IDEC

Think Automation and beyond...

IDEC Group Green Procurement Guidelines（Ver.3.1）ANNEX

Restricted chemicals　*1

Table 1. Prohibited chemicals

No.	Chemical substances	Threshold values	Subjects of restrictions	Main related laws, regulations, conventions
1	Cadmium and its compounds	Less than 100 ppm	All uses (other than uses exempted from the RoHS Directive) Note: Batteries are subject to the EU Batteries Regulation	EU RoHS Directive China RoHS
2	Lead and its compounds	Less than 1000 ppm *2	All uses (other than uses exempted from the RoHS Directive) Note: Batteries are subject to the EU Batteries Regulation	EU RoHS Directive China RoHS
3	Mercury and its compounds	Less than 1000 ppm	All uses (other than uses exempted from the RoHS Directive) Note: Batteries are subject to the EU Batteries Regulation	EU RoHS Directive China RoHS Minamata Convention on Mercury
4	Hexavalent chromium compounds	Less than 1000 ppm	All uses (other than uses exempted from the RoHS Directive) Note: Batteries are subject to the EU Batteries Regulation	EU RoHS Directive China RoHS
1-4	Cadmium, lead, hexavalent chromium, and mercury	Intentional use prohibited and less than 100 ppm in total	Packaging and packing materials for IDEC products	EU Packing and Packing Waste Directives, US The Model Toxics in Packaging Legislation
5	Polybrominated biphenyls (PBB)	Intentional use prohibited and less than 1000 ppm	All uses	EU RoHS Directive Japan Regulation of Chemical Substances China RoHS EU POPs Regulations Annex Ⅰ
6	Polybrominated diphenyl ethers (PBDE)	Intentional use prohibited and less than 10 ppm Articles made from recovered material: less than 200 ppm	All uses	EU RoHS Directive Japan Regulation of Chemical Substances China RoHS EU POPs Regulations Annex Ⅰ
7	Bis(2-Ethylhexyl) phthalate (DEHP)	Less than 1000 ppm	All uses	EU RoHS Directive
8	Dibutyl phthalate (DBP)	Less than 1000 ppm	All uses	EU RoHS Directive
9	Benzyl butyl phthalate (BBP)	Less than 1000 ppm	All uses	EU RoHS Directive
10	Diisobutyl phthalate (DIBP)	Less than 1000 ppm	All uses	EU RoHS Directive
7-10	BBP, DBP, DEHP, DIBP	Less than 100 ppm in total	Packaging and packing materials for IDEC products	US The Model Toxics in Packaging Legislation
11	Polychlorinated biphenyls (PCBs) and specific substitutes	Intentional use prohibited and less than 0.2 ppm in total Only in articles containing organic pigments or dyes: less than 25 ppm in total (10 ppm after April 2028)	All uses	Japan Regulation of Chemical Substances EU POPs Regulations Annex Ⅰ
12	Polychlorinated terphenyls (PCTs)	Less than 50 ppm	All uses	EU REACH Regulations Annex XVII
13	Asbestos	Intentional use prohibited	All uses	EU REACH Regulations Annex XVII

No.	Chemical substances	Threshold values	Subjects of restrictions	Main related laws, regulations, conventions
14	Tri-substituted organostannic compounds	Less than 1000 ppm by weight of tin	All uses	Japan Regulation of Chemical Substances EU REACH Regulations Annex XVII
15	Short-Chain Chlorinated Paraffin (SCCPs) (C10 - 13)	Intentional use prohibited and less than 1500 ppm	All uses	Japan Regulation of Chemical Substances EU POPs Regulations Annex Ⅰ
16	Azocolourants and azodyes which from certain aromatic amines	Release of one or more aromatic amines exceeding 30 ppm	Textile and leather parts that may come into direct contact with human skin or oral cavities for a long period of time	EU REACH Regulations Annex XVII
17	Polychlorinated naphthalenes (CL>/=1)	Intentional use prohibited	All uses	Japan Regulation of Chemical Substances EU POPs Regulations Annex Ⅰ
18	Ozone-depleting substances	Intentional use prohibited	All uses and uses in producing process	Japan Regulation on the Protection of the Ozone Laye The Montreal Protocol on Substances that Deplete the Ozone Layer
19	Dibenzothiophene (DBT) compounds	Less than 1000 ppm by weight of tin	All uses	EU REACH Regulations Annex XVII
20	Dioctyltin (DOT) compounds	Less than 1000 ppm by weight of tin	Textiles coming into contact with the skin Two-ingredient greenhouse-effect mold kit	EU REACH Regulations Annex XVII
21	Formaldehyde	Release from furniture and wood-based articles; less than 0.062 mg/m3 Release from articles other than furniture and wood-based articles; less than 0.080 mg/m3	All uses	EU REACH Regulations Annex XVII
22	Perfluorooctanoic Sulfonate (PFOS), their salts and PFOS related substances	PFOS and their salts: less than 0.025 ppm PFOS-related substances: less than 1 ppm in total	All uses	Japan Regulation of Chemical Substances EU POPs Regulations Annex Ⅰ
23	Perfluorooctanoic acid (PFOA), their salts and PFOA related substances	PFOA and their salts: less than 0.025 ppm PFOA-related substances: less than 1 ppm in total	All uses	Japan Regulation of Chemical Substances EU REACH Regulations Annex XVII
24	2-(2H-1,2,3-benzotriazole-2-yl)-4,6-dii-tert-butylphenol (UV-320)	Intentional use prohibited	All uses	Japan Regulation of Chemical Substances EU REACH Regulations Annex XIV
25	Dimethyl fumarate	Less than 0.1 ppm	All uses	EU REACH Regulations Annex XVII
26	Polycyclic aromatic hydrocarbons (PAH)	Less than 1 ppm	Rubber or plastic parts that may come into contact with human skin or oral cavities directly for a long period of time or repeated contact for a short period of time	EU REACH Regulations Annex XVII
27	Hexabromocyclododecane (HBCD/HBCDD)	Intentional use prohibited and less than 75 ppm	All uses	Japan Regulation of Chemical Substances EU POPs Regulations Annex Ⅰ
28	Hexachlorobenzene (HCB)	Intentional use prohibited and less than 10 ppm	All uses	Japan Regulation of Chemical Substances EU POPs Regulations Annex Ⅰ
29	Phenol, isopropylphosphoric acid (3: 1) (PIP (3: 1))	Intentional use prohibited and less than 1000 ppm	All uses	US TSCA

No.	Chemical substances	Threshold values	Subjects of restrictions	Main related laws, regulations, conventions
30	Pentachlorothiophenol (PCTP)	Intentional use prohibited and less than1000 ppm	All uses	US TSCA
31	Perfluorohexane sulfonic acid (PFHxS), its salts and PFHxS-related substances	PFHxS and their salts: less than 0.025 ppm, PFHxS -related substances: total less than 1 ppm	All uses	Japan Regulation of Chemical Substances EU POPs Regulations Annex Ⅰ
32	Dechlorane Plus CAS RN®: 13560-89-9, 135821-03-3, 135821-74-8	Intentional use prohibited and less than 1 ppm	All uses	Japan Regulation of Chemical Substances EU POPs Regulations Annex Ⅰ
33	2-(2H-Benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	Intentional use prohibited and less than 1 ppm	All uses	Japan Regulation of Chemical Substances EU POPs Regulations Annex Ⅰ
34	Chlorinated paraffins with carbon chain lengths in the range C14–17 (MCCP)	Intentional use prohibited and less than 1000 ppm	All uses	POPs Convention
35	Long-chain perfluorocarboxylic acids (LC-PFCAs), their salts and related compounds with carbon chain lengths in the range C9–21	LC-PFCA and their salts: less than 0.025 ppm LC-PFCA-related substances: less than 0.26 ppm in total	All uses	POPs Convention
36	2,4,6-tris(tert-butyl)phenol (2,4,6-TTBP)	Intentional use prohibited and less than 3000 ppm	All uses	US TSCA
37	Pentachlorophenol (PCP) and its salts and esters	Intentional use prohibited and less than 5 ppm	All uses	Japan Regulation of Chemical Substances EU POPs Regulations Annex Ⅰ
38	Mineral oil aromatic hydrocarbons (MOAH) comprising from 1 to 7 aromatic rings	Less than 0.1% and less than 1 ppm MOAH compounds containing 3 to 7 aromatic rings	Inks on packaging and packing for IDEC products	Mineral Oil Requirements under French Circular Economy Law
39	Hydrocarbons saturated with mineral oil (MOSH) containing 16 to 35 carbon atoms	Less than 0.1%	Inks on packaging and packing for IDEC products	Mineral Oil Requirements under French Circular Economy Law

*1 If there is a chemical substance agreement for a product for a specific customer, that agreement will take precedence.
*2 Please report if lead is intentionally added to the material that covers the surface of the cord, or if the lead content exceeds 300 ppm (0.03%).

Table 2. Controlled chemicals

No.	Subject	Notes
1	IEC 62474	Other than prohibited chemicals under Annex 1
2	Candidate substances for permission under EU REACH regulations (SVHCs)	Other than prohibited chemicals under Annex 1

Table 3. Applicable laws and regulations

No.	Common name	Official name
1	Japan Regulation of Chemical Substances	Act on the Regulation of Manufacture and Evaluation of Chemical Substances
2	Japan Regulation on the Protection of the Ozone Layer	Act on the Protection of the Ozone Layer Through the Control of Specified Substances, etc. and Other Measures
3	Act on the Regulation of Radioisotopes, etc.	Act on the Regulation of Radioisotopes, etc.
4	EU RoHS Directive	Directive 2011/65/EU
5	EU REACH Regulation Annex XVII	Regulation(EC) No 1907/2006 Annex XVII
6	EU REACH Regulation Annex XIV	Regulation(EC) No 1907/2006 Annex X IV
7	China RoHS	Administrative Measure on the Control of Pollution Caused by Electronic Information Products
8	POPs Convention	Stockholm Convention on Persistent Organic Pollutants
9	EU POPs Regulation Annex Ⅰ	Regulation (EC) No 850/2004 Annex Ⅰ
10	EU packaging directive	Directive 94/62/EC
11	US TSCA	US Toxic substances Control Act (TSCA)
12	US Model Toxics in Packaging Legislation	US Model Toxics in Packaging Legislation
13	EU Batteries Regulation	(EU) 2023/1542
14	Minamata Convention on Mercury	The Minamata Convention on Mercury
15	French Circular Economy Law Mineral Oil Requirements	LOI n°2020-105 relative à la lutte contre le gaspillage et à l'économie circulaire Article 112, D543-45-1

Table 4. Exemptions

No.	Material	Exemptions	Deadline at IDEC
EU RoHS Directive Annex Ⅲ (including draft)			
6(a)	Lead	Lead as an alloying element in steel for machining purposes containing up to 0,35 % lead by weight and in galvanized steel containing up to 0,35 % lead by weight	2024/07/21
6(a)-Ⅰ	Lead	Lead as an alloying element in steel for machining purposes containing up to 0,35 % lead by weight	2027/07/21
6(a)-Ⅱ	Lead	Lead in batch hot dip galvanised steel components containing up to 0,2 % lead by weight	–
6(b)	Lead	Lead as an alloying element in aluminium containing up to 0,4 % lead by weight	2025/07/21
6(b)-Ⅰ	Lead	Lead as an alloying element in aluminium containing up to 0,4 % lead by weight, provided it stems from lead-bearing aluminium scrap recycling	2025/07/21
6(b)-Ⅱ	Lead	Lead as an alloying element in aluminium for machining purposes with a lead content up to 0,4 % by weight	2025/07/21
6(b)-Ⅲ	Lead	Lead as an alloying element in aluminium casting alloys containing up to 0.3% lead by weight provided it stems from lead-bearing aluminium scrap recycling	2027/07/21
6(c)	Lead	Copper alloy containing up to 4 % lead by weight	–

No.	Material	Exemptions	Deadline at IDEC
7(a)	Lead	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead) (excludes those in the scope of exemption 24(a))	2027/07/21
7(a)- Ⅰ	Lead	Lead in high melting temperature type solders (i.e., lead-based alloys containing 85 % by weight or more lead) when used for the following applications (excludes those in the scope of exemption 24): for internal interconnections for attaching die, or other components along with a die in semiconductor assembly with steady state or transient/impulse currents of 0.1 A or greater or blocking voltages beyond 10 V, or die edge sizes larger than 0.3 mm x 0.3 mm	–
7(a)- Ⅱ	Lead	Lead in high melting temperature type solders (i.e., lead-based alloys containing 85 % by weight or more lead) when used for the following applications (excludes those in the scope of exemption 24): for integral (meaning internal and external) connections of die attach in electrical and electronic components, if the thermal conductivity of the cured/sintered die-attach material is >35W/(m*K) AND the electrical conductivity of the cured/sintered die-attach material shall be >4.7MS/m AND solidus melting temperature has to be above 260°C	–
7(a)-Ⅲ	Lead	Lead in high melting temperature type solders (i.e., lead-based alloys containing 85 % by weight or more lead) when used for the following applications (excludes those in the scope of exemption 24): In first level solder joints (internal or integral connections - meaning internal and external) for manufacturing components so that subsequent mounting of electronic components onto subassemblies (i.e., modules or sub-circuit boards or substrates or point to point soldering) with a secondary solder does not reflow the first level solder. This item excludes die attach applications and hermetic sealings	–
7(a)-Ⅳ	Lead	Lead in high melting temperature type solders (i.e., lead-based alloys containing 85 % by weight or more lead) when used for the following applications (excludes those in the scope of exemption 24): In second level solder joints for the attachment of components to printed circuit board or lead frames: 1. in solder balls for the attachment of ceramic ball-grid-array (BGA) 2. in high temperature plastic overmouldings (> 220 °C)	–
7(a)-Ⅴ	Lead	Lead in high melting temperature type solders (i.e., lead-based alloys containing 85 % by weight or more lead) when used for the following applications (excludes those in the scope of exemption 24): as a hermetic sealing material between: 1. a ceramic package or plug and a metal case, 2. component terminations and an internal subpart	–
7(a)-Ⅵ	Lead	Lead in high melting temperature type solders (i.e., lead-based alloys containing 85 % by weight or more lead) when used for the following applications (excludes those in the scope of exemption 24): for establishing electrical connections between lamp components in incandescent reflector lamps for infrared heating or high intensity discharge lamps or oven lamps	–
7(a)-Ⅶ	Lead	Lead in high melting temperature type solders (i.e., lead-based alloys containing 85 % by weight or more lead) when used for the following applications (excludes those in the scope of exemption 24): for audio transducers where the peak operating temperature exceeds 200°C	–
7(c)- Ⅰ	Lead	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound	–
7(c)- Ⅱ	Lead	Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher Does not apply to applications covered by point 7(c)-I and 7(c)-IV of this Annex.	–

No.	Material	Exemptions	Deadline at IDEC
7(c)-Ⅴ	Lead	Electrical and electronic components containing lead in a glass or glass matrix compound that fulfils the following functions: 1) protection and electrical insulation in glass beads of high voltage diodes and glass layers for wafer on the basis of a lead-zincborate or a lead-silica-borate glass body, 2) for hermetic sealings between ceramic, metal and/or glass parts 3) for bonding purposes in a process parameter window for < 500°C combined with a viscosity of 1013,3 dPas (so called “glass-transition temperature”) 4) used as resistance materials such as ink, with a resistivity range from 1 Ohms/square to 100 Mega Ohms/square, excluding trimmer potentiometers 5) used in chemically modified glass surfaces for Microchannel Plates (MCPs), Channel Electron Multipliers (CEMs) and Resistive Glass Products (RGPs).	—
7(c)-Ⅵ	Lead	Electrical and electronic components containing lead in a ceramic that fulfils the following functions (excluding items covered under item 7(c)-II, 7(c)-III and 7(c)-IV of this annex): 1) piezoelectric lead zirconium titanate (PZT) ceramics 2) providing ceramics with a positive temperature coefficient (PTC)	—
8(b)	Cadmium	Cadmium and its compounds in electrical contacts	2024/07/21
8(b)-Ⅱ	Cadmium	Cadmium and its compounds in electrical contacts of - circuit breakers - thermal sensing controls - thermal motor protectors (excluding hermetic thermal motor protectors) - AC switches - DC switches Only parts for RoHS category 8, 9, 11	2027/07/21
8(c)	Cadmium	Cadmium and its compounds in electrical contacts that are not covered by exemption 8(b)(II) Only parts for RoHS category 8, 9	2027/07/21
13(a)	Lead	Lead in glasses used for optical applications excluding applications falling under points 13(b), 13(b)(I), 13(b)(II), 13(b)(IV) of this Annex	—
13(b)	Cadmium and lead	Cadmium and lead in filter glasses and glasses used for reflectance standards	2024/07/21
13(b)-Ⅰ	Lead	Lead in ion coloured optical filter glass types	—
13(b)-Ⅱ	Cadmium	Cadmium in striking optical filter glass types; excluding applications falling under point 39 of this Annex	—
13(b)-Ⅳ	Cadmium	Cadmium in glazes used for reflectance standards	—
13(b)-Ⅴ	Lead	Lead compound coatings in infrared interference filters used in infrared gas analysis and mid-farinfrared spectroscopy	—
18(b)	Lead	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 ($BaSi_2O_5$:Pb)	—
18(b)-Ⅱ	Lead	Lead as activator in the fluorescent powder (1 % lead by weight or less) of discharge lamps containing phosphors such as BSP ($BaSi_2O_5$:Pb) when used in medical phototherapy equipment, incl. extracorporeal photopheresis lamps For categories 5, 8 and 9 only	—
24(a)	Lead	Lead in alloys used for soldering to through hole discoidal and/or planar array ceramic multilayer capacitors I) Not exceeding 50% by weight for applications where the components are mechanically mounted (e.g. by bolts, clips or screws) or bonded by a selective soldering / welding process and where the component will not exceed a temperature of 150ºC. II) In high melting point solders containing ≥85 % lead by weight for cases where the components are mounted using an elevated temperature process (e.g. solder reflow, welding) at a temperature of ≥150°C or where the component is rated to operate at a temperature of ≥150ºC.	—
29	Lead	Lead bound in crystal glass as defined in Annex I (Categories 1, 2, 3 and 4) of Council Directive 69/493/EEC(*)	—

No.	Material	Exemptions	Deadline at IDEC
32	Lead	Lead oxide in seal frit used for making window assemblies for Argon and Krypton laser tubes	–
34	Lead	Lead in cermet-based trimmer potentiometer elements	2027/07/21
39(a)	Cadmium	Cadmium selenide in downshifting cadmium-based semiconductor nanocrystal quantum dots for use in display lighting applications (< 0,2 µg Cd per mm^2 of display screen area)	2026/07/21
39(b)	Cadmium	Cadmium in downshifting semiconductor nanocrystal quantum dots directly deposited on LED semiconductor chips for use in display and projection applications (< 5 µg Cd per mm^2 of LED chip surface) with a maximum amount per device of 1 mg	–
EU POPs Regulation No 2019/1021 ANNEX Ⅰ (including draft)			
UV-328 (1)	UV-328	UV-328 used in triacetyl cellulose film in polarisers	2029/07/21
US TSCA			
PIP（3:1）(1)	PIP（3:1）	PIP (3:1)-containing products for use in circuit boards and wire harnesses	–
PIP（3:1）(2)	PIP（3:1）	Products or articles made of plastic recycled or reused, where no new PIP (3:1) was added.	–

Deadline at IDEC: Not applicable to products produced after the deadline.

Revision Records

Revised Date/Version	Revised contents
November 2024 Ver.3.0	Annex 1. Prohibited chemicals No. 14 Incorporate Tributyltin oxide (TBTO) into Tri-substituted organostannic compounds No. 15 Set the threshold for Short-Chain Chlorinated Paraffin (SCCPs) impurities No. 27 Revised the threshold for Hexabromocyclododecane (HBCD/HBCDD) impurities No. 30 Set the threshold for Phenol, isopropylphosphoric acid (3: 1) (PIP (3: 1)) impurities No. 35 Added Medium Chain Chlorinated paraffins (MCCP) No. 36 Added Long-chain perfluorocarboxylic acids (LC-PFCAs), their salts and related compounds Annex 4. Exemptions - Added 18(b)-Ⅱ, 24(a), 39(b), UV-328 (1), PIP(3:1)(1) and PIP(3:1)(2) - Revised the following number's deadline: 5(b), 6(a), 6(a) - Ⅰ, 6(b), 6(b)- Ⅰ, 6(b)-Ⅱ, 8(b)-Ⅱ, 8(c), 18(b)- Ⅰ, 24 - Revised the exclusions and deadline in 39(a)
December 2025 Ver.3.1	Annex 1. Prohibited chemicals No. 6 Revised the threshold for Polybrominated diphenyl ethers (PBDE) impurities No. 11 Set the specific substitutes for Polychlorinated biphenyls (PCBs) and the threshold for impurities No. 21 Revised the threshold for impurities and regulatory targets for Formaldehyde No. 32 Set the threshold for Dechlorane Plus impurities No. 33 Set the threshold for UV-328 impurities No. 34 Revised the threshold for MCCP No. 35 Revised the threshold for LC-PFCAs No. 36 Added 2,4,6-tris(tert-butyl)phenol (2,4,6-TTBP) No. 37 Added Pentachlorophenol (PCP) and its salts and esters Annex 4. Exemptions - Added 7(a)- Ⅰ～Ⅶ - Revised the following number's deadline: 6(a)- Ⅰ, 6(b)-Ⅲ, 7(a). 34, UV-328 (1)