



Carrier Japan
List of Environment-Related Substances
(Ver.1.0)

April. 2026

<Table 1>**Carrier Japan List of Environment-Related Substances Rank A: Prohibited substances**

No.	Substance category	Threshold of concentration to be prohibited in supplies to Carrier Japan	Reference laws and regulations
A01	Asbestos	Prohibition of intentional addition	EU REACH Regulation (Annex XVII), JPN Industrial Safety and Health Law (Prohibition of Manufacturing)
A02	Certain azocolourants and azodyes (only those that may release certain amines)	0.003wt% (30 ppm) for each generated certain Amine	EU REACH Regulation (Annex XVII)
A03	Cadmium and cadmium compounds	0.01wt% (100 ppm) (*1, 2)	EU RoHS Directive, EU REACH Regulation (Annex XVII), EU Packaging Directive
A04	Hexavalent chromium compounds	0.1wt% (1000 ppm) (*1, 2)	EU RoHS Directive, EU REACH Regulation (Annex XVII), EU Packaging Directive
A05	Lead and lead compounds	0.1wt% (1000 ppm) (*1, 2)	EU RoHS Directive, EU REACH Regulation (Annex XVII), EU Packaging Directive
A06	Mercury and mercury compounds	0.1wt% (1000 ppm) (*1, 2)	EU RoHS Directive, EU REACH Regulation (Annex XVII), EU Packaging Directive
A07	Ozone depleting substances (CFCs, HCFCs, HBFCs, carbon tetrachloride, etc.)	Prohibition of intentional addition	Montreal Protocol, JPN Ozone Layer Protection Law
A08	Polybrominated biphenyls (PBBs)	0.1wt% (1000 ppm) (*1)	EU RoHS Directive, EU REACH Regulation (Annex XVII)
A09	Polybrominated diphenyl ethers (PBDEs)	Prohibition of intentional addition, and 0.1wt% (1000 ppm) (*1) or 0.001wt% (10 ppm) (*10)	JPN CSCL (Class 1) (*7), U.S. TSCA PBT Rules (*8), EU RoHS Directive, EU POPs Regulation
A10	Polychlorinated biphenyls (PCBs)	Prohibition of intentional addition	JPN CSCL (Class 1) (*7), EU POPs Regulation
A11	Polychlorinated naphthalenes (more than 1 chlorine atoms) (*3)	Prohibition of intentional addition	JPN CSCL (Class 1) (*7), EU POPs Regulation

No.	Substance category	Threshold of concentration to be prohibited in supplies to Carrier Japan	Reference laws and regulations
A12	Radioactive substances	Prohibition of intentional addition	JPN Act on Prevention of Radiation Hazards due to Radioisotopes, etc. JPN Nuclear Reactor Regulation Law
A13	Certain short chain chlorinated paraffins (with a carbon chain length of between 10 and 13)	Prohibition of intentional addition, or 0.1wt% (1000 ppm)	JPN CSCL (Class 1) (*7), EU POPs Regulation
A14	Tributyl tin (TBT) and triphenyl tin (TPT)	0.1wt% (1000 ppm) of tin in the part (*4)	EU REACH Regulation (Annex XVII)
A15	Tributyl tin oxide (TBTO)	Prohibition of intentional addition, or 0.1wt% (1000 ppm) of tin in the part (*4)	JPN CSCL (Class 1) (*7), EU REACH Regulation (Annex XVII)
A16	2-(2H-1,2,3-benzotriazol-2-yl)-4,6-di-tert-butylphenol (UV-320)	Prohibition of intentional addition	JPN CSCL (Class 1) (*7)
A17	Perfluorooctane sulfonic acid (PFOS), its salts and PFOS-related compounds	[PFOS and its salt] Prohibition of intentional addition, and 0.0000025wt% (0.025 ppm) [PFOS-related compounds] Prohibition of intentional addition, and 0.0001wt% (1 ppm) for the sum of concentrations of all PFOS-related compounds	JPN CSCL (Class 1) (*7,9), EU POPs Regulation
A18	(deleted)		
A19	Polychlorinated terphenyls (PCTs)	0.005wt% (50 ppm)	EU REACH Regulation (Annex XVII)
A20	Tri-substituted organostannic compounds (excluding A14 and A15)	0.1wt% (1000 ppm) of tin in the part (*4)	EU REACH Regulation (Annex XVII)
A21	Dimethyl fumarate (DMF)	0.00001wt% (0.1 ppm)	EU REACH Regulation (Annex XVII)
A22	Diocetyl tin compounds (DOT)	0.1wt% (1000 ppm) of tin in the part (*4, 5)	EU REACH Regulation (Annex XVII)
A23	Dibutyl tin compounds (DBT)	0.1wt% (1000 ppm) of tin in the part (*4, 5)	EU REACH Regulation (Annex XVII)
A24	Hexabromocyclododecane (HBCDD)	Prohibition of intentional addition, and 0.0075wt% (75 ppm)	JPN CSCL (Class 1) (*7), EU POPs Regulation

No.	Substance category	Threshold of concentration to be prohibited in supplies to Carrier Japan	Reference laws and regulations
A25	Polycyclic aromatic hydrocarbons (PAHs) (BaP, BeP, BaA, CHR, BbFA, BjFA, BkFA, DBAhA)	0.0001wt% (1 ppm) of the plastic or rubber part (*5)	EU REACH Regulation (Annex XVII)
A26	Bis (2-ethylhexyl) phthalate (DEHP)	0.1wt% (1000 ppm) (*6)	EU RoHS Directive, EU REACH Regulation (Annex XVII)
A27	Dibutyl phthalate (DBP)	0.1wt% (1000 ppm) (*6)	EU RoHS Directive, EU REACH Regulation (Annex XVII)
A28	Butyl benzyl phthalate (BBP)	0.1wt% (1000 ppm) (*6)	EU RoHS Directive, EU REACH Regulation (Annex XVII)
A29	Diisobutyl Phthalate (DIBP)	0.1wt% (1000 ppm) (*6)	EU RoHS Directive, EU REACH Regulation (Annex XVII)
A30	Phenol, isopropylated phosphate (PIP (3:1))	Prohibition of intentional addition	U.S. TSCA PBT Rules (* 8)
A31	Perfluorooctanoic acid (PFOA), its salts and PFOA-related compounds	[PFOA and its salts] Prohibition of intentional addition, and 0.0000025wt% (0.025 ppm) [PFOA-related compounds] Prohibition of intentional addition, and 0.0001wt% (1 ppm) of any individual PFOA-related compound or a combination of PFOA-related compounds	JPN CSCL (Class 1) (*7), EU POPs Regulation
A32	(deleted)		
A33	Perfluorohexane sulfonic acid (PFHxS), its salts and PFHxS-related compounds	[PFHxS and its salts] Prohibition of intentional addition, and 0.0000025wt% (0.025 ppm) [PFHxS-related compounds] Prohibition of intentional addition, and 0.0001wt% (1 ppm) for the sum of concentrations of all PFHxS-related compounds	ORRChem Switzerland, JPN CSCL (Class 1) (*7), EU POPs Regulation
A34	Dechlorane Plus	Prohibition of intentional addition, and 0.0001 wt% (1 ppm) (*11)	JPN CSCL (Class 1) (*7), EU POPs Regulation
A35	UV-328	Prohibition of intentional addition, and 0.0001 wt% (1 ppm) (*11)	JPN CSCL (Class 1) (*7), EU POPs Regulation

No.	Substance category	Threshold of concentration to be prohibited in supplies to Carrier Japan	Reference laws and regulations
A36	Medium-chain chlorinated paraffins (MCCPs) (Limited to substances or mixtures that contain linear chloroalkanes with carbon chain lengths in the range C14–17 and chlorination levels at or exceeding 45 percent chlorine by weight)	Prohibition of intentional addition	JPN CSCL (Class 1) (*7), Stockholm Convention on Persistent Organic Pollutants
A37	Long chain perfluorocarboxylic acids (C9-21 PFCAs), their salts and related compounds	Carbon chain lengths in the range C9-C14 [C9-C14 PFCAs and its salts] 0.000025wt% (25 ppb) for the sum of C9-C14 PFCAs and their salts [C9-C14 PFCAs -related compounds] 0.000026wt% (260 ppb) for the sum of C9-C14 PFCA-related substances	EU REACH Regulation (Annex XVII)
		Carbon chain lengths in the range C9-C21 Prohibition of intentional addition	JPN CSCL (Class 1) (*7), Stockholm Convention on Persistent Organic Pollutants

"Intentional addition" means using chemical substances intentionally in forming supply items to bring

about specific properties, appearance, or quality.

- (*1) The denominator when calculating a threshold value shall be for each homogeneous material. The threshold concentration of metal compound is the mass ratio of metal element to homogeneous material. For example, in the case of cadmium and its compounds, it is the concentration of cadmium element. Only applications exempt from the EU RoHS Directive (hereinafter RoHS) shall be exempt from the prohibition (including exemption applications accepted in the future).
- (*2) For packaging materials, the threshold of concentration to be prohibited shall be 0.01wt% (100 ppm) for a total of four materials (cadmium and its compounds, hexavalent chromium compounds, lead and its compounds, and mercury and its compounds) for each homogeneous material composing the package. The threshold concentration of metal compound is the mass ratio of metal element to homogeneous material. For example, in the case of cadmium and its compounds, it is the concentration of cadmium element.
- (*3) Polychlorinated naphthalene with 1 or more chlorine atoms is prohibited for products destined for the EU that require compliance with EU POPs regulations. Polychlorinated naphthalene with 2 or more chlorine atoms is prohibited for products for other regions.
- (*4) The numerator when calculating a threshold value shall be an equivalent for metal tin (Sn), and the denominator shall be for each molded item or its component (including mixtures only for DBT). Intentional addition for biocides and industrial wastewater treatment applications is prohibited.
- (*5) The target substance groups and uses are listed in Annex XVII of the EU REACH Regulation. However, only the applications allowed for use covered by the exemptions and time limits specified in Annex XVII of the EU REACH Regulation shall be exempt from the prohibition of use.
- (*6) In the case of the scope of the EU RoHS Directive, it is prohibited to contain 0.1wt% (1000 ppm) or more of each homogeneous material for each substance. In the case of the scope of the EU REACH Regulation, the total content of phthalates is prohibited from containing 0.1wt% (1000 ppm) or more of the plasticized material. The applications that are out of scope of EU RoHS Directive or EU REACH Regulation, or are exempted from EU RoHS Directive or EU REACH Regulation shall be exempt from this regulation (including exemption applications accepted in the future).
- (*7) CSCL: Chemical Substances Control Law of Japan
- (*8) The regulations on the five persistent, bioaccumulative, and toxic (PBT) chemicals and PBT-containing products and articles in accordance with the TSCA (U.S. Toxic Substances Control Act) Section 6(h). At the moment, procurement items that are incorporated into articles whose destinations are clearly countries other than the U.S. are not subject to the regulations. In addition, among PIP (3:1), phase-in prohibitions and exemptions are excluded.
- (*9) Under the CSCL PFOS-related compounds are excluded.
- (*10) In the case of the scope of the TSCA (U.S. Toxic Substances Control Act), polybrominated diphenyl ethers (only for 10 bromine atoms) must not be present in concentrations of 0.1wt% or more. In the case of the scope of the EU RoHS Directive, polybrominated diphenyl ethers must not be present in concentrations of 0.1% by weight or more in homogeneous materials. In the case of the scope of the EU POPs regulations, polybrominated diphenyl ethers (only for 4-7, 10 bromine atoms) must not be present in total concentrations of 0.001% by weight or more.
- (*11) The EU POPs Regulation prohibits the manufacture, placing on the market and use of products that intentionally contain Dechlorane Plus and UV-328 above the threshold level from the specified date as follows. Carrier Japan has prohibited the supply of these products starting one year prior to the date of application, except where the regulation is already applicable.

Substance category	Threshold	date of application
Dechlorane Plus	0.1 wt% (1000 ppm)	15 October 2025
	0.0001wt% (1 ppm)	16 April 2028
UV-328	0.01wt% (100 ppm)	4 August 2025
	0.001wt% (10 ppm)	4 August 2027
	0.0001wt% (1 ppm)	4 August 2029

<Table 2>**Carrier Japan List of Environment-Related Substances Rank B: Managed substances**

No.	Substance category
B01	Brominated flame retardants, other than PBBs (A08) and PBDEs (A09)
B02	Nickel and its compounds (only parts in contact with human bodies)
B03	Certain phthalates, other than DEHP (A26), DBP (A27), BBP (A28), DIBP (A29) and designated phthalates (B07)
B04	Perfluorocarbons (PFCs)
B05	Hydrofluorocarbons (HFCs)
B06	Sulfur hexafluoride (SF6)
B07	Substances of Very High Concern (SVHC) under the EU REACH Regulation (*12)
B08	The U.S. TSCA PBT Rules (5 substances) (excluding DecaBDE (A09) and PIP (3:1) (A30)) (*13)
B09	Tetrabromobisphenol A (TBBPA)
B10	(deleted)
B11	(deleted)
B12	(deleted)
B13	PFAS (Per- and polyfluoroalkyl substances)
B14	(deleted)

(*12) The Substances of Very High Concern (SVHC) selected under the procedures specified in Article 59 of the EU REACH Regulation. The denominator shall be the total mass of a supply item or each component/material.

(*13) The regulations on the five persistent, bioaccumulative, and toxic (PBT) chemicals and PBT-containing products and articles in accordance with the TSCA (U.S. Toxic Substances Control Act) Section 6(h). At the moment, procurement items that are incorporated into articles whose destinations are clearly countries other than the U.S. are not subject to the regulations.

<Revision History>

Ver.	Issued	Reason and contents of revision
1.0	Apr.2026	<ol style="list-style-type: none"> 1. Change corresponding department 2. Newly issued "Carrier Japan List of Environment-Related Substances"Ver.1.0 3. Revised "Carrier Japan List of Environment-Related Substances" <ul style="list-style-type: none"> • Revised the threshold for PBDEs (A09) and added (*10) • Consolidated PFOS (A17) and PFOSF; PFOSF (A18) was deleted • Revised the substance (group) name of HBCDD (A24) • Revised the threshold wording for PFOA (A31) (value unchanged) • Revised the threshold wording for PFHxS (A33) (value unchanged) • Revised the thresholds for Dechlorane Plus (A34) and UV-328 (A35) and added (*11) • Upgraded MCCP (B10) to Rank A and added MCCP (A36) • Upgraded C15–C21 PFCAs (B14) to Rank A and consolidated with C9–C14 PFCAs (A32) and added C9–C21 PFCAs (A37)

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