

Table 1: Standard of prohibited and controlled substances in product for JDI

A. Prohibited substances

| No. | Substances | Target | Threshold level *1) | Referring laws and regulations | Remarks |
|---------------------------------|---|---|---|---|---|
| 1 | Lead and its compounds *2) | Resin materials | 50 ppm | EU RoHS Directive(2011/65/EC) - Packaging and Packaging Waste Directive(EU) - Toy Safety Directive(88/378/EEC) | - Prohibited total content of 4 substances (cadmium, lead, mercury and hexavalent chromium), contained more than 100 ppm, each material in packaging materials. - Intended use of skin-contact applied to toys. The threshold level refers to the elution result according to the Toy Safety Directive (based on the test method in the European Standard EN 71 Part 3). |
| | | Skin-contact use | 90 ppm | | |
| | | All uses other than the above | 800 ppm | | |
| 2 | Mercury and its compounds *2) | All uses | Prohibited intentionally added | EU RoHS Directive(2011/65/EC) - Packaging and Packaging Waste Directive(EU) | - Prohibited its impurity contained over 500 ppm. - Prohibited total content of 4 substances (cadmium, lead, mercury and hexavalent chromium), contained more than 100 ppm, per material in packaging materials. |
| 3 | Cadmium and its compounds *2) | Resin materials | 5 ppm | EU RoHS Directive(2011/65/EC) - Packaging and Packaging Waste Directive(EU) | - Prohibited total content of four substances (cadmium, lead, mercury and hexavalent chromium), contained more than 100 ppm, per material in packaging materials. - Resin materials included inks, paints and rubbers |
| | | Solder | 20 ppm | | |
| | | All uses other than the above | 50 ppm | | |
| 4 | Hexavalent chromium and its compounds *2) | All uses | Prohibited intentionally added | EU RoHS Directive(2011/65/EC) - Packaging and Packaging Waste Directive(EU) | - Prohibited its impurity contained over 500 ppm. - Prohibited total content of four substances (cadmium, lead, mercury and hexavalent chromium), contained more than 100 ppm, per material in packaging materials. |
| 5 | Polybrominated biphenyls (PBBs) | All uses | Prohibited intentionally added | EU RoHS Directive(2011/65/EC) | - Prohibited its impurity contained over 500 ppm. |
| 6 | Polybrominated diphenylethers (PBDEs) | All uses | Prohibited intentionally added | EU RoHS Directive(2011/65/EC) | - Prohibited its impurity contained over 500 ppm. |
| 7 | PCN, PCB, PCT and Halogenated diphenyl methanes | | | | |
| | Polychlorinated naphthalenes (PCNs) | All uses | Prohibited intentionally added | - Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. Class I Specified Chemical Substances | - Prohibited its impurity contained over 5 ppm. |
| | Polychlorinated biphenyls (PCBs) | All uses | Prohibited intentionally added | - Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. Class I Specified Chemical Substances | - Prohibited its impurity detected through component analysis (0.1 ppm or less). |
| | Polychlorinated terphenyls (PCTs) | All uses | Prohibited intentionally added | - EU REACH ANNEX XVII(Restricted substances) | - Prohibited its impurity contained over 5 ppm. |
| 8 | Asbestos | All uses | Prohibited intentionally added | EU REACH ANNEX XVII(Restricted substances) | |
| | Organotin compounds | | | | |
| | Trisubstituted organotin compounds (including Bis(tributyltin) oxide (TBTO)) | All uses | Prohibited intentionally added | EU REACH ANNEX XVII(Restricted substances) - Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. Class I/II Specified Chemical Substances | - Prohibited its impurity contained over 1,000 ppm converted to tin. |
| | Dibutyltin compounds (DBT) | All uses | 1,000 ppm of the tin concentration | - EU REACH ANNEX XVII(Restricted substances) | |
| 10 | Chlorinated paraffins | | | | |
| | Short-chain chlorinated paraffins (SCCP) | All uses | Prohibited intentionally added | EU REACH(1907/2006) and ANNEX XVII, etc. | - Prohibited its impurity contained over 1,000 ppm. |
| 11 | Azo pigment and azo dye | Fiber and leather products | 30 ppm | JDI Self-regulation (*3) - EU REACH ANNEX XVII(Restricted substances) | [Example] CAS No. 85535-85-9 Azo compound that generates specified amine when decomposed by the method indicated in EU REACH ANNEX XVII and the amine itself are prohibited. See EU REACH ANNEX XVII for details on the specified amines. |
| | Medium-chain chlorinated paraffins (MCCP) | All uses | 1000 ppm | | |
| 12 | Phthalate esters | | | | |
| | 1) Bis-2-ethylhexyl phthalate (DEHP (DOP)) | All uses | Prohibited intentionally added | EU RoHS Directive(2011/65/EC) EU REACH ANNEX XVII(Restricted substances) | 1) CAS No. 117-81-7 |
| | 2) Benzyl butyl phthalate (BBP) | | | | 2) CAS No. 85-68-7 |
| | 3) Dibutyl phthalate (DBP) | | | | 3) CAS No. 84-74-2 |
| | 4) Diisobutyl phthalate (DIBP) | | | | 4) CAS No. 84-69-5 |
| | 5) Diisononyl phthalate (DINP) | | | | 5) CAS No. 28553-12-0 and 68515-48-0 |
| | 6) Disodecyl phthalate (DIDP) | | | | 6) CAS No. 26761-40-0 and 68515-49-1 |
| | 7) Di-n-octyl phthalate (DNOP) | | | | 7) CAS No. 117-84-0 |
| | 8) Di-n-hexyl phthalate (DNHP) | | | | 8) CAS No. 84-75-3 |
| | 9) Disopentyl phthalate | | | | 9) CAS No. 605-50-5 |
| | 10) D-n-pentyl phthalate (branched and linear) | | | | 10) CAS No. 84777-06-0 |
| | 11) N-pentylisopentyl phthalate | | | | 11) CAS No. 776297-69-9 |
| | 12) 1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP) | | | | 12) CAS No. 71888-89-6 |
| | 13) 1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP) | | | | 13) CAS No. 68515-42-4 |
| | 14) Bis(2-methoxyethyl) phthalate (DMEP) | | | | 14) CAS No. 117-82-8 |
| | 15) Dipentyl phthalate (DPP) | | | | 15) CAS No. 131-18-0 |
| | 16) 1,2-Benzenedicarboxylic acid, di-C6-10 alkyl esters with ≥0.3% of dihexyl phthalate, 1,2-Benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥0.3% of dihexyl phthalate | | | | 16) CAS No. 68515-51-5 and 68648-93-1 |
| | 17) Dipentyl phthalate (DEP) | | | | 17) CAS No. 84-66-2 |
| | 18) Dimethyl phthalate (DMP) | | | | 18) CAS No. 131-11-3 |
| | 19) Diundecyl phthalate (DuDP) | | | | 19) CAS No. 3648-20-2 |
| | 20) Dicyclohexyl phthalate (DCHP) | | | | 20) CAS No. 84-61-7 |
| 21) Diisohexyl phthalate (DIHP) | | | | 21) CAS No. 68515-50-4 | |
| 13 | Benzene | Toy products | Prohibited intentionally added | EU REACH ANNEX XVII(Restricted substances) - Industrial Safety and Health Act (Specified Chemical Substances), etc. | - CAS No. 71-43-2 |
| 14 | Nickel and its compounds | Skin-contact use | Prohibited intentionally added | - EU REACH ANNEX XVII(Restricted substances) | Content in components or materials for skin-contact uses as impurities is limited to 0.28 mg/cm ² /week. |
| 15 | Cobalt dichloride | Moisture indicator and humidity indicator used for silica gel | Prohibited intentionally added | EU Directive(67/548/EEC), etc. | |
| 16 | PFOS and its salts | All uses other than the above | 100 ppm | | |
| | | Coating materials | 1 μg/m ² | EU Regulation ((EC) No.850/2004) EU Regulation ((EU) No.757/2010) - Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. Class I Specified Chemical Substances | Prohibited its impurities or residues over 10 ppm |
| 17 | Dimethyl fumarate (DMF) | All uses | 0.1 ppm | EU REACH ANNEX XVII(Restricted substances) | - CAS No. 624-49-7 |
| 18 | Ozone depleting substances | All uses | Prohibited intentionally added | - Montreal Protocol on Substances that Deplete the Ozone Layer EU Regulation ((EC) No. 2037/2000) | |
| 19 | Fluorine based green house gases (PFC, HFC and SF6) | All uses | Prohibited intentionally added | EU Regulation ((EC) No. 842/2006) | |
| 20 | Barium | Toy products for skin-contact use | 1000 ppm | - Toy Safety Directive(88/378/EEC) | The threshold level refers to the elution result according to the Toy Safety Directive (based on the test method in the European Standard EN 71 Part 3). |
| 21 | Chromium | Toy products for skin-contact use | 60 ppm | - Toy Safety Directive(88/378/EEC) | The threshold level refers to the elution result according to the Toy Safety Directive (based on the test method in the European Standard EN 71 Part 3). |
| 22 | Selenium | Toy products for skin-contact use | 500 ppm | - Toy Safety Directive(88/378/EEC) | The threshold level refers to the elution result according to the Toy Safety Directive (based on the test method in the European Standard EN 71 Part 3). |
| 23 | Polycyclic aromatic hydrocarbons (PAHs) | Skin-contact use | 1 ppm for each and 10 ppm for a total of 27 kinds | - Germany GS Certification - EU REACH ANNEX XVII(Restricted substances) | 27 substances of PAHs are as follows: Naphthalene, Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene, Anthracene, Fluoranthene, Pyrene, Chrysene, Benzo[a]anthracene, Benzo[b]fluoranthene, Benzo[k]fluoranthene, Benzo[j]fluoranthene, Indeno[1,2,3-cd]pyrene, Dibenzo[a,h]anthracene, Benzo[ghi]perylene, Benzo[a]pyrene, Benzo[e]pyrene, Benzo[f]perylene, Dibenz[a,h]acridine, Dibenz[a,j]acridine, Dibenz[a,e]fluoranthene, Dibenz[a,e]pyrene, Dibenz[a,h]pyrene, Dibenz[a,i]pyrene, 7H-dibenzo[c,g]carbazole, 5-methylchrythene |

Table 1: Standard of prohibited and controlled substances in product for JDI

A. Prohibited substances - continuation from previous page

| No. | Substances | Target | Threshold level *1) | Referring laws and regulations | Remarks |
|-----|--|--|---|--|--|
| 24 | Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. Class I Specified Chemical Substances Polychlorinated naphthalenes (more than 3 chlorine atoms in the molecule) Hexachlorobenzene Aldrin Dieldrin Endrin DDT Chlorodane Paraphenylenediamines 2,4,6-tri-tert-butylphenol Toxaphene Mirex Kelthane or Dicofol Hexachlorobuta-1,3-diene Specific benzotriazole 2-(2H-1,2,3-Benzotriazol-2-yl)-4,6-di-tert-butylphenol Perfluorooctane-1-sulfonyl fluoride (PFOSF) Pentachlorobenzene Hexachlorocyclohexanes Chlordecone Hexabromobiphenyl Phenoxybenzenes Hexabromocyclododecane (HBCDD) Endosulfan or Benzoepin Pentachlorophenol or its chlorides or esters Decabromodiphenyl ethers Short-chain chlorinated paraffins | All uses | Prohibited intentionally added | - Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. Class I Specified Chemical Substances | - Impurities and residues of the specific benzotriazole 2-(2H-1,2,3-Benzotriazol-2-yl)-4,6-di-tert-butylphenol are limited to a total of 5 ppm. - Impurities and residues of HBCDD are limited to a total of 100 ppm. - Should be taken priority to the threshold level prohibited, in case of substances included other prohibited one. |
| 25 | Radioactive substances | All uses | Prohibited intentionally added | - Radiation Hazard Prevention Act - Nuclear Reactor Regulation Law | |
| 26 | Formaldehyde | All uses | 0.1 mL/m ³ (ppm) and 300 ppm | - German ChemVerbotsV - Danish Ministry of the Environment Statutory Order no. 289 | - Threshold level refers to emission concentration according to the chamber method (EN 717:2004) and the concentration must not exceed 0.1 mL/m ³ and, in the case where it is included in the components or materials in their delivery condition (e.g., after drying ink) to JDI, the concentration must not exceed 300 ppm for a homogeneous material. |
| 27 | Benzenamine,N-Phenyl-, Reaction Products with Styrene and 2,4,4- Trimethylpentene (BNST) | All uses | Prohibited intentionally added | - JDI self-regulation *3) | - CAS No. 68921-45-9 |
| 28 | Phenol, n-methyl- o-Cresol p-Cresol m-Cresol Cresol | All uses | 10 ppm | - Canadian Environmental Protection Act, 1999 | - CAS No. 95-48-7 - CAS No. 106-44-5 - CAS No.108-39-4 - CAS No. 1319-77-3 |
| 29 | Halogenated compounds (Chlorine-Bromine) *Including halogenated (Chlorine/Bromine) flame retardants | All uses | Chlorine or Bromine < 900 ppm (Total of Chlorine and Bromine < 1500 ppm) | - JDI self-regulation *3) | - Chlorinated and brominated compounds, ex. short-chained chlorinated paraffin, PBBs and PBDEs etc., prohibited other than this regulation, should be taken priority to those threshold. Not applied to color materials for color filters. |
| 30 | Polyvinyl chloride (PVC) and its compounds | All uses | Chlorine < 900 ppm | - JDI self-regulation *3) | |
| 31 | Antimony and its compounds | Skin-contact use | 60 ppm | - JDI self-regulation *3) | - Prohibited contained over 60 ppm in a product, intended use of cutaneous touch. - Intended use of cutaneous touch applied to toys. The threshold level refers to the elution result according to the Toy Safety Directive (based on the test method in the European Standard EN 71 Part 3). |
| | | All uses other than the above | 700 ppm | - Toy Safety Directive(88/378/EEC) | |
| 32 | Arsenic and its compounds | All | Prohibited intentionally added | - JDI self-regulation *3) - Toy Safety Directive(88/378/EEC) | - Dopants for production of semiconductor devices, etc. excepted. - Prohibited its impurity contained over 1000 ppm in the solder. - Prohibited its impurity contained over 25 ppm in the Toys, intended use of cutaneous touch. Intended use of cutaneous touch applied to toys. The threshold level refers to the elution result according to the Toy Safety Directive (based on the test method in the European Standard EN 71 Part 3). - Prohibited other than the above impurity contained over 50 ppm. |
| 33 | Beryllium and its compounds Beryllium oxide Beryllium and its compounds (except for Beryllium oxide) | All uses | Prohibited intentionally added | - JDI self-regulation *3) | |
| | | All uses | 1000 ppm | | |
| 34 | Bisphenol A | All uses | 1000 ppm | - JDI self-regulation *3) | - CAS No. 80-05-7 |
| 35 | Natural rubber | All uses | Prohibited intentionally added | - JDI self-regulation *3) | |
| 36 | Perfluorooctanoic acid (PFOA) | Coating materials | 1 ug/m ² | - Norway Product Regulations (FOR-2004-06-01-922) | Prohibited its impurity or residue contained over threshold level regulated by EU REACH ANNEX XVII (Restricted substances). |
| | | All uses other than the above | Prohibited intentionally added | - JDI self-regulation *3) | |
| 37 | 4-(Isopropylamino)diphenylamine | Skin-contact use | Prohibited intentionally added | - JDI self-regulation *3) | - CAS No. 101-72-4 |
| 38 | Nonylphenol (NP) and nonylphenol ethoxylates (NPE) | Parts made of fiber, leather, metal, or paper | Prohibited intentionally added | - EU REACH ANNEX XVII (Restricted substances) - JDI self-regulation *3) | [Examples] CAS No.: 7311-27-5, 20427-84-3, 104-35-8, 27176-93-8, 28679-13-2, 25154-52-3, 104-40-5, 37340-60-6, 68412-53-3, 27177-05-5, 27177-08-8, 9016-45-9, 84852-15-3, 27986-36-3, 37251-69-7, 26523-78-4, 26027-38-3, 51938-25-1, 37205-87-1, 68412-54-4, 127087-87-0 |
| 39 | Tris(2-chloroethyl) phosphate (TCEP) | All uses | 1000 ppm | - JDI self-regulation *3) | - CAS No. 115-96-8 |
| 40 | Perchlorates | All uses | 0.1 ppm | - JDI self-regulation *3) - California State Law in the U.S.A. | [Examples] CAS No.: 7601-89-0, 7778-74-7, 7790-98-9, 7791-03-9, 10034-81-8, 7791-07-3 |
| | | | | | |
| 41 | EU REACH ANNEX XIV | Prohibited use for substances except for authorized applications of EU REACH ANNEX XIV *4) | | - EU REACH ANNEX XIV | - Should be taken priority to the threshold level prohibited, in case of substances included other prohibited one. |
| 42 | EU REACH ANNEX XVII | Prohibited use for substances and applications of EU REACH ANNEX XVII *4) | | - EU REACH ANNEX XVII (Restricted substances) | - Should be taken priority to the threshold level prohibited, in case of substances included other prohibited one. |

*1) If calculated content rate for each substance, its denominator is each homogeneous substance.

*2) Only in cases in which RoHS exemptions are applied to specific uses, it excludes contain-prohibited. **However, JDI sets up original expiration of JDI Exemptions for some items. For more information, please refer to [RoHS Exemptions List].**

*3) It is concerned about the effect of those substances on human body and environment. Besides, the JDI sets up our regulation originally with consideration for regulatory status of each company.

* If parts or materials contains over regulated value are specified in specification required by JDI, the content of specification is taken priority.
* Regarding some substances, JDI define the regulated value more stricter than referred to laws and regulations, with consideration for our customers' requirements and past records etc.
If using parts or materials contained over the regulated value specified in this standard, due to various reasons, JDI will consider its special acceptance.
* Parts or materials which has been started delivery before March 31, 2013, they are applied to standard of prohibited substances when they were qualified at that time.

*4) Details for EU REACH ANNEX XIV and XVII, please refer to the following URL:

EU REACH ANNEX XIV: <https://echa.europa.eu/authorisation-list>
EU REACH ANNEX XVII: <https://echa.europa.eu/substances-restricted-under-reach>
*URL might be changed. Please check the website of ECHA (EUROPEAN CHEMICALS AGENCY) if cannot connect to it.

Table 1: Standard of prohibited and controlled substances in product for JDI

B. Controlled substances

| No. | Substances | Target | Threshold level *5) | Referring laws and regulations | Remarks |
|-----|--|----------|---------------------|--|---|
| 1 | SVHCs in EU REACH regulation (candidates for authorization) *6) | All uses | Reportable | - EU REACH ((EC) No. 1907/2006) | - Candidate list of SVHC for authorization with Article 59 of the REACH Regulation - May be prohibited contained over 1,000 ppm in products/parts by weight in case of specified customers. |
| 2 | Other Phthalate esters: Phthalates esters except No. 12 in "A. Prohibited substances" | All uses | Reportable | - | - May be prohibited contained over 1,000 ppm in products/parts by weight in case of specified customers. |
| 3 | Substituted diphenylamines | All uses | Reportable | - Canadian Environmental Protection Act, 1999 | CAS No.: 101-67-7, 4175-37-5, 10081-67-1, 15721-78-5, 24925-59-5, 26803-23-6, 27177-41-9, 36878-20-3, 68411-46-1, 68442-68-2, 68608-77-5, 68608-79-7, 184378-08-3 |
| 4 | 2-(2-aminoethylamino)ethanol | All uses | Reportable | - Canadian Environmental Protection Act, 1999 | - CAS No. 111-41-1 |
| 5 | Proposition 65 List of Chemicals *7) | All uses | Reportable | - California Proposition 65 | - May be prohibited contained in products/parts in case of specified customers. |
| 6 | Washington State's List of Chemicals of High Concern to Children(CHCC) *8) | All uses | Reportable | - Children's Safe Products Act | - May be prohibited contained in products/parts in case of specified customers. |
| 7 | 1-bromopropane | All uses | Reportable | - | -CAS No. 106-94-5 |
| 8 | Phosphorus flame retardant | All uses | Reportable | - SFS 2016:1067 | - |
| 9 | Red phosphorus | All uses | Reportable | - | - May be prohibited contained in products/parts in case of specified customers. |
| 10 | Bisphenol F Bisphenol S | All uses | Reportable | - | - CAS No. 620-92-8 - CAS No. 2467-02-9, 1333-16-0, 80-09-1 |
| 11 | Volatile Organic Compounds (VOCs) | All uses | Reportable | - "Voluntary Guidelines for Reducing Vehicle Cabin VOC Concentration Levels" produced by Japan Automobile Manufacturers Association, Inc. (JAMA) | - Necessary to report when it is contained as a residual component in products/parts - VOCs include Formaldehyde, Toluene, Xylene, Ethylbenzene, Styrene, Bis (2-ethylhexyl) phthalate, Tetradecane, Dibutyl phthalate, Acetaldehyde and so on |
| 12 | Cobalt and its compounds | All uses | Reportable | - | - |
| 13 | Endocrine Disrupting Chemicals (EDCs) | All uses | Reportable | - | [Examples] CAS No. 115-86-6, 128-37-0, 137-30-4, 137-42-8, 137-26-8, 12122-67-7, 100-02-7, 108-46-3, 25013-16-5, 611-99-4, 15087-24-8 |
| 14 | IEC 62474 Substances *9) | All uses | Reportable | - | - |
| 15 | Indium Phosphide | All uses | Reportable | - | - CAS No. 22398-80-7 |
| 16 | Per- and Polyfluoroalkyl Substances (PFAS) | All uses | Reportable | - | [Examples] CAS No. 375-22-4, 2706-90-3, 307-24-4, 375-95-9, 375-95-1, 335-76-2, 2059-94-8, 307-55-1, 72629-94-8, 375-73-5, 2706-91-4, 355-46-4, 375-92-8, 68259-12-1 |

*5) When a controlled substance corresponds to a prohibited substance, the threshold level of the prohibited substance should be taken priority.

*6) Details for SVHC, please refer to the following URL:
<https://echa.europa.eu/candidate-list-table>

*7) Details for Proposition 65 List, please refer to the following URL:
http://oehha.ca.gov/prop65/prop65_list/Newlist.html

*8) Details for CHCC, please refer to the following URL:
<http://apps.leq.wa.gov/WAC/default.aspx?cite=173-334-130>

*9) Details for IEC 62474 substances, please refer to the following URL:
<http://std.iec.ch/iec62474>
 *URL might be changed.

Term Definition

[Intentionally added]

This means a situation where a substance is contained in the part, device, or its materials because of deliberate addition, filling, blend, or adhesion, in order to provide a specific characteristic, appearance, property, attribute or quality. Dopants for production of semiconductor devices, etc. are not treated as "Intentionally added" if present in the devices in a very small amount.

[Impurities]

This means a substance contained in natural materials, which cannot be completely removed in a refining process by adequate technical means (i.e. natural impurities), and generated in a synthesis process, which cannot be completely removed by adequate technical means.

[Contained]

This means that a situation remains in parts, devices, or their materials because of addition, filling, blend, or adhesion, whether intended or not. When a substance is unintentionally contained in, or added to a product in a processing process, this situation is also regarded as "Contained."

[Prohibited substances]

This means a substance which should be prohibited contains over regulated value or intentionally added.

[Controlled substances]

This means a substance which must be reported to JDI, when the substance is contained and intentionally added. Additionally, it is possible that this substance will be prohibited based on revised laws/regulations and customer's requirements.

[Resin materials]

Common organic compounds containing carbon atom(s) in the molecule. Resin materials include plastics, inks, paints and rubbers.

For any discrepancy between this Table 1 and its translation into any other language, the Japanese version shall always take precedence.

【欧州RoHS指令の適用除外用途】
[Exemptions in the European RoHS Directive]

| Exemption code *Japanese version is for reference only. English version takes precedence. 適用除外コード | | Description of exemption *Japanese version is for reference only. English version takes precedence. 適用除外内容 ※和訳は参考です。英文が優先されます。 | Date of expiration of RoHS exemption RoHSにおける 除外終了期限 | Date of expiration of JDI exemption JDIにおける 除外終了期限 |
|---|--|---|--|---|
| 1 | Mercury in single capped (compact) fluorescent lamps not exceeding (per burner): 1口金(コンパクト)蛍光灯に含まれる右記を超えない水銀(バーナーあたり) | 1(a) For general lighting purposes < 30 W: 2.5 mg 30W未満の一般照明用途: 2.5mg | 5 mg up to Dec. 31, 2011 3.5 mg up to Dec. 31, 2012 2.5 mg thereafter ~2011年12月31日: 5mg ~2012年12月31日: 3.5mg 上記以降: 2.5mg (Under extended review) (延長審議中) | - |
| | | 1(b) For general lighting purposes ≥ 30 W and < 50 W: 3.5 mg 30W以上50W未満の一般照明用途: 3.5mg | 5 mg up to Dec. 31, 2011 3.5 mg thereafter ~2011年12月31日: 5mg 上記以降: 3.5mg (Under extended review) (延長審議中) | - |
| | | 1(c) For general lighting purposes ≥ 50 W and < 150 W: 5 mg 50W以上150W未満の一般照明用途: 5mg | (Under extended review) (延長審議中) | - |
| | | 1(d) For general lighting purposes ≥ 150 W: 15 mg 150W以上の一般照明用途: 15mg | (Under extended review) (延長審議中) | - |
| | | 1(e) For general lighting purposes with circular or square structural shape and tube diameter ≤ 17 mm: 7 mg 円形または四角形で直径17mm以下の一般照明用途: 7 mg | Unrestricted up to Dec. 31, 2011 7 mg thereafter ~2011年12月31日: 制限無 上記以降: 7mg (Under extended review) (延長審議中) | - |
| | | 1(f) For special purposes: 5 mg 特殊用途: 5mg | (Under extended review) (延長審議中) | - |
| | | 1(g) For general lighting purposes < 30 W with a lifetime equal or above 20 000 h: 3.5 mg 一般照明用で寿命が20000時間以上の30W未満: 3.5mg | Dec. 31, 2017 2017年12月31日 | Exemption expired on Dec. 31, 2016 2016年12月31日 適用除外終了 |
| 2(a) | Mercury in double-capped linear fluorescent lamps for general lighting purposes not exceeding (per lamp): 二口金直管蛍光灯に含まれる右記を超えない水銀(ランプあたり) | 2(a)(1) Tri-band phosphor with normal lifetime and a tube diameter < 9 mm (e.g. T2): 4 mg 通常寿命の3波長で管径9mm(T2など)未満: 4mg | 5 mg up to Dec. 31, 2011 4 mg thereafter ~2011年12月31日: 5mg 上記以降: 4mg (Under extended review) (延長審議中) | - |
| | | 2(a)(2) Tri-band phosphor with normal lifetime and a tube diameter ≥ 9 mm and ≤ 17 mm (e.g. T5): 3 mg 通常寿命の3波長で管径9mm(T5など)以上17mm以下: 3mg | 5 mg up to Dec. 31, 2011 3 mg thereafter ~2011年12月31日: 5mg 上記以降: 3mg (Under extended review) (延長審議中) | - |
| | | 2(a)(3) Tri-band phosphor with normal lifetime and a tube diameter > 17 mm and ≤ 28 mm (e.g. T8): 3.5 mg 通常寿命の3波長で管径17mm(T8など)を超え28mm以下: 3.5mg | 5 mg up to Dec. 31, 2011 3.5 mg thereafter ~2011年12月31日: 5mg 上記以降: 3.5mg (Under extended review) (延長審議中) | - |
| | | 2(a)(4) Tri-band phosphor with normal lifetime and a tube diameter > 28 mm (e.g. T12): 3.5 mg 通常寿命の3波長で管径28mm(T12など)を超えるもの: 3.5mg | 5 mg up to Dec. 31, 2012 3.5 mg thereafter ~2012年12月31日: 5mg 上記以降: 3.5mg (Under extended review) (延長審議中) | - |
| | | 2(a)(5) Tri-band phosphor with long lifetime (≥ 2 500 h): 5 mg 長寿命(2500時間以上)の3波長: 5mg | 8 mg up to Dec. 31, 2011 5 mg thereafter ~2011年12月31日: 8mg 上記以降: 5mg (Under extended review) (延長審議中) | - |
| 2(b) | Mercury in other fluorescent lamps not exceeding (per lamp): その他の蛍光灯に含まれる右記を超えない水銀(ランプあたり) | 2(b)(1) Linear halophosphate lamps with tube > 28 mm (e.g. T10 and T12): 10 mg 直管形ハロリン酸ランプで管径28mmを超える(T10, T12など): 10mg | Apr. 13, 2012 2012年4月13日 | Exemption expired 適用除外終了 |
| | | 2(b)(2) Non-linear halophosphate lamps (all diameters): 15 mg 直管蛍光灯以外のハロリン酸ランプ(全ての径): 15mg | Apr. 13, 2016 2016年4月13日 | Exemption expired on Apr. 13, 2015 2015年4月13日 適用除外終了 |
| | | 2(b)(3) Non-linear tri-band phosphor lamps with tube diameter > 17 mm (e.g. T9): 15mg 直管蛍光灯以外の3波長形蛍光灯で管径17mmを超える(T9など): 15mg | Unrestricted up to Dec. 31, 2011 15 mg thereafter ~2011年12月31日: 制限無 上記以降: 15mg (Under extended review) (延長審議中) | - |
| | | 2(b)(4) Lamps for other general lighting and special purposes (e.g. induction lamps): 15mg その他の一般照明及び特殊用途ランプ(電磁誘導灯など): 15mg | Unrestricted up to Dec. 31, 2011 15 mg thereafter ~2011年12月31日: 制限無 上記以降: 15mg (Under extended review) (延長審議中) | - |
| 3 | Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for special purposes not exceeding (per lamp): 特殊用途の冷陰極蛍光灯(CCFL)と外部電極蛍光灯(EEFL)に含まれる右記を超えない水銀(ランプあたり) | 3(a) Short length (≤ 500 mm): 3.5 mg 短いもの(500mm以下): 3.5mg | Unrestricted up to Dec. 31, 2011 3.5 mg thereafter ~2011年12月31日: 制限無 上記以降: 3.5mg (Under extended review) (延長審議中) | - |
| | | 3(b) Medium length (> 500 mm and ≤ 1 500 mm): 5mg 中程度のもの(500mmを超えて1500mm以下): 5mg | Unrestricted up to Dec. 31, 2011 5 mg thereafter ~2011年12月31日: 制限無 上記以降: 5mg (Under extended review) (延長審議中) | - |
| | | 3(c) Long length (> 1 500 mm): 13mg 長いもの(1500mmをこえるもの): 13mg | Unrestricted up to Dec. 31, 2011 13 mg thereafter ~2011年12月31日: 制限無 上記以降: 13mg (Under extended review) (延長審議中) | - |
| | | 4(a) Mercury in other low pressure discharge lamps (per lamp): 15mg その他の低圧放電ランプ中の水銀(ランプあたり): 15mg | Unrestricted up to Dec. 31, 2011 15 mg thereafter ~2011年12月31日: 制限無 上記以降: 15mg (Under extended review) (延長審議中) | - |

【欧州RoHS指令の適用除外用途】
[Exemptions in the European RoHS Directive]

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|---|---|---|--|---|---|
| 4(b) | Mercury in High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner) in lamps with improved colour rendering index Ra > 60: 演色評価数Ra60を超える一般照明用高圧ナトリウム(蒸気)ランプに含まれる右記を越えない水銀(バーナーあたり) | 4(b)-I | P ≤ 155 W: 30mg 155W以下: 30mg | Unrestricted up to Dec. 31, 2011 30 mg thereafter ～2011年12月31日:制限無 上記以降:30mg (Under extended review) (延長審議中) | — |
| | | 4(b)-II | 155 W < P ≤ 405 W: 40mg 155Wを超え405W以下: 40mg | Unrestricted up to Dec. 31, 2011 40 mg thereafter ～2011年12月31日:制限無 上記以降:40mg (Under extended review) (延長審議中) | — |
| | | 4(b)-III | P > 405 W: 40mg 405Wを超えるもの: 40mg | Unrestricted up to Dec. 31, 2011 40 mg thereafter ～2011年12月31日:制限無 上記以降:40mg (Under extended review) (延長審議中) | — |
| 4(c) | Mercury in other High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner): その他の一般照明用高圧ナトリウム(蒸気)ランプに含まれる右記を越えない水銀(バーナーあたり) | 4(c)-I | P ≤ 155 W: 25mg 155W以下: 25mg | Unrestricted up to Dec. 31, 2011 25 mg thereafter ～2011年12月31日:制限無 上記以降:25mg (Under extended review) (延長審議中) | — |
| | | 4(c)-II | 155 W < P ≤ 405 W: 30mg 155Wを超え405W以下: 30mg | Unrestricted up to Dec. 31, 2011 30 mg thereafter ～2011年12月31日:制限無 上記以降:30mg (Under extended review) (延長審議中) | — |
| | | 4(c)-III | P > 405 W: 40mg 405Wを超えるもの: 40mg | Unrestricted up to Dec. 31, 2011 40 mg thereafter ～2011年12月31日:制限無 上記以降:40mg (Under extended review) (延長審議中) | — |
| | 4(d) | Mercury in High Pressure Mercury (vapour) lamps (HPMV) 高圧水銀(蒸気)ランプ(HPMV)中の水銀 | Apr. 13, 2015 2015年4月13日 | Exemption expired on Apr. 13, 2014 2014年4月13日 適用除外終了 | |
| | 4(e) | Mercury in metal halide lamps (MH) 金属ハロゲンランプ(MH)中の水銀 | (Under extended review) (延長審議中) | — | |
| | 4(f) | Mercury in other discharge lamps for special purposes not specifically mentioned in this Annex | (Under extended review) (延長審議中) | — | |
| | 4(g) | Mercury in hand crafted luminous discharge tubes used for signs, decorative or architectural and specialist lighting and light-artwork, where the mercury content shall be limited as follows: (a)20 mg per electrode pair + 0.3 mg per tube length in cm, but not more than 80 mg, for outdoor applications and indoor applications exposed to temperatures below 20 °C; (b)15 mg per electrode pair + 0.24 mg per tube length in cm, but not more than 80 mg, for all other indoor applications. 装飾的あるいは建築上の専門的な照明設備やライトワークのネオンサイン用の手作業で製作される発光放電管中の水銀。水銀含有量は、以下の通りに制限される: (a)20℃以下の温度で感光する屋外または屋内アプリケーション用として電極対あたり20mg、チューブ長1cmあたり0.3mg(ただし80mg以下のこと) (b)他の全ての屋内アプリケーション用として電極対あたり15mg、チューブ長1cmあたり0.24mg(ただし80mg以下のこと) | Dec. 31, 2018 2018年12月31日 | Dec. 31, 2017 2017年12月31日 | |
| | 5(a) | Lead in glass of cathode ray tubes 陰極管(ブラウン管)のガラス中の鉛 | Jul. 24, 2016 2016年7月24日 | Exemption expired on July 21, 2016 2016年7月21日 適用除外終了 | |
| | 5(b) | Lead in glass of fluorescent tubes not exceeding 0.2 % by weight 蛍光灯のガラス中の0.2重量%を超えない鉛 | (Under extended review) (延長審議中) | — | |
| | 6(a) | Lead as an alloying element in steel for machining purposes and in galvanised steel containing up to 0.35 % lead by weight 機械加工用の鉄合金、亜鉛メッキ鋼に含まれる0.35重量%までの鉛 | (Under extended review) (延長審議中) | — | |
| | 6(b) | Lead as an alloying element in aluminium containing up to 0.4 % lead by weight アルミニウム合金中の0.4重量%までの鉛 | (Under extended review) (延長審議中) | — | |
| | 6(c) | Copper alloy containing up to 4 % lead by weight 4重量%までの鉛を含む銅合金 | (Under extended review) (延長審議中) | — | |
| | 7(a) | Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead) 高融点ハンダ中の鉛(85重量%以上の鉛ベースの合金) | (Under extended review) (延長審議中) | — | |
| | 7(b) | Lead in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signalling, transmission, and network management for telecommunications サーバー、記憶装置、記憶装置アレイシステム、信号切替・送受信・伝送及び電気通信ネットワーク用のネットワーク基礎設備に使用されるハンダ中の鉛 | Jul. 24, 2016 2016年7月24日 | Exemption expired on July 21, 2016 2016年7月21日 適用除外終了 | |
| | 7(c)-I | Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectric devices, or in a glass or ceramic matrix compound 電気電子部品(コンデンサ中の誘電体を除く)のガラス、セラミック中の鉛(たとえばピエゾエレクトリックデバイス、ガラス、セラミックマトリックス化合物) | (Under extended review) (延長審議中) | — | |
| | 7(c)-II | Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher | (Under extended review) (延長審議中) | — | |
| | 7(c)-III | Lead in dielectric ceramic in capacitors for a rated voltage of less than 125 V AC or 250 V DC AC125V、DC250V未満のコンデンサのセラミック中の鉛 | Jan. 1, 2013; thereafter permitted only in spare parts for products marketed before that date 2013年1月1日迄、それ以降は上記までに上市された製品の補修部品に限定 | Exemption expired 適用除外終了 | |
| | 7(c)-IV | Lead in PZT based dielectric ceramic materials for capacitors which are part of integrated circuits or discrete semiconductors 集積回路またはディスクリット半導体の一部であるコンデンサ用のPZT(チタン酸ジルコン酸鉛)誘電体セラミック材料に含まれる鉛 | (Under extended review) (延長審議中) | — | |
| | 8(a) | Cadmium and its compounds in one shot pellet type thermal cut-offs ワンショットペレットタイプ熱ヒューズに含まれるカドミウム及びその化合物 | Jan. 1, 2012; thereafter permitted only in spare parts for products marketed before that date 2012年1月1日迄、それ以降は上記までに上市された製品の補修部品に限定 | Exemption expired 適用除外終了 | |
| | 8(b) | Cadmium and its compounds in electrical contacts 電気接点に含まれるカドミウム及びその化合物 | (Under extended review) (延長審議中) | — | |
| | 9 | Hexavalent chromium as an anticorrosion agent of the carbon steel cooling system in absorption refrigerators up to 0.76 % by weight in the cooling solution 吸収型冷蔵庫の炭素鋼冷却システムの防食剤としての冷却剤中に含まれる0.76重量%以下の六価クロム | July 24, 2016 2016年7月24日 | Exemption expired on July 21, 2016 2016年7月21日 適用除外終了 | |
| | 9(b) | Lead in bearing shells and bushes for refrigerant-containing compressors for heating, ventilation, air conditioning and refrigeration (HVACR) applications 暖房、換気、空調、冷却機器(HVACR)のコンプレッサーに含まれる冷媒用ベアリングシェル及びブッシュに含まれる鉛 | (Under extended review) (延長審議中) | — | |
| | 11(a) | Lead used in C-press compliant pin connector systems Cプレスコンプライアントピンコネクタシステムに使用する鉛 | Sept. 24, 2010; thereafter permitted only in spare parts for products marketed before that date 2010年9月24日迄、それ以降は上記までに上市された製品の補修部品に限定 | Exemption expired 適用除外終了 | |

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|---|---|--|---|
| 11(b) | Lead used in other than C-press compliant pin connector systems Cプレスコンプライアントピンコネクタシステム以外に使用される鉛 | Jan. 1, 2013; thereafter permitted only in spare parts for products marketed before that date 2013年1月1日迄、それ以降は上記までに上市された製品の補修部品に限定 | Exemption expired 適用除外終了 |
| 12 | Lead as a coating material for the thermal-conduction module C-ring 熱電モジュールのCリングのコーティング材として使用される鉛 | Sept. 24, 2010; thereafter permitted only in spare parts for products marketed before that date 2010年9月24日迄、それ以降は上記までに上市された製品の補修部品に限定 | Exemption expired 適用除外終了 |
| 13(a) | Lead in white glasses used for optical applications 光学用途の白色ガラス中の鉛 | (Under extended review) (延長審議中) | - |
| 13(b) | Cadmium and lead in filter glasses and glasses used for reflectance standards フィルターガラス及び反射率標準のガラスに使用されるカドミウムと鉛 | (Under extended review) (延長審議中) | - |
| 14 | Lead in solders consisting of more than two elements for the connection between the pins and the package of microprocessors with a lead content of more than 80 % and less than 85 % by weight マイクロプロセッサのピンとパッケージ間の接続に用いられる、2種以上の成分から構成され、鉛の含有率80%以上85%未満のハンダ中の鉛 | Jan. 1, 2011; thereafter permitted only in spare parts for products marketed before that date 2011年1月1日迄、それ以降は上記までに上市された製品の補修部品に限定 | Exemption expired 適用除外終了 |
| 15 | Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages ICフリップチップパッケージ内の半導体ダイとキャリア間の電気接続用のハンダ中の鉛 | (Under extended review) (延長審議中) | - |
| 16 | Lead in linear incandescent lamps with silicone coated tubes シリカコートされた直管白熱電球に含まれる鉛 | Sept. 1, 2013 2013年9月1日 | Exemption expired on Apr. 1, 2013 2013年4月1日 適用除外終了 |
| 17 | Lead halide as radiant agent in high intensity discharge (HID) lamps used for professional reprography applications 業務用電子複写機に使用される高輝度放電(HID)ランプに発光物質として使用されるハロゲン化鉛 | July 21, 2016 2016年7月21日 | Exemption expired on July 21, 2016 2016年7月21日 適用除外終了 |
| 18(a) | Lead as activator in the fluorescent powder (1 % lead by weight or less) of discharge lamps when used as speciality lamps for diazotyping, reprography, lithography, insect traps, photochemical and curing processes containing phosphors such as SMS ((Sr,Ba)2MgSi2O7:Pb) SMS((Sr,Ba)2MgSi2O7:Pb)などの蛍光体を含むジアゾ印刷電子複写、石版印刷、集虫器、光化学プロセスの専門ランプとして使われるとき、放電ランプの蛍光粉(1重量%以下の鉛を含む)の活性化剤としての鉛 | Jan. 1, 2014 2014年1月1日 | Exemption expired 適用除外終了 |
| 18(b) | Lead as activator in the fluorescent powder (1 % lead by weight or less) of discharge lamps when used as sun tanning lamps containing phosphors such as BSP (BaSi2O5:Pb) BSP (BaSi2O5:Pb)などの蛍光体を含む日焼け用ランプとして使用される放電ランプの蛍光パウダー(1重量%以下の鉛を含む)の活性化剤としての鉛 | (Under extended review) (延長審議中) | - |
| 19 | Lead with PbBiSn-Hg and PbInSn-Hg in specific compositions as main amalgam and with PbSn-Hg as auxiliary amalgam in very compact energy-saving lamps (ESL) 超小型の省エネ灯(ESL)の中的主要アマルガムとしての特定のPbBiSn-HgとPbInSn-Hg、並びに補助アマルガムとしてのPbSn-Hgに用いられる鉛 | June 1, 2014 2014年6月1日 | Exemption expired 適用除外終了 |
| 20 | Lead oxide in glass used for bonding front and rear substrates of flat fluorescent lamps used for Liquid Crystal Displays (LCDs) 液晶ディスプレイに使用される平面蛍光管のフロント/リア基板の接合に使用されるガラス中の酸化鉛 | June 1, 2014 2014年6月1日 | Exemption expired 適用除外終了 |
| 21 | Lead and cadmium in printing inks for the application of enamels on glasses, such as borosilicate and soda lime glasses ホウケイ酸ガラス、ソーダ石灰ガラスのエナメルに使用される印刷インク中の鉛及びカドミウム | (Under extended review) (延長審議中) | - |
| 23 | Lead in finishes of fine pitch components other than connectors with a pitch of 0.65 mm and less ピッチが0.65mm以下のコネクタ以外のファインピッチ部品の仕上げ剤中の鉛 | Sept. 24, 2010; thereafter permitted only in spare parts for products marketed before that date 2010年9月24日迄、それ以降は上記までに上市された製品の補修部品に限定 | Exemption expired 適用除外終了 |
| 24 | Lead in solders for the soldering to machined through hole discoidal and planar array ceramic multilayer capacitors 機械的に貫通孔が作られた円板状と、平面上積層セラミックキャパシタを半田付けする半田中の鉛 | (Under extended review) (延長審議中) | - |
| 25 | Lead oxide in surface-conduction electron-emitter displays (SED) used in structural elements, notably in the seal frit and frit ring 表面伝導型電子放出素子ディスプレイ(SED)の構造部品に含まれる酸化鉛。特に、シールフリット、フリットリングに含まれる酸化鉛 | July 21, 2016 2016年7月21日 | Exemption expired on July 21, 2016 2016年7月21日 適用除外終了 |
| 26 | Lead oxide in the glass envelope of Black Light Blue (BLB) lamps ブラックライトブルー(BLB)灯のガラス管に含まれる酸化鉛 | June 1, 2014 2014年6月1日 | Exemption expired 適用除外終了 |
| 27 | Lead alloys as solder for transducers used in high-powered (designated to operate for several hours at acoustic power levels of 125 dB SPL and above) loudspeakers 高出力音響スピーカー(音の強さ125dB程度で数時間の稼働として設計された)の変換器用の半田としての鉛合金 | Sept. 24, 2010 2010年9月24日 | Exemption expired 適用除外終了 |
| 29 | Lead bound in crystal glass as defined in Annex I (Categories 1, 2, 3 and 4) of Council Directive 69/493/EEC (1) 指令69/493/EECの付属書I(カテゴリー1, 2, 3と4)で定義されるクリスタルガラス中の鉛 | (Under extended review) (延長審議中) | - |
| 30 | Cadmium alloys as electrical/mechanical solder joints to electrical conductors located directly on the voice coil in transducers used in high-powered loudspeakers with sound pressure levels of 100 dB (A) and more 100dB以上の音圧レベルの高出力音響スピーカーに使用される変換器内のボイスコイルに直接位置する電気接点への電気的/機械的のんだ接合としてのカドミウム合金 | July 21, 2016 2016年7月21日 | Exemption expired on July 21, 2016 2016年7月21日 適用除外終了 |
| 31 | Lead in soldering materials in mercury free flat fluorescent lamps (which, e.g. are used for liquid crystal displays, design or industrial lighting) 水銀を使用しない平面蛍光灯(たとえば、液晶ディスプレイまたは産業用照明に使用される)のハンダ中の鉛 | July 21, 2016 2016年7月21日 | Exemption expired on July 21, 2016 2016年7月21日 適用除外終了 |
| 32 | Lead oxide in seal frit used for making window assemblies for Argon and Krypton laser tubes アルゴンやクリプトンレーザーチューブのウィンドウアセンブリを作るために使用されるシールフリット中の酸化鉛 | (Under extended review) (延長審議中) | - |
| 33 | Lead in solders for the soldering of thin copper wires of 100 µm diameter and less in power transformers 変圧器中の直径100µm以下の細い銅線ハンダ付け用ハンダ中の鉛 | July 21, 2016 2016年7月21日 | Exemption expired on July 21, 2016 2016年7月21日 適用除外終了 |
| 34 | Lead in cermet-based trimmer potentiometer elements サーメット型トリマポテンショメータ素子中の鉛 | (Under extended review) (延長審議中) | - |
| 36 | Mercury used as a cathode sputtering inhibitor in DC plasma displays with a content up to 30 mg per display DCプラズマディスプレイのカソードスパッタリング抑制剤として使用される1ディスプレイあたり30mgまでの水銀 | July 1, 2010 2010年7月1日 | Exemption expired 適用除外終了 |
| 37 | Lead in the plating layer of high voltage diodes on the basis of a zinc borate glass body 亜鉛ホウ酸ガラスをベースとした高電圧ダイオードの表面被覆層の鉛 | (Under extended review) (延長審議中) | - |
| 38 | Cadmium and cadmium oxide in thick film pastes used on aluminium-bonded beryllium oxide アルミニウム結合ベリリウム酸化物に使用される厚膜ペーストに含まれるカドミウム及び酸化カドミウム | July 21, 2016 2016年7月21日 | Exemption expired on July 21, 2016 2016年7月21日 適用除外終了 |
| 39 | Cadmium in colour converting II-VI LEDs (< 10 µg Cd per mm ² of light emitting area) for use in solid state illumination or display systems 固体照明またはディスプレイシステムに使用される色変換II-VI族LED(発光領域あたりカドミウム量が10µg/mm ² 未満)中のカドミウム | July 1, 2014 2014年7月1日 | Exemption expired on Apr. 1, 2013 2013年4月1日 適用除外終了 |

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| Exemption code *Japanese version is for reference only. English version takes precedence. 適用除外コード | Description of exemption *Japanese version is for reference only. English version takes precedence. 適用除外内容 ※和訳は参考です。英文が優先されます。 | Date of expiration of RoHS exemption RoHSにおける 除外終了期限 | Date of expiration of JDI exemption JDIにおける 除外終了期限 |
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| 40 | Cadmium in photoresistors for analogue optocouplers applied in professional audio equipment 業務用オーディオ機器に使用されるアナログオプトラ用のフォトレジスタに含まれるカドミウム | Dec. 31, 2013 2013年12月31日 | Exemption expired on Apr. 1, 2013 2013年4月1日 適用除外終了 |
| 41 | Lead in solders and termination finishes of electrical and electronic components and finishes of printed circuit boards used in ignition modules and other electrical and electronic engine control systems, which for technical reasons must be mounted directly on or in the crankcase or cylinder of hand-held combustion engines (classes SH:1, SH:2, SH:3 of Directive 97/68/EC of the European Parliament and of the Council (1)) (1)Directive 97/68/EC of the European Parliament and of the Council of 16 December 1997 on the approximation of the laws of the Member States relating to measures against the emission of gaseous and particulate pollutants from internal combustion engines to be installed in non-road mobile machinery (OJ L 59, 27.2.1998, p. 1). 技術的な理由でハンドヘルド内燃機関(欧州議会・理事会指令97/68/ECのクラスSH:1、SH:2、SH:3)(1)のクランクケースまたはシリンダーに直接搭載されなければならない点火モジュールおよび他の電気・電子エンジンの制御装置で使われるはんだおよび電気・電子部品の末端仕上げとプリント配線基板の仕上げの鉛 (1)1997年12月16日の欧州議会・理事会指令97/68/ECの道路通信用でない移動体機器に搭載される内燃機関からのガス状および粒子の汚染物質放出に対する法案に関する加盟国の類似法(1998年2月27日のOJ L59, p.1) | Dec. 31, 2018 2018年12月31日 | Dec. 31, 2017 2017年12月31日 |

* This table is provided only for reference and then, wherever applicable, the latest instructions provided in European RoHS Directive should govern.

* This table has been established based on the information available at JDI in September 2016.

※本表は参考掲載であり、如何なる場合においても欧州RoHS指令により規定される最新の内容が優先されます。

※本表は2016年9月時点の当社にて把握している情報を基に作成しています。

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| | <p>- No. 37 Perfluorooctanoic acid (PFOA): A threshold level of 1 µg/m² was introduced for coatings. A threshold level of 10 ppm was introduced for residue contained.</p> <p>Other changes Referenced laws and regulations were changed as listed below: No. 1-6: Referenced RoHS-related regulation was changed to EU RoHS Directive 2011/65/EC. No. 16 PFOS and its salts: Referenced regulations were changed to EU REACH Annex XVII (Restricted materials) and EU Directive 2006/122/EC. No. 26 Formaldehyde: Referenced regulation was changed to German ChemVerbotsV and Danish Directive No. 289.</p> <p>The substances in the table were rearranged as follows along with addition of entries: No. 24 to No. 7 Polychlorinated naphthalenes (PCNs) No. 31 to No. 26 Formaldehyde No. 26 to No. 30 Halogenated compounds (Chlorine and Bromine) No. 27 to No. 31 Polyvinyl chloride (PVC) and its compounds No. 28 to No. 32 Antimony and its compounds No. 29 to No. 33 Arsenic and its compounds No. 30 to No. 34 Beryllium and its compounds No. 33 to No. 35 Bisphenol A No. 34 to No. 36 Natural rubber No. 35 to No. 37 Perfluorooctanoic acid (PFOA) No. 36 to No. 38 4-(Isopropylamino)diphenylamine</p> <p>Changes in EU RoHS exemption Exemption codes 16, 39, and 40 were changed to exemption expiration. In addition, some errors in descriptions were corrected.</p> | |
| 3.00 | <p>Prohibited substances added The following substances were added to the list in response to customers' requests and revision of laws and regulations: - No. 24 Endosulfan or Benzoepin - No. 40 EU REACH ANNEX XIV - No. 41 EU REACH ANNEX XVII</p> <p>Threshold levels modified for prohibited substances The following threshold levels were modified in response to customers' requests and law revisions: - No. 11 Azo pigment and azo dye: The threshold level was changed from 30 ppm to 20 ppm. - No. 13 Benzene: The threshold level was changed from 5 ppm to "Prohibited intentionally added". - No. 33 Arsenic and its compounds: The threshold level was changed from "100 ppm for metals", "25 ppm for skin-contact use", and "50 ppm for all uses other than the above" to "Prohibited intentionally added".</p> <p>Other changes Referenced laws and regulations were changed as listed below: - No. 16: PFOS and its salts - No. 37: Perfluorooctanoic acid (PFOA) Some substances were added CAS No.</p> <p>Changes in EU RoHS exemption Exemption codes 4(d) was changed to exemption expiration. Exemption codes 1(g), 4(g) and 41 were added to exemptions list.</p> | Apr. 1, 2015 |
| 4.00 | <p>Prohibited substances added The following substance was added to the list in response to customers' requests: - No. 40 Tris(2-chloroethyl) phosphate (TCEP)</p> <p>Controlled substances changed to Prohibited substances The following substance was changed from Controlled substances to Prohibited substances in response to customers' requests: - No. 41 Perchlorates</p> <p>Threshold levels modified for prohibited substances The following threshold levels were modified in response to customers' requests: - No. 12 Phthalate esters: The threshold level was changed to impurities and residues are limited to a total of 1000 ppm for phthalates. - No. 27 Pentachlorophenols (PCPs): The threshold level was changed from 5 ppm to "Prohibited intentionally added".</p> <p>Other changes Referenced laws and regulations were changed as listed below: - No. 12: Phthalate esters - No. 39: Nonylphenol (NP) and nonylphenol ethoxylates (NPE)</p> <p>The substances in the table were rearranged as follows along with addition of entries: No. 40 to No. 42 EU REACH ANNEX XIV No. 41 to No. 43 EU REACH ANNEX XVII</p> <p>EU REACH ANNEX XVII reference URL was updated.</p> <p>Changes in EU RoHS exemption Exemption codes 2(b)(2), 7(c)-IV were changed to exemption expiration.</p> | Apr. 1, 2016 |

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| 5.00 | <p>Prohibited substances added</p> <p>The following substances were added to the list in response to customers' requests:</p> <ul style="list-style-type: none"> - The following substances were added to No. 12 Phthalate esters. <ul style="list-style-type: none"> 16. 1,2-benzenedicarboxyl acid, di-C6-10 alkyl esters with ≥0.3% of dihexyl phthalate, 1,2-benzenedicarboxyl acid, mixed decyl and hexyl and octyl diesters with ≥0.3% of dihexyl phthalate. - Nine (9) types were added to No. 23 Polycyclic aromatic hydrocarbons (PAHs) <ul style="list-style-type: none"> Benzo[r,s,t]pentaphene, Dibenz[a,h]acridine, Dibenz[a,j]acridine, Dibenz[a,e]fluoranthene, Dibenz[a,e]pyrene, Dibenz[a,h]pyrene, Dibenz[a,l]pyrene, 7H-dibenzo[c,g]carbazole, and 5-methylchrysene <p>Threshold levels modified for prohibited substances</p> <p>The following threshold levels were modified in response to customers' requests:</p> <ul style="list-style-type: none"> - No. 7 PCN, PCB, PCT, and their substitutes <ul style="list-style-type: none"> For polychlorinated naphthalenes (PCNs), the threshold level of impurities was changed from 50 ppm to 5 ppm. For polychlorinated biphenyls (PCBs), the threshold level of impurities was changed from 50 ppm to "Prohibited its impurity detected through component analysis (0.1 ppm or less)." For polychlorinated naphthalenes (PCNs), the threshold level of impurities was changed from 50 ppm to 5 ppm. - No. 11 Azo pigment and azo dye <ul style="list-style-type: none"> For the applications for fiber and leather products, the threshold was changed from 20 ppm to 30 ppm. - No. 23 Polycyclic aromatic hydrocarbons (PAHs) <ul style="list-style-type: none"> "Total of 18 kinds is below 10 ppm and below 1 ppm for each of 8 kinds" was changed to "1 ppm for each and 10 ppm for a total of 27 kinds." - No. 24 Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. Class I Specified Chemical Substances <ul style="list-style-type: none"> For the specific benzotriazole 2-(2H-1,2,3-Benzotriazol-2-yl)-4,6-di-tert-butylphenol, the threshold level of Impurities and residues was added as a total of 5 ppm. - No. 26 Formaldehyde <ul style="list-style-type: none"> The threshold level was changed to from 0.1 mL/m³ (ppm) to 0.1 mL/m³ (ppm) and 300 ppm, and supplemental explanation about the threshold level was changed. - No. 40 Perchlorates <ul style="list-style-type: none"> The threshold level was changed from 1,000 ppm to 0.1 ppm. <p>Controlled substances added</p> <p>The following substances below were added to the list in response to customers' requests and revision of laws and regulations:</p> <ul style="list-style-type: none"> - No. 5 Proposition 65 List of Chemicals - No. 6 Washington State's List of Chemicals of High Concern to Children (CHCC) - No. 7 1-bromopropane <p>Other changes</p> <ul style="list-style-type: none"> - No. 27 Pentachlorophenols (PCPs) of the prohibited substance was moved to No. 24 Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. Class I Specified Chemical Substances and the name of substances was changed to "Pentachlorophenol or its chlorides or esters." <ul style="list-style-type: none"> In response to this, Nos. 28 through 43 of the prohibited substance were moved up to Nos. 27 through 42. - Reference URLs were added and errors in descriptions, etc., were corrected. <p>Changes in EU RoHS exemption</p> <ul style="list-style-type: none"> - In the date of expiration for the following exemption codes, the wording "(Under extended review)" was added. <ul style="list-style-type: none"> 1(a), 1(b), 1(c), 1(d), 1(e), 1(f), 2(a)(1), 2(a)(2), 2(a)(3), 2(a)(4), 2(a)(5), 2(b)(3), 2(b)(4), 3(a), 3(b), 3(c), 4(a), 4(b)-I, 4(b)-II, 4(b)-III, 4(c)-I, 4(c)-II, 4(c)-III, 4(e), 4(f), 5(b), 6(a), 6(b), 6(c), 7(a), 7(c)-I, 7(c)-II, 7(c)-IV, 8(b), 9(b), 13(a), 13(b), 15, 18(b), 21, 24, 29, 32, 34, 37 - The following exemption codes were changed to exemption expiration. <ul style="list-style-type: none"> 1(g), 5(a), 7(b), 9, 17, 25, 30, 31, 33, 38 | Apr. 1, 2017 |
| 6.00 | <p>Prohibited substances added</p> <p>The following substances were added to the list in response to revision of laws:</p> <ul style="list-style-type: none"> - No. 24 Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. Class I Specified Chemical Substances <ul style="list-style-type: none"> Decabromodiphenyl ethers. and Short-chain chlorinated paraffins <p>Threshold levels modified for prohibited substances</p> <p>The following threshold levels were modified in response to revision of laws:</p> <ul style="list-style-type: none"> - No. 37 Perfluorooctanoic acid (PFOA) <ul style="list-style-type: none"> Threshold level was added to Remarks by revision of EU REACH ANNEX XVII(Restricted substances). - No. 41 EU REACH ANNEX XVII <ul style="list-style-type: none"> Threshold level was modified appropriately. <p>Controlled substances added</p> <p>The following substances below were added to the list in response to customers' requests and revision of laws and</p> <ul style="list-style-type: none"> - No. 8 Phosphorus flame retardant - No. 9 Red phosphorus <p>Other changes</p> <ul style="list-style-type: none"> - Reference URLs were modified and errors in descriptions, etc., were corrected. | Apr. 1, 2018 |
| 7.00 | <p>Prohibited substances added</p> <p>The following substances were added to the list in response to customers' requests:</p> <ul style="list-style-type: none"> - The following substances were added to No.12 Phthalate esters <ul style="list-style-type: none"> 19) Diundecyl phthalate (DuDP) | Apr. 1, 2019 |

- 20) Dicyclohexyl phthalate (DCHP)
- 21) Diisohexyl phthalate (DiHP)

Threshold levels modified for prohibited substances

The following threshold levels were modified in response to customers' requests:

- No. 24 Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. Class I Specified Chemical Substances

"Impurities and residues of HBCDD are limited to a total of 100 ppm." was added to Remarks for Hexabromocyclododecane (HBCDD).

Controlled substances added

The following substances below were added to the list in response to customers' requests and revision of laws and regulations:

- No. 10 Bisphenol F, Bisphenol S
- No. 11 Volatile Organic Compounds (VOCs)
- No. 12 Cobalt and its compounds
- No. 13 Endocrine Disrupting Chemicals (EDCs)
- No. 14 IEC 62474 Substances
- No. 15 Indium Phosphide
- No. 16 Per- and Polyfluoroalkyl Substances (PFAS)

Other changes

- Referenced laws and regulations for prohibited substance No. 27 Benzenamine,N-Phenyl-, Reaction Products with Styrene and 2,4,4- Trimethylpentene (BNST) were changed from " Canadian Environmental Protection Act, 1999" to "JDI self-regulation."

- Reference URLs were modified and errors in descriptions, etc., were corrected.