Shortchain Chlorinated Paraffins (C10 –<br>C13)                | See another list | All                          | Intentionally added or<br>0.15(1,500ppm) of the Article                | EU POPs Regulation<br>Swiss Ordinance on Reduction of Risk from Chemical Products                              |   |
| 31  | Banned              | 00056                                | Tris(2-chloroethyl) phosphate (TCEP)                           | 115-96-8         | All                          | 0.1% by weight<br>(1,000 ppm) of the Article                           | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 13.01.2010) | ANNEX XIV of REACH<br>Sunset date:21.08.2015                      |
| 32  | Banned              | 00026                                | Lead chromate  | 7758-97-6        | All                          | 0.1% by weight<br>(1,000 ppm) of the Article                           | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 13.01.2010) | ANNEX XIV of REACH<br>Sunset date:21.05.2015                      |
| 33  | Banned              | 00027                                | Lead chromate molybdate sulphate red (C.I.<br>Pigment Red 104) | 12656-85-8       | All                          | 0.1% by weight<br>(1,000 ppm) of the Article                           | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 13.01.2010) | ANNEX XIV of REACH<br>Sunset date:21.05.2015                      |
| 34  | Banned              | 00028                                | Lead sulfochromate yellow (C.I. Pigment<br>Yellow 34)          | 1344-37-2        | All                          | 0.1% by weight<br>(1,000 ppm) of the Article                           | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 13.01.2010) | ANNEX XIV of REACH<br>Sunset date:21.05.2015                      |
| 35  | Banned              | 00053                                | Strontium chromate   | 7789-06-2        | All                          | 0.1% by weight<br>(1,000 ppm) of the Article                           | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011) | ANNEX XIV of REACH<br>Sunset date: 22.01.2019                     |
| 36  | Banned              | 00061                                | Potassium hydroxyoctaoxodizincate<br>dichromate                | 11103-86-9       | All                          | 0.1% by weight<br>(1,000 ppm) of the Article                           | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011) | Banned under RoHS<br>ANNEX XIV of REACH<br>Sunset date:22.01.2019 |
| 37  | Banned              | 00060                                | Pentazinc chromate octahydroxide                               | 49663-84-5       | All                          | 0.1% by weight<br>(1,000 ppm) of the Article                           | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011) | Banned under RoHS<br>ANNEX XIV of REACH<br>Sunset date:22.01.2019 |
| 38  | Banned              | 00064                                | Decabromodiphenyl ether  | 1163-19-5        | All                          | 0.1% by weight<br>(1,000 ppm) of the Article                           | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011) | Banned under RoHS   |
| 39  | Banned              | 00065                                | Sulfurous acid, lead salt, dibasic                             | 62229-08-7       | All                          | 0.1% by weight of the<br>Article(EU RoHS)<br>Intentionally added(TSCA) | POPs: Persistent Organic Pollutants<br>Toxic Substance Control Act (TSCA)                                      | Banned under RoHS   |
| 40  | Banned              | 00067                                | Trilead dioxide phosphonate                                    | 12141-20-7       | All                          | 0.1% by weight<br>(1,000 ppm) of the Article                           | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011) | Banned under RoHS   |
| 41  | Banned              | 00069                                | 4-Aminoazobenzene  | 60-09-3          | All                          | 0.1% by weight<br>(1,000 ppm) of the Article                           | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011) |   |
| 42  | Banned              | 00070                                | Tetralead trioxide sulfate                                     | 12202-17-4       | All                          | 0.1% by weight<br>(1,000 ppm) of the Article                           | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011) | Banned under RoHS   |
| 43  | Banned              | 00071                                | Orange lead (lead tetroxide)                                   | 1314-41-6        | All                          | 0.1% by weight<br>(1,000 ppm) of the Article                           | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011) | Banned under RoHS   |
| 44  | Banned              | 00072                                | Pyrochlore, antimony lead yellow                               | 8012-00-8        | All                          | 0.1% by weight<br>(1,000 ppm) of the Article                           | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011) | Banned under RoHS   |

|     |                     |                                      |   |                  | I                                 | 1   |  |   |
|-----|---------------------|--------------------------------------|---|------------------|-----------------------------------|---|--|---|
| No. | Classifi-<br>cation | JGPSSI<br>Classifi-<br>cation<br>No. | Substance Group   | CAS No.          | Reportable<br>Application(s)      | Threshold Level<br>(Reporting level)  | Key Legal and Regulatory or Industry Standard/Agreement Citation   | Remarks   |
| 45  | Banned              | 00073                                | Pentalead tetraoxide sulphate   | 12065-90-6       | All                               | 0.1% by weight<br>(1,000 ppm) of the Article  | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011) | Banned under RoHS   |
| 46  | Banned              | 00076                                | Dibutyltin dichloride (DBTC)  | 683-18-1         | All                               | 0.1% by weight<br>(1,000 ppm) of the Article  | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011) |   |
| 47  | Banned              | 00077                                | Lead cynamidate   | 20837-86-9       | All                               | 0.1% by weight<br>(1,000 ppm) of the Article  | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011) | Banned under RoHS   |
| 48  | Banned              | 00079                                | Silicic acid (H2Si2O5), barium salt (1:1), lead-doped   | 68784-75-8       | All                               | 0.1% by weight<br>(1,000 ppm) of the Article  | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011) | Banned under RoHS   |
| 49  | Banned              | 00083                                | Lead titanium trioxide  | 12060-00-3       | All                               | 0.1% by weight<br>(1,000 ppm) of the Article  | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011) | Banned under RoHS   |
| 50  | Banned              | 00084                                | Lead titanium zirconium oxide   | 12626-81-2       | All                               | 0.1% by weight<br>(1,000 ppm) of the Article  | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011) | Banned under RoHS   |
| 51  | Banned              | 00085                                | Lead oxide sulfate  | 12036-76-9       | All                               | 0.1% by weight<br>(1,000 ppm) of the Article  | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011) | Banned under RoHS   |
| 52  | Banned              | 00086                                | [Phthalato(2-)]dioxotrilead   | 69011-06-9       | All                               | 0.1% by weight<br>(1,000 ppm) of the Article  | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011) | Banned under RoHS   |
| 53  | Banned              | 00087                                | Dioxobis(stearato)trilead   | 12578-12-0       | All                               | 0.1% by weight<br>(1,000 ppm) of the Article  | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011) | Banned under RoHS   |
| 54  | Banned              | 00088                                | Fatty acids, C16-18, lead salts   | 91031-62-8       | All                               | 0.1% by weight<br>(1,000 ppm) of the Article  | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011) | Banned under RoHS   |
| 55  | Banned              | 00089                                | Lead dinitrate  | 10099-74-8       | All                               | 0.1% by weight<br>(1,000 ppm) of the Article  | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011) | Banned under RoHS   |
| 56  | Banned              |                                      | Specific Heavy Metals<br>Cd/Cd Compounds;<br>Pb/Pb Compounds;<br>Hg/Hg Compounds;<br>CrVI Compounds | _                | Packaging, packaging<br>component | Intentionally added or 0.01%<br>by weight (100ppm) of the<br>sum of Cd, Hg, Pb, Cr <sup>6+</sup> in the<br>material | EU 94/62/EC Directive;<br>US State Toxic in Packaging (TIP)  | Packaging   |
| 57  | Banned              | 00094                                | Cadmium oxide   | 1306-19-0        | All                               | 0.1% by weight<br>(1,000 ppm) of the Article  | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 20.6.2013)  | Banned under RoHS   |
| 58  | Banned              | 00096<br>00097                       | Pentadecafluorooctanoic acid (PFOA) and its salts   | See another list | All                               | 0.1% by weight<br>(1,000 ppm) of the Article  | POPs: Persistent Organic Pollutants<br>EU POPs Regulation  |   |
| 59  |                     |                                      |   |                  |                                   |   |  |   |
| 60  | Banned              | 00099                                | Cadmium sulphide  | 1306-23-6        | All                               | 0.1% by weight<br>(1,000 ppm) of the Article  | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2013) | Banned under RoHS   |
| 61  | Banned              | 00038                                | Bis (2-ethylhexyl) phthalate (DEHP)   | 117-81-7         | All                               |   | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 28.10.2008) | Banned under RoHS[Limit<br>of substitution:<br>31.12.2018];<br>ANNEX XIV of REACH<br>Sunset date:21.02.2015 |
| 62  | Banned              | 00039                                | Dibutylphthalate (DBP)  | 84-74-2          | All                               | 0.1% by weight (1,000 ppm) in<br>homogeneous material   | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 28.10.2008) | Banned under RoHS[Limit<br>of substitution:<br>31.12.2018];<br>ANNEX XIV of REACH<br>Sunset date:21.02.2015 |

| No. | Classifi-<br>cation | JGPSSI<br>Classifi-<br>cation<br>No. | Substance Group  | CAS No.          | Reportable<br>Application(s)   | Threshold Level<br>(Reporting level)   | Key Legal and Regulatory or Industry Standard/Agreement Citation  | Remarks  |
|-----|---------------------|--------------------------------------|--|------------------|--|--|---|--|
| 63  | Banned              | 00040                                | Butyl benzyl phthalate (BBP)                                     | 85-68-7          | All  | 0.1% by weight (1,000 ppm) in<br>homogeneous material                          | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate<br>list of SVHC for authorization 28.10.2008) | Banned under RoHS[Limit<br>of substitution :<br>31.12.2018];<br>ANNEX XIV of REACH<br>Sunset date : 21.02.2015 |
| 64  | Banned              | 00041                                | Diisobutyl phthalate (DIBP)                                      | 84-69-5          | All  | 0.1% by weight (1,000 ppm) in<br>homogeneous material                          | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate<br>list of SVHC for authorization 28.10.2008) | Banned under RoHS[Limit<br>of substitution :<br>31.12.2018];<br>ANNEX XIV of REACH<br>Sunset date : 21.02.2015 |
| 65  | Banned              | -                                    | Polycyclic aromatic hydrocarbon (PAH)                            | See another list | Rubber or plastic parts that<br>come into direct, prolonged<br>or repetitive skin or oral<br>cavity contact except those<br>for toys or childcare articles | 0.0001 mass% (1ppm) of the<br>plastic or rubber part                           | ANNEX XVII of REACH Regulation (EC) No 1907/2006 and Commission<br>Regulation (EU) No 1272/2013                   |  |
| 66  | Banned              | -                                    | Polycyclic aromatic hydrocarbon (PAH)                            |                  | Rubber or plastic parts of<br>toys and childcare articles<br>that come into direct,<br>prolonged or repetitive skin<br>or oral cavity contact              | 0.00005 mass% (0.5ppm) of the plastic or rubber part                           | ANNEX XVII of REACH Regulation (EC) No 1907/2006 and Commission<br>Regulation (EU) No 1272/2013                   |  |
| 67  | Controlled          | 00174                                | Phenol, Isopropylated Phosphate (3:1) (PIP (3:1))                | 68937-41-7       | All  | Intentionally added  | US TSCA.  | Banned from<br>November/1/2022   |
| 68  | Controlled          | 00005                                | Beryllium Oxide (BeO)  | 1304-56-9        | All  | 0.1% by weight<br>(1,000 ppm) of the Article                                   | DIGITALEUROPE 2/CECED/<br>AeA 3/ EERA guidance  |  |
|     | Controlled          | 00009                                | Brominated flame retardants (other than<br>PBBs,PBDEs, or HBCDD) |                  | Plastic materials except<br>printed wiring board<br>laminates  | 0.1% total bromine content by<br>weight (1,000 ppm) in the<br>plastic material | JS709   |  |
| 69  | Controlled          | 00008                                | Brominated flame retardants (other than<br>PBBs,PBDEs, or HBCDD) |                  | Printed wiring board<br>laminate   | 0.09% total bromine content<br>by weight (900 ppm) in the<br>laminate          | IPC-4101 and IEC 61249-2-21   |  |

| No. | Classifi-<br>cation | JGPSSI<br>Classifi-<br>cation | Substance Group  | CAS No.                  | Reportable<br>Application(s)                                    | Threshold Level<br>(Reporting level)  | Key Legal and Regulatory or Industry Standard/Agreement Citation  | Remarks |
|-----|---------------------|-------------------------------|--|--------------------------|---|---|---|---------|
| 70  | Controlled          | No.                           | Chlorinated flame retardants                           | See another list         | Plastic materials except<br>printed wiring board<br>laminates 4 | 0.1% total chlorine content by<br>weight (1,000 ppm) in the<br>plastic material | JS709   |         |
|     | Controlled          | 00063                         | Chlorinated flame retardants                           |                          | Printed wiring board<br>laminate 4                              | 0.09% total chlorine content<br>by weight (900 ppm) in the<br>laminate          | IPC-4101 and IEC 61249-2-21   |         |
| 71  | Controlled          | -                             | Polyvinyl Chloride (PVC) and PVC<br>Copolymers         | See another list         | Plastic materials except<br>printed wiring board<br>laminates 4 | 0.1% total chlorine content by<br>weight (1,000 ppm) in the<br>plastic material | JS709   |         |
| 72  | Controlled          | 00090                         | Di-isodecyl phthalate (DIDP)                           | 68515-49-1<br>26761-40-0 | All   | Intentionally added   | US/CA Proposition65   |         |
| 73  | Controlled          | 00091                         | Di-n-hexyl Phthalate (DnHP)                            | 84-75-3                  | All   | Intentionally added or 0.1% by<br>weight (1,000 ppm) of the<br>Article          | US/CA Proposition65;<br>Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate<br>list of SVHC for authorization 16.12.2013) |         |
| 74  | Controlled          | 00013                         | Cobalt dichloride (CoCl2)                              | 7646-79-9                | All   | 0.1% by weight<br>(1,000 ppm) of the Article                                    | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 28.10.2008)                            |         |
| 75  | Controlled          | 00050                         | Refractory Ceramic Fibres, Aluminosilicate             | -                        | All   | 0.1% by weight<br>(1,000 ppm) of the Article                                    | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011)                            |         |
| 76  | Controlled          | 00051                         | Refractory Ceramic Fibres, Zirconia<br>Aluminosilicate | -                        | All   | 0.1% by weight<br>(1,000 ppm) of the Article                                    | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011)                            |         |

| No. | Classifi-<br>cation | JGPSSI<br>Classifi-<br>cation<br>No. | Substance Group  | CAS No.                  | Reportable<br>Application(s) | Threshold Level<br>(Reporting level)         | Key Legal and Regulatory or Industry Standard/Agreement Citation   | Remarks                                       |
|-----|---------------------|--------------------------------------|--|--------------------------|------------------------------|--|--|---|
| 77  | Controlled          | 00007                                | Boric acid   | 10043-35-3<br>11113-50-1 | All                          | 0.1% by weight<br>(1,000 ppm) of the Article | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 18.06.2010) |   |
| 78  | Controlled          | 00017                                | Disodium tetraborate, anhydrous  | See another list         | All                          | 0.1% by weight<br>(1,000 ppm) of the Article | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 18.06.2010) |   |
| 79  | Controlled          | -                                    | Tetraboron disodium heptaoxide, hydrate  | 12267-73-1               | All                          | 0.1% by weight<br>(1,000 ppm) of the Article | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 18.06.2010) |   |
| 80  | Controlled          | 00042                                | 1,2-Benzenedicarboxylic acid, di-C6-8-<br>branched alkyl esters, C7-rich (DIHP)  | 71888-89-6               | All                          | 0.1% by weight<br>(1,000 ppm) of the Article | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 20.06.2011) |   |
| 81  | Controlled          | 00043                                | 1,2-Benzenedicarboxylic acid, di-C7-11-<br>branched and linear alkyl esters (DHNUP)  | 68515-42-4               | All                          | 0.1% by weight<br>(1,000 ppm) of the Article | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 20.06.2011) |   |
| 82  | Controlled          | -                                    | 4-[4,4'-bis(dimethylamino) benzhydrylidene]<br>cyclohexa-2,5-dien-1-ylidene]<br>dimethylammonium chloride (C.I. Basic<br>Violet 3) | 548-62-9                 | All                          | 0.1% by weight<br>(1,000 ppm) of the Article | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 18.06.2010) |   |
| 83  | Controlled          | -                                    | 2,2'-dichloro-4,4'-methylenedianiline<br>(MOCA)  | 101-14-4                 | All                          | 0.1% by weight<br>(1,000 ppm) of the Article | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011) | ANNEX XIV of REACH<br>Sunset date:22.11.2017  |
| 84  | Controlled          | 00059                                | Bis(2-methoxyethyl) phthalate  | 117-82-8                 | All                          | 0.1% by weight<br>(1,000 ppm) of the Article | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011) |   |
| 85  | Controlled          | 00057                                | 4-(1,1,3,3-tetramethylbutyl)phenol, (4-tert-<br>Octylphenol)   | 140-66-9                 | All                          | 0.1% by weight<br>(1,000 ppm) of the Article | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011) |   |
| 86  | Controlled          | 00058                                | Bis(2-methoxyethyl) ether  | 111-96-6                 | All                          | 0.1% by weight<br>(1,000 ppm) of the Article | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011) | ANNEX XIV of REACH<br>Sunset date: 22.08.2017 |
| 87  | Controlled          | -                                    | N,N-dimethylacetamide (DMAC)   | 127-19-5                 | All                          | 0.1% by weight<br>(1,000 ppm) of the Article | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2011) |   |
| 88  | Controlled          | 00066                                | 1,2-bis(2-methoxyethoxy)ethane (TEGDME;<br>triglyme)   | 112-49-2                 | All                          | 0.1% by weight<br>(1,000 ppm) of the Article | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 18.06.2010) |   |

| No. | Classifi-<br>cation | JGPSSI<br>Classifi-<br>cation<br>No. | Substance Group   | CAS No.  | Reportable<br>Application(s) | Threshold Level<br>(Reporting level)         | Key Legal and Regulatory or Industry Standard/Agreement Citation   | Remarks |
|-----|---------------------|--------------------------------------|---|--|------------------------------|--|--|---------|
| 89  | Controlled          | 00068                                | 1,2-dimethoxyethane; ethyleneglycol<br>dimethyl ether (EGDME)   | 110-71-4   | All                          | 0.1% by weight<br>(1,000 ppm) of the Article | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2012)   |         |
| 90  | Controlled          | 00074                                | 1,2-Diethoxyethane  | 629-14-1   | All                          | 0.1% by weight<br>(1,000 ppm) of the Article | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2012)   |         |
| 91  | Controlled          | 00075                                | Diboron trioxide  | 1303-86-2  | All                          | 0.1% by weight<br>(1,000 ppm) of the Article | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 18.06.2012)   |         |
| 92  | Controlled          | 00078                                | N,N-dimethylformamide   | 68-12-2  | All                          | 0.1% by weight<br>(1,000 ppm) of the Article | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2012)   |         |
| 93  | Controlled          | 00080                                | 1.2-Benzenedicarboxylic acid, dipentylester, branched and linear  | 84777-06-0   | All                          | 0.1% by weight<br>(1,000 ppm) of the Article | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2012)   |         |
| 94  | Controlled          | 00081                                | Diisopentylphthalate (DIPP)   | 605-50-5   | All                          | 0.1% by weight<br>(1,000 ppm) of the Article | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2012)   |         |
| 95  | Controlled          | 00082                                | N-pentyl-isopentylphthalate   | 776297-69-9  | All                          | 0.1% by weight<br>(1,000 ppm) of the Article | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2012)   |         |
| 96  | Controlled          | -                                    | Hexahydromethylphathalic anhydride,<br>Hexahydro-4-methylphathalic anhydride,<br>Hexahydro-1-methylphathalic anhydride,<br>Hexahydro-3-methylphathalic anhydride  | 25550-51-0<br>19438-60-9<br>48122-14-1<br>57110-29-9 | All                          | 0.1% by weight<br>(1,000 ppm) of the Article | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2012)   |         |
| 97  | Controlled          | 00095                                | Dipentyl phthalate (DPP)  | 131-18-0   | All                          | 0.1% by weight<br>(1,000 ppm) of the Article | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 20.06.2013)   |         |
| 98  | Controlled          | 00098                                | 4-Nonylphenol, branched and linear, ethoxylated   | -  | All                          | 0.1% by weight (1,000 ppm) of the Article    | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 20.06.2013)   |         |
| 99  | Controlled          | 00100                                | Trixylyl phosphate  | 25155-23-1   | All                          | 0.1% by weight (1,000 ppm) of the Article    | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2013)   |         |
| 100 | Controlled          | 00102                                | Disodium 3,3'-[[1,1'-biphenyl]-4,4'-<br>diylbis(azo)]bis(4-aminonaphthalene-1-<br>sulphonate)<br>(C.I. Direct Red 28)   | 573-58-0   | All                          | 0.1% by weight<br>(1,000 ppm) of the Article | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2013)   |         |
| 101 | Controlled          | 00105                                | Imidazolidine-2-thione; (2-imidazoline-2-<br>thiol)   | 96-45-7  | All                          | 0.1% by weight (1,000 ppm) of the Article    | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2013)   |         |
| 102 | Controlled          | 00106                                | 1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear  | 68515-50-4   | All                          | 0.1% by weight<br>(1,000 ppm) of the Article | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2013)   |         |
| 103 | Controlled          | 00107                                | Diisononyl phthalate (DINP)   | 28553-12-0<br>68515-48-0                             | All                          | Intentionally added                          | California Proposition65   |         |
| 104 | Controlled          | 00126                                | Disodium 4-amino-3-[[4'-[(2,4-<br>diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo]-<br>5-hydroxy-6-(phenylazo)naphthalene-2,7-<br>disulphonate<br>(C.I. Direct Black 38)   | 1937-37-7  | All                          | 0.1% by weight<br>(1,000 ppm) of the Article | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 19.12.2013)   |         |
| 105 | Controlled          | -                                    | Benzenamine, N-phenyl-, reaction products<br>with styrene and 2,4,4-trimethylpentene<br>(BNST)  | 68921-45-9   | All                          | 0.1% by weight<br>(1,000 ppm) of the Article | Prohibition of Certain Toxic Substances Regulations, 2012, CANADA  |         |
| 106 | Controlled          | 00128                                | 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-<br>oxa-3,5-dithia-4-stannatetradecanoate<br>(DOTE)   | 15571-58-1   | All                          | 0.1% by weight<br>(1,000 ppm) of the Article | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 17.12.2014)   |         |
| 107 | Controlled          | 00128                                | reaction mass of 2-ethylhexyl 10-ethyl-4,4-<br>dioctyl-7-oxo-8-oxa-3,5-dithia-4-<br>stannatetradecanoate and 2-ethylhexyl 10-<br>ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-<br>oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-<br>4-stannatetradecanoate<br>(reaction mass of DOTE and MOTE) |  | All                          | 0.1% by weight<br>(1,000 ppm) of the Article | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 17.12.2014)   |         |
| 108 | Controlled          | 00130                                | 2-(2H-benzotriazol-2-yl)-4,6-<br>ditertpentylphenol<br>(UV-328)   | 25973-55-1   | All                          | Intentionally added                          | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate<br>list of SVHC for authorization 17.12.2014)<br>POPs: Persistent Organic Pollutants |         |

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|-----|---------------------|--------------------------------------|--|--------------------------|--------------------------------|--|--|---------|
| 109 | Controlled          | 00131                                | 1,2-benzenedicarboxylic acid, di-C6-10-alkyl<br>esters; 1,2-benzenedicarboxylic acid, mixed<br>decyl and hexyl and octyl diesters with ≥<br>0.3% of dihexyl phthalate (EC No. 201-559-<br>5) | 68515-51-5<br>68648-93-1 | All                            | 0.1% by weight<br>(1,000 ppm) of the Article   | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 15.6.2015)  |         |
| 110 | Controlled          | -                                    | Nitrobenzene   | 98-95-3                  | All                            | 0.1% by weight<br>(1,000 ppm) of the Article   | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 17.12.2015)   |         |
| 111 | Controlled          | 00134                                | 2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-<br>yl)phenol<br>(UV-327)  | 3864-99-1                | All                            | 0.1% by weight<br>(1,000 ppm) of the Article   | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 17.12.2015)   |         |
| 112 | Controlled          | -                                    | 2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-<br>(sec-butyl)phenol<br>(UV-350)  | 36437-37-3               | All                            | 0.1% by weight<br>(1,000 ppm) of the Article   | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 17.12.2015)   |         |
| 113 | Controlled          | 00133                                | 1,3-propanesultone   | 1120-71-4                | All                            | 0.1% by weight<br>(1,000 ppm) of the Article   | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 17.12.2015)   |         |
| 114 |                     |                                      |  |                          |                                |  |  |         |
|     | Banned              |                                      | 4,4'-Isopropylidenediphenol  | 80-05-7                  | Applications of thermal paper. | It is prohibited to market<br>thermal paper containing a<br>concentration of 0.02% or<br>more by weight. | ANNEX XVII of REACH Regulation (EC) No 1907/2006   |         |
| 115 | Controlled          | 00141                                | 4,4'-Isopropylidenediphenol  | 80-05-7                  | All                            | Intentionally added or 0.1% by<br>weight (1,000 ppm) of the<br>Article                                   | /<br>Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of<br>SVHC for authorization 12.Jan.2017)) ;US/CA Proposition65                    |         |
| 116 | Banned              | 00140<br>00142                       | Perfluorocarboxylic acids (C9–C14<br>PFCAs) and their salts  | See another list         | All                            | 0.0000025 mass% of the<br>Article  | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 3.Sep.2017)   |         |
| 117 | Banned              | 00143                                | Perfluorohexane-1-sulphonic acid and its salts   | See another list         | All                            | 0.0000025 mass% of the<br>Article  | EU POPs Regulation<br>Swiss Regulations on Risk Reduction from Chemical Products<br>POPs: Persistent Organic Pollutants  |         |
| 118 | Controlled          | 00146                                | Cadmium hydroxide  | 21041-95-2               | All                            | 0.1% by weight<br>(1,000 ppm) of the Article   | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate<br>list of SVHC for authorization 15.Jan.2018)   |         |
| 119 | Controlled          | 00147                                | 1,6,7,8,9,14,15,16,17,17,18,18–<br>Dodecachloropentacyclc[12.2.1.16,9.02,13.<br>05,10]octadeca-7,15-diene ("Dechlorane<br>Plus"™)  | See another list         | All                            | Intentionally added  | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate<br>list of SVHC for authorization 15.Jan.2018)<br><b>POPs: Persistent Organic Pollutants</b> |         |
| 120 | Controlled          | 00148                                | Benzo[ghi]perylene   | 191-24-2                 | All                            | 0.1% by weight<br>(1,000 ppm) of the Article   | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 8.Jul.2018)   |         |
| 121 | Controlled          | 00149                                | Octamethylcyclotetrasiloxane   | 556-67-2                 | All                            | 0.1% by weight<br>(1,000 ppm) of the Article   | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate<br>list of SVHC for authorization 8.Jul.2018)  |         |
| 122 | Controlled          | 00150                                | Decamethylcyclopentasiloxane   | 541-02-6                 | All                            | 0.1% by weight<br>(1,000 ppm) of the Article   | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 8.Jul.2018)   |         |
| 123 | Controlled          | 00151                                | Dodecamethylcyclohexasiloxane  | 540-97-6                 | All                            | 0.1% by weight<br>(1,000 ppm) of the Article   | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 8.Jul.2018)   |         |

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|-----|---------------------|--------------------------------------|---|------------------------|------------------------------------|---|---|---------|
| 124 | Controlled          | 00152                                | Disodium octaborate   | 12008-41-2             | All                                | 0.1% by weight<br>(1,000 ppm) of the Article                          | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 8.Jul.2018)  |         |
| 125 | Controlled          | 00153                                | Terphenyl, hydrogenated   | 61788-32-7             | All                                | 0.1% by weight<br>(1,000 ppm) of the Article                          | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 8.Jul.2018)  |         |
|     |                     |                                      |   |                        |                                    |   |   |         |
| 127 | Controlled          | 00139                                | Dicyclohexyl phthalate  | 84-61-7                | All                                | 0.1% by weight<br>(1,000 ppm) of the Article                          | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 8.Jul.2018)  |         |
| 128 | Controlled          | 00155                                | 2,2-bis(4'-hydroxyphenyl)-4-<br>methylpentane                                       | 6807-17-6              | All                                |   | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 15.Jan.2018) |         |
| 129 | Controlled          | 00156                                | Benzo[k]fluoranthene  | 207-08-9               | All                                | (1,000 ppm) of the Article  | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 8.Jul.2018)  |         |
| 130 | Controlled          | 00158                                | Phenanthrene  | 85-01-8                | All                                |   | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 8.Jul.2018)  |         |
| 131 | Controlled          | 00157                                | Fluoranthene  | 206-44-0<br>93951-69-0 | All                                | (1,000 ppm) of the Article  | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 15.Jan.2018) |         |
| 132 | Controlled          | 00159                                | Pyrene  | 129-00-0<br>1718-52-1  | All                                | 0.1% by weight<br>(1,000 ppm) of the Article                          | Article 33 and 7.2 of REACH Regulation (EC) No 1907/2006 (Candidate list of SVHC for authorization 15.Jan.2018) |         |
| 133 | Banned              | -                                    | Pentachlorothiophenol (PCTP)  | 133-49-3               | All                                | 1% by weight of the Article   | US TSCA.  |         |
| 134 | Banned              | -                                    | Hexachlorobutadiene (HCBD)  | 87-68-3                | All                                | Intentionally added   | POPs: Persistent Organic Pollutants<br>Toxic Substance Control Act (TSCA)                                       |         |
| 135 | Banned              | -                                    | Hexachlorobenzene   | 118-74-1               | All                                | Intentionally added or 0.001%<br>by weight (10 ppm) of the<br>Article | POPs: Persistent Organic Pollutants<br>Toxic Substance Control Act (TSCA)                                       |         |
| 136 | Banned              | -                                    | Mineral Oil Aromatic Hydrocarbons<br>(MOAH) consisting of 1-7 aromatic rings        | -                      | Packaging and printed<br>materials | Intentionally added   | French Mineral Oil Regulation   |         |
| 137 | Banned              | -                                    | Mineral Oil Saturated Hydrocarbons<br>(MOSH) with carbon chain lengths of 16-<br>35 | -                      | Packaging and printed materials    | Intentionally added   | French Mineral Oil Regulation   |         |
| 138 | Banned              | -                                    | 2,4,6-Tri-tert-butylphenol  | -                      | Substances and mixtures            | 0.3% by weight<br>(3,000 ppm)   | Toxic Substance Control Act (TSCA)  |         |