Rinnai Chemical Substance Policy Ver. 4.6

24 June 2024

Rinnai Corporation

Rinnai

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Related documents for this policy is on Rinnai Website.
URL: https://www.rinnai.co.jp/corp/green_procurement/

1. Objective

The objective Rinnai Chemical Substance Policy is to achieve compliance of Rinnai-group (hereafter, Rinnai) supplied products with regulations, by informing suppliers about the chemical substance restricted due to its environment or human health effects.

In this policy, the chemical substance refers to the substance present in or released from items delivered to Rinnai (hereafter, present substance).

This policy is an appendix of Rinnai Green Procurement Standards (hereafter, E-Procurement Standards).

2. Definition of term

Term	Definition
Substance of concern	Chemical substances classified by Rinnai as Prohibited substance and Reporting substance.
Prohibited substance	Substance that shall not be present in or released from delivered items above the threshold value. Exempted use defined in this policy or any regulations may apply.
Reporting substance	Substance that shall be managed its amount in delivered items.
Threshold value	Maximum allowance for concentration of Substance of concern present in, or released from delivered items.
Concentration	Ratio of single Substance of concern present in homogeneous material.
Homogeneous material	Materials that cannot be separated mechanically.
Intentional-use	Application of the substance to delivered items or its component for manufacturing purposes.
JAMP	Joint Article Management Promotion-consortium.
chemSHERPA	Information transfer scheme for chemicals present in products. Defined by METI (Japanese Ministry) and managed by JAMP.

3. Substance of concern

Prohibited substance:

No.	Substance group	Synonym	Threshold value		Ex.[1]
1	Cadmium and its compounds	-	≦100ppm as Cd *Battery: 20ppm by its weight	*Package: Sum of heavy metals (Cd, Cr^{6+}, Pb, Hg) ≦ 100ppm by its weight	Y
2	Chromium(VI) compounds	-	≦1000ppm as Cr^{6+}		Y
3	Lead and its compounds	-	≦1000ppm as Pb		Y
4	Mercury and its compounds	-	≦1000ppm as Hg *Battery: 5ppm by its weight		Y
5	Bis(tributyltin)oxide	TBTO	No intentional-use		-
6	Tri-substituted organostannic compounds(incl. TBTO)	-	≦1000ppm as Tin		-
7	Dibutyltin compounds	DBT	≦1000ppm as Tin		-
8	Dioctyltin compounds	DOT	≦1000ppm as Tin		Y
9	Short-chain chlorinated paraffins	SCCPs	No intentional-use If not intentional, ≦1500ppm		-
10	Polychlorinated naphthalenes (1 or more chlorine atoms)	PCN	No intentional-use		-
11	Polychlorinated biphenyls	PCB	No intentional-use		-
12	Polychlorinated terphenyls	PCTs	No intentional-use If not intentional, ≦50ppm		-
13	Polybrominated biphenyls	PBB	No intentional-use If not intentional, ≦1000ppm		-
14	Polybrominated diphenyl ethers	PBDE	No intentional-use If not intentional, ≦500ppm		-
15	Formaldehyde	-	<0.005mg/m2・h (Satisfy JIS or JAS F-Four-Star standard)		Y
16	Perfluorooctane sulfonic acid and its derivatives	PFOS	No intentional-use If not intentional, ≦1000ppm *Textile/surface finishing: ≦1 μg/m2		-
17	Asbestos	-	No intentional-use		-
18	Azocolourants and azodyes releasing aromatic amines	AZO	No intentional-use If not intentional, ≦ 30ppm as aromatic amines		Y
19	Ozone depleting substances	-	No intentional-use		-
20	2-benzotriazol-2-yl-4,6-di-tert-butylphenol	-	No intentional-use		-
21	Dimethylfumarate	DMF	≦0.1ppm		-
22	Polycyclic-aromatic hydrocarbons	PAH	≦1ppm		Y
23	Hexabromocyclododecane	HBCDD	No intentional-use If not intentional, ≦100ppm		-
24	Bis(2-ethylhexyl) phthalate	DEHP	Sum of 4 phthalates ≦1000ppm		Y
25	Butyl benzyl phthalate	BBP	Sum of 4 phthalates ≦1000ppm		Y
26	Dibutyl phthalate	DBP	Sum of 4 phthalates ≦1000ppm		Y
27	Diisobutyl phthalate	DIBP	Sum of 4 phthalates ≦1000ppm		Y
28	Chlorinated phosphate ester flame retardants	-	≦1000ppm		-
29	Hydrofluorocarbons	HFC	No intentional-use		Y
30	Perfluorooctanoic acid, its salts and related compounds	PFOA	No intentional-use If not intentional, PFOA (incl. its salts):≦25 ppb Combination of one or multi. PFOA related substances:≦1000 ppb		-
31	Pentachlorothiophenol	PCTP	≦10000ppm		Y
32	C9-C14 perfluorocarboxylic acids their salts and related substances	PFCA	C9-C14 PFCAs (including salts), less than 25 ppb One or more PFCA-related substances Less than 260 ppb in combination		Y

[1] If exempted use exist. See Art. 4 Exempted use for Prohibited substance.

No.	Substance group	Synonym	Threshold value	Ex.[2]
33	Perfluorohexane sulfonic acid, its salts and related compounds	PFHxS	No intentional-use If not intentional, PFHxS(incl. its salts):≦ 25ppb Combination of one or multi. PFHxS related substances:≦1000ppb	-
34	Tris phosphate(Phenol,isopropylated phosphate)(3:1)	PIP(3:1)	No intentional-use	Y
35	Dechlorane Plus™ 1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene	DP	No intentional-use	Y
36	UV-328 (2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol)	-	No intentional-use	Y

Reporting Substance: chemSHERPA Declarable Substances

[2] If exempted use exist. See Art. 4 Exempted use for Prohibited substance.

4. Exempted use for Prohibited substance[3]

4.1. Exempted use defined by RoHS (Annex III)

Supplier shall not deliver exempted items to Rinnai six months before the due date set by the regulation.

Rinnai product falls in the category of electrical and electric equipment defined by RoHS as below.

No.	Category	Rinnai product
1	Large household appliances	Hybrid water heating system Gas water heater Built-in hob Table cooker Dishwasher Oven Gas fan heater Forced flue gas heater Gas fireplace Bathroom heater Gas clothes dryer
2	Small household appliances	-
3	IT and telecommunications equipment	-
4	Consumer equipment	Bathroom TV
5	Lighting equipment	-
6	Electrical and electronic tools	-
7	Toys, leisure and sports equipment	-
8	Medical devices	-
9	Monitoring and control instruments including industrial monitoring and control instruments	-
10	Automatic dispensers	-
11	Other EEE not covered by any of the categories above	Other product not listed above

[3] See the related documents for exempted use highly related to Rinnai.
URL: https://www.rinnai.co.jp/corp/green_procurement/

Exempted use No.	Exempted use	Scope of applicability	Due date
1(a)	Mercury in single capped (compact) fluorescent lamps not exceeding (per burner):For general lighting purposes < 30 W: 2.5 mg	-	24 February 2023
1(b)	Mercury in single capped (compact) fluorescent lamps not exceeding (per burner):For general lighting purposes ≥ 30 W and < 50 W; 3.5 mg	-	24 February 2023
1(c)	Mercury in single capped (compact) fluorescent lamps not exceeding (per burner):For general lighting purposes ≥ 50 W and < 150 W; 5 mg	-	24 February 2023
1(d)	Mercury in single capped (compact) fluorescent lamps not exceeding (per burner):For general lighting purposes ≥ 150 W; 15 mg	-	24 February 2023
1(e)	Mercury in single capped (compact) fluorescent lamps not exceeding (per burner):For general lighting purposes with circular or square structural shape and tube diameter ≤ 17 mm: 5 mg	-	24 February 2023
1(f)-I	Mercury in single capped (compact) fluorescent lamps not exceeding (per burner): For lamps designed to emit mainly light in the ultraviolet spectrum: 5 mg	-	24 February 2027
1(f)-II	Mercury in single capped (compact) fluorescent lamps not exceeding (per burner): For special purposes: 5 mg	-	24 February 2025
1(g)	Mercury in single capped (compact) fluorescent lamps not exceeding (per burner):For general lighting purposes < 30 W with a lifetime equal or above 20,000 h: 3.5 mg	-	24 August 2023
2(a)(1)	Mercury in double-capped linear fluorescent lamps for general lighting purposes not exceeding (per lamp): Tri-band phosphor with normal lifetime and a tube diameter < 9 mm (e.g. T2): 4 mg	-	24 February 2023
2(a)(2)	Mercury in double-capped linear fluorescent lamps for general lighting purposes not exceeding (per lamp): Tri-band phosphor with normal lifetime and a tube diameter ≥ 9 mm and ≤ 17 mm (e.g. T5): 3 mg	-	24 August 2023
2(a)(3)	Mercury in double-capped linear fluorescent lamps for generation lighting purposes not exceeding (per lamp):Tri-band phosphor with normal lifetime and a tube diameter > 17 mm and ≤ 28 mm (e.g. T8): 3.5mg	-	24 August 2023
2(a)(4)	Mercury in double-capped linear fluorescent lamps for general lighting purposes not exceeding (per lamp): Tri-band phosphor with normal lifetime and a tube diameter > 28 mm (e.g. T12): 3,5 mg	-	24 February 2023
2(a)(5)	Mercury in double-capped linear fluorescent lamps for general lighting purposes not exceeding (per lamp):Tri-band phosphor with long lifetime (≥ to 25 000 h): 5 mg	-	24 February 2023
2(b)(3)	Mercury in other fluorescent lamps not exceeding (per lamp):Non-linear tri-band phosphor lamps with tube diameter > 17 mm (e.g. T9): 10 mg	-	10 mg may be used per lamp from 25 February 2023 until 24 February 2025
2(b)(4) -I	Mercury in other fluorescent lamps not exceeding (per lamp): Lamps for other general lighting and special purposes (e.g. induction lamps): 15 mg	-	Under review
2(b)(4)-II	Mercury in other fluorescent lamps not exceeding (per lamp): Lamps emitting mainly light in the ultraviolet spectrum: 15 mg	-	24 February 2027
2(b)(4)-III	Mercury in other fluorescent lamps not exceeding (per lamp): Emergency lamps: 15 mg	-	24 February 2027
3(a)	Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for special purposes used in EEE placed on the market before 24 February 2022 not exceeding (per lamp): Short length (≤ 500 mm): 3,5 mg	-	24 February 2025
3(b)	Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for special purposes used in EEE placed on the market before 24 February 2022 not exceeding (per lamp): Medium length (> 500 mm and ≤ 1,500 mm): 5 mg	-	24 February 2025
3(c)	Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for special purposes used in EEE placed on the market before 24 February 2022 not exceeding (per lamp):Long length (> 1,500 mm): 13 mg	-	24 February 2025
4(a)	Mercury in other low pressure discharge lamps (per lamp): 15 mg	-	24 February 2023

Exempted use No.	Exempted use	Scope of applicability	Due date
4(a)-I	Mercury in low pressure non-phosphor coated discharge lamps, where the application requires the main range of the lamp-spectral output to be in the ultraviolet spectrum: up to 15 mg mercury may be used per lamp	-	24 February 2027
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 > 80: P ≤ 105 W: 16 mg may be used per burner	-	24 February 2027
4(b)-I	Mercury in High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner) in lamps with improved colour rendering index Ra > 60: P ≤ 155 W: 30 mg may be used per burner	-	24 February 2023
4(b)-II	Mercury in High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner) in lamps with improved colour rendering index Ra > 60: 155 W < P ≤ 405 W: 40 mg may be used per burner	-	24 February 2023
4(b)-III	Mercury in High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner) in lamps with improved colour rendering index Ra > 60: P > 405 W: 40 mg may be used per burner	-	24 February 2023
4(c)-I	Mercury in other High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner): P ≤ 155 W:20mg	-	24 February 2027
4(c)-II	Mercury in other High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner): 155 W < P ≤ 405 W: 25 mg	-	24 February 2027
4(c)-III	Mercury in other High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner): P> 405 W: 25 mg	-	24 February 2027
4(e)	Mercury in metal halide lamps (MH)	-	24 February 2027
4(f)-I	Mercury in other discharge lamps for special purposes not specifically mentioned in this Annex	-	Under review
4(f) -II	Mercury in high pressure mercury vapour lamps used in projectors where an output ≥2000 lumen ANSI is required	-	24 February 2027
4(f) -III	Mercury in high pressure sodium vapour lamps used for horticulture lighting	-	24 February 2027
4(f) -IV	Mercury in lamps emitting light in the ultraviolet spectrum	-	24 February 2027
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.	-	31 December 2018
5(a)	Lead in glass of cathode ray tubes	-	21 July 2024
5(b)	Lead in glass of fluorescent tubes not exceeding 0,2 % by weight	-	Under review
6(a)	Lead as an alloying element in steel for machining purposes and in galvanised steel containing up to 0,35 % lead by weight	categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments	21 July 2021
		category 8 in vitro diagnostic medical devices	21 July 2023
		category 9 industrial monitoring and control instruments, and for category 11	21 July 2024
6(a)-I	Lead as an alloying element in steel for machining purposes containing up to 0,35 % lead by weight and in batch hot dip galvanised steel components containing up to 0,2 % lead by weight	categories 1-7 and 10	21 July 2021
6(b)	Lead as an alloying element in aluminium containing up to 0,4 % lead by weight	categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments	21 July 2021
		category 8 in vitro diagnostic medical devices	21 July 2023
		category 9 industrial monitoring and control instruments, and for category 11	21 July 2024

Exempted use No.	Exempted use	Scope of applicability	Due date
6(b)-I	Lead as an alloying element in aluminium containing up to 0,4 % lead by weight, provided it stems from lead-bearing aluminium scrap recycling	categories 1-7 and 10	21 July 2021
6(b)-II	Lead as an alloying element in aluminium for machining purposes with a lead content up to 0,4 % by weight	categories 1-7 and 10	21 July 2021
6(c)	Copper alloy containing up to 4 % lead by weight	categories 1-7 and 10/categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments	21 July 2021
		category 8 in vitro diagnostic medical devices	21 July 2023
		category 9 industrial monitoring and control instruments, and for category 11	21 July 2024
7(a)	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)	categories 1-7 and 10 (except applications covered by point 24)/categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments	21 July 2021
		category 8 in vitro diagnostic medical devices	21 July 2023
		category 9 industrial monitoring and control instruments, and for category 11	21 July 2024
7(b)	Lead in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signalling, transmission, and network management for telecommunications	-	21 July 2016
7(c)-I	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound	categories 1-7 and 10 (except applications covered under point 34)/categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments	21 July 2021
		category 8 in vitro diagnostic medical devices	21 July 2023
		category 9 industrial monitoring and control instruments, and for category 11	21 July 2024
7(c)-II	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/categories 1-7 and 10/categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments	21 July 2021
		category 8 in vitro diagnostic medical devices	21 July 2023
		category 9 industrial monitoring and control instruments, and for category 11	21 July 2024
7(c)-III	Lead in dielectric ceramic in capacitors for a rated voltage of less than 125 V AC or 250 V DC	Spare parts for EEE placed on the market before 1 January 2013	1 January 2013
7(c)-IV	Lead in PZT based dielectric ceramic materials for capacitors which are part of integrated circuits or discrete semiconductors	categories 1-7 and 10/categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments	21 July 2021
		category 8 in vitro diagnostic medical devices	21 July 2023
		category 9 industrial monitoring and control instruments, and for category 11	21 July 2024
8(a)	Cadmium and its compounds in one shot pellet type thermal cut-offs	Spare parts for EEE placed on the market before 1 January 2012	1 January 2012
8(b)	Cadmium and its compounds in electrical contacts	categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments	21 July 2021
		category 8 in vitro diagnostic medical devices	21 July 2023

Exempted use No.	Exempted use	Scope of applicability	Due date
		category 9 industrial monitoring and control instruments, and for category 11	21 July 2024
8(b)-I	Cadmium and its compounds in electrical contacts used in: −circuit breakers, −thermal sensing controls, − thermal motor protectors (excluding hermetic thermal motor protectors), −AC switches rated at: −6 A and more at 250 V AC and more, or −12 A and more at 125 V AC and more, −DC switches rated at 20 A and more at 18 V DC and more, and −switches for use at voltage supply frequency ≥ 200 Hz	categories 1 to 7 and 10	21 July 2021
9	Hexavalent chromium as an anticorrosion agent of the carbon steel cooling system in absorption refrigerators up to 0,75 % by weight in the cooling solution	categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments	21 July 2021
		category 8 in vitro diagnostic medical devices	21 July 2023
		category 9 industrial monitoring and control instruments, and for category 11	21 July 2024
9(b)	Lead in bearing shells and bushes for refrigerant-containing compressors for heating, ventilation, air conditioning and refrigeration (HVACR) applications	category 8 in vitro diagnostic medical devices	21 July 2023
		category 9 industrial monitoring and control instruments and for category 11	21 July 2024
		other subcategories of categories 8 and 9	21 July 2021
9(b)-(I)	Lead in bearing shells and bushes for refrigerant-containing hermetic scroll compressors with a stated electrical power input equal or below 9 kW for heating, ventilation, air conditioning and refrigeration (HVACR) applications	category 1	21 July 2019
11(a)	Lead used in C-press compliant pin connector systems	Spare parts for EEE placed on the market before 24 September 2010	24September 2010
11(b)	Lead used in other than C-press compliant pin connector systems	Spare parts for EEE placed on the market before 1 January 2013	1 January 2013
12	Lead as a coating material for the thermal conduction module C-ring	Spare parts for EEE placed on the market before 24 September 2010	24September 2010
13(a)	Lead in white glasses used for optical applications	category 8 in vitro diagnostic medical devices	21 July 2023
		category 9 industrial monitoring and control instruments and for category 11	21 July 2024
		all other categories and subcategories	21 July 2021
13(b)	Cadmium and lead in filter glasses and glasses used for reflectance standards	category 8 in vitro diagnostic medical devices	21 July 2023
		category 9 industrial monitoring and control instruments and for category 11	21 July 2024
		other subcategories of categories 8 and 9	21 July 2021
13(b)-(I)	Lead in ion coloured optical filter glass types	categories 1 to 7 and 10	21 July 2021
13(b)-(II)	Cadmium in striking optical filter glass types; excluding applications falling under point 39 of this Annex	categories 1 to 7 and 10	21 July 2021
13(b)-(III)	Cadmium and lead in glazes used for reflectance standards	categories 1 to 7 and 10	21 July 2021
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	Spare parts for EEE placed on the market before 1 January 2011	1 January 2011

Exempted use No.	Exempted use	Scope of applicability	Due date
15	Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages	categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments	21 July 2021
		category 8 in vitro diagnostic medical devices	21 July 2023
		category 9 industrial monitoring and control instruments, and for category 11	21 July 2024
15(a)	Lead in solders to complete a viable electrical connection between the semiconductor die and carrier within integrated circuit flip chip packages where at least one of the following criteria applies: —a semiconductor technology node of 90 nm or larger; — a single die of 300 mm2 or larger in any semiconductor technology node; —stacked die packages with die of 300 mm2 or larger, or silicon interposers of 300 mm2 or larger.	categories 1 to 7 and 10	21 July 2021
16	Lead in linear incandescent lamps with silicate coated tubes	-	1 September 2013
17	Lead halide as radiant agent in high intensity discharge (HID) lamps used for professional reprography applications	-	21 July 2024
18(a)	Lead as activator in the fluorescent powder (1 % lead by weight or less) of discharge lamps when used as speciality lamps for diazoprinting reprography, lithography, insect traps, photochemical and curing processes containing phosphors such as SMS ((Sr,Ba)2MgSi2O7:Pb)	-	1 January 2011
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)	categories 1-7 and 10/categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments	21 July 2021
		category 8 in vitro diagnostic medical devices	21 July 2023
		category 9 industrial monitoring and control instruments, and for category 11	21 July 2024
18(b)-I	Lead as activator in the fluorescent powder (1 % lead by weight or less) of discharge lamps containing phosphors such as BSP (BaSi2O5:Pb) when used in medical phototherapy equipment	categories 5 and 8, excluding applications covered by entry 34 of Annex IV	Applies to categories 5 and 8, excluding applications covered by entry 34 of Annex IV, and expires on 21 July 2021.
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)	-	1 June 2011
20	Lead oxide in glass used for bonding front and rear substrates of flat fluorescent lamps used for Liquid Crystal Displays (LCDs)	-	1 June 2011
21	Lead and cadmium in printing inks for the application of enamels on glasses, such as borosilicate and soda lime glasses	categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments	21 July 2021
		category 8 in vitro diagnostic medical device	21 July 2023
		category 9 industrial monitoring and control instruments, and for category 11.	21 July 2024
21(a)	Cadmium when used in colour printed glass to provide filtering functions, used as a component in lighting applications installed in displays and control panels of EEE	21 July 2021 for categories 1 to 7 and 10 except applications covered by entry 21(b) or entry 39	21 July 2021
21(b)	Cadmium in printing inks for the application of enamels on glasses, such as borosilicate and soda lime glasses	21 July 2021 for categories 1 to 7 and 10 except applications covered by entry 21(a) or entry 39	21 July 2021
21(c)	Lead in printing inks for the application of enamels on other than borosilicate glasses	categories 1 to 7 and 10	21 July 2021
23	Lead in finishes of fine pitch components other than connectors with a pitch of 0,65 mm and less	Spare parts for EEE placed on the market before 24 September 2010	24 September 2010

Exempted use No.	Exempted use	Scope of applicability	Due date
24	Lead in solders for the soldering to machined through hole discoidal and planar array ceramic multilayer capacitors	categories 1-7 and 10/categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments	21 July 2021
		category 8 in vitro diagnostic medical devices	21 July 2023
		category 9 industrial monitoring and control instruments, and for category 11	21 July 2024
25	Lead oxide in surface conduction electron emitter displays (SED) used in structural elements, notably in the seal frit and frit ring	-	21 July 2016
26	Lead oxide in the glass envelope of black light blue lamps	-	1 June 2011
29	Lead bound in crystal glass as defined in Annex I (Categories 1, 2, 3 and 4) of Council Directive 69/493/EEC (*1)(*1) Council Directive 69/493/EEC of 15 December 1969 on the approximation of the laws of the Member States relating to crystal glass (OJ L 326, 29.12.1969, p. 36).	categories 1-7 and 10/categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments	21 July 2021
		category 8 in vitro diagnostic medical device	21 July 2023
		category 9 industrial monitoring and control instruments, and for category 11	21 July 2024
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	-	21 July 2024
31	Lead in soldering materials in mercury free flat fluorescent lamps (which, e.g. are used for liquid crystal displays, design or industrial lighting)	-	21 July 2024
32	Lead oxide in seal frit used for making window assemblies for Argon and Krypton laser tubes	categories 1-7 and 10/categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments	21 July 2021
		category 8 in vitro diagnostic medical devices	21 July 2023
		category 9 industrial monitoring and control instruments, and for category 11	21 July 2024
33	Lead in solders for the soldering of thin copper wires of 100 µm diameter and less in power transformers	-	21 July 2016
34	Lead in cermet-based trimmer potentiometer elements	categories 1-7 and 10/categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments,	21 July 2021
		category 8 in vitro diagnostic medical devices	21 July 2023
		category 9 industrial monitoring and control instruments, and for category 11	21 July 2024
37	Lead in the plating layer of high voltage diodes on the basis of a zinc borate glass body	categories 1-7 and 10/categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments	21 July 2021
		category 8 in vitro diagnostic medical devices	21 July 2023
		category 9 industrial monitoring and control instruments, and for category 11	21 July 2024
38	Cadmium and cadmium oxide in thick film pastes used on aluminium bonded beryllium oxide	-	21 July 2024
39	Cadmium in colour converting II-VI LEDs (< 10 µg Cd per mm2 of light-emitting area) for use in solid state illumination or display systems	-	1 July 2014
39(a)	Cadmium selenide in downshifting cadmium-based semiconductor nanocrystal quantum dots for use in display lighting applications (< 0,2 µg Cd per mm2 of display screen area)	-	Under review
40	Cadmium in photoresistors for analogue optocouplers applied in professional audio equipment	-	31 December 2013

Exempted use No.	Exempted use	Scope of applicability	Due date
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	categories 1 to 7, 10 and 11	31 March 2022
		categories 8 and 9 other than in vitro diagnostic medical devices and industrial monitoring and control instruments	21 July 2021
		category 8 in vitro diagnostic medical devices	21 July 2023
		category 9 industrial monitoring and control instruments	21 July 2024
42	Lead in bearings and bushes of diesel or gaseous fuel powered internal combustion engines applied in non-road professional use equipment: —with engine total displacement ≥ 15 litres; or —with engine total displacement < 15 litres and the engine is designed to operate in applications where the time between signal to start and full load is required to be less than 10 seconds; or regular maintenance is typically performed in a harsh and dirty outdoor environment, such as mining, construction, and agriculture applications	category 11, excluding applications covered by entry 6(c)	21 July 2024
43	Bis(2-ethylhexyl) phthalate in rubber components in engine systems, designed for use in equipment that is not intended solely for consumer use and provided that no plasticised material comes into contact with human mucous membranes or into prolonged contact with human skin and the concentration value of bis(2-ethylhexyl) phthalate does not exceed: (a) 30 % by weight of the rubber for (i) gasket coatings; (ii) solid-rubber gaskets; or (iii) rubber components included in assemblies of at least three components using electrical, mechanical or hydraulic energy to do work, and attached to the engine. (b) 10 % by weight of the rubber for rubber-containing components not referred to in point (a). For the purposes of this entry, “ prolonged contact with human skin ” means continuous contact of more than 10 minutes duration or intermittent contact over a period of 30 minutes, per day.	category 11	21 July 2024
44	Lead in solder of sensors, actuators, and engine control units of combustion engines within the scope of Regulation (EU) 2016/1628 of the European Parliament and of the Council, installed in equipment used at fixed positions while in operation which is designed for professionals, but also used by non-professional users	category 11	21 July 2024
45	lead diazide, lead styphnate, lead dipicramate, orange lead (lead tetroxide), lead dioxide in electric and electronic initiators of explosives for civil (professional) use and barium chromate in long time pyrotechnic delay charges of electric initiators of explosives for civil (professional) use	category 11	20 april 2026

4.2. Other Exempted use

4.2.1. Dioctyltin compounds (DOT) (8)

Exempted use
Other than the following purposes: Textile articles intended to come into contact with the skin, gloves, footwear or part of footwear intended to come into contact with the skin, wall and floor coverings, childcare articles, female hygiene products, nappies, two-component room temperature vulcanisation moulding kits (RTV-2 moulding kits)

4.2.2. Formaldehyde (15)

Exempted use
Other than the following purposes: 1. Building material Chipboard, wooden flooring, structural panel, bonded wood, laminated veneer lumber, medium density fiberboard, particle board, other wooden materials, urea formaldehyde resin plate, wallpaper, adhesive, lagging material, buffer material, insulating material 2. Building material applied during construction Paint, coating, adhesive

4.2.3. Azocolourants and Azodyes releasing aromatic amines (AZO) (18)

Exempted use
Azocolourants and Azodyes releasing the aromatic amines, that is used in other than textile and leather articles which may come into direct and prolonged contact with the human skin or oral cavity

4.2.4. Polycyclic aromatic hydrocarbons (PAH) (22)

Exempted use
PAHs used in other than rubber or plastic components that come into direct and prolonged or short-term repetitive contact with the human skin or the oral cavity

4.2.5. Phthalates (24, 25, 26, 27)

Exempted use
Phthalates used in components designed by Rinnai before July 2018
Phthalates used in products covered by RoHS directive and concentration of the single substance is below or equal to 1000ppm

4.2.6. Hydrofluorocarbons (HFC) (29)

Exempted use
HFCs used in water heating or air-conditioning appliance

4.2.7. Pentachlorothiophenol（PCTP）(31)

Exempted use
PCTP used in specific parts accepted by Rinnai

4.2.8. C9-C14 Perfluorocarboxylic acids ,their salts and related substances（PFCA）(32)

Exempted use
PFCAs used in specific parts accepted by Rinnai

4.2.9. Tris phosphate(Phenol,isopropylated phosphate) (PIP3:1) (34)

Exempted use
PIP(3:1) used in specific parts accepted by Rinnai

4.2.10. DechloranPlus"™1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene (DP)(35)

Exempted use
PIP(3:1) used in specific parts accepted by Rinnai ※Once a substance is designated as a Class 1 Specified Chemical Substance under the Act on the Examination of Chemical Substances and Regulation of Manufacturing, etc., this exempted use becomes invalid.

4.2.11. UV-328 (2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol) (36)

Exempted use
PIP(3:1) used in specific parts accepted by Rinnai ※Once a substance is designated as a Class 1 Specified Chemical Substance under the Act on the Examination of Chemical Substances and Regulation of Manufacturing, etc., this exempted use becomes invalid.

5. Management and report of substance information

5.1. Substance information

Supplier shall properly manage substance present in delivered items (hereafter, substance information), except for parts provided by Rinnai.

Substance information shall be managed in accordance with chemSHERPA as defined by JAMP.

Mandatory item for general information of chemSHERPA:

Input field	Mandatory item
Remarks	Composition and Compliance information
Area	IEC62474

5.2. Evidence

Supplier collects any document specifying substance information as evidence, if needed. Examples as below.

1. chemSHERPA-AI (Information for articles)
2. chemSHERPA-CI (Information for chemicals)
3. Declaration of conformity
4. Analysis or test result of chemical composition
5. Safety Data Sheet (SDS)
6. Material certification (e.g. Mill sheet)
7. Other document specifying substance information

5.3. Identification of substance information

Supplier manages substance information in a rational manner. Examples as below.

1. Measure using internal or external analyzing devices
2. Collect information from suppliers
3. Determine by material specification or study report at own risk

5.4. Report to Rinnai

Supplier shall reports substance information to Rinnai by following methods.

1. Submit chemSHERPA through Rinnai Group Supplier Portal, R-LINE
   URL: https://r-line.rinnai.co.jp/

2. Other method requested by Rinnai

5.5. Report of non-conformity

Supplier shall notify Rinnai the non-conformity of the requirements set out in this policy. Notification shall be sent by Supplier to Rinnai's buyer and mutually discuss the implementation of corrective actions.

5.6. Modification of substance information

Supplier shall notify Rinnai in advance of substance information change.
Notification shall be sent by Supplier to Rinnai's buyer and Environment division.

6. Referenced regulation

6.1. Prohibited substance

Region	No.	Name of regulation (relevant section or substance list)	Acronym
JP	1	Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (Class I Specified Chemical Substance)	JP Chem
	2	Industrial Safety and Health Act (Article 55: Prohibition of Manufacturing, etc.)	JP Labor
	3	Building Standards Act (Article 28-2: Measure for asbestos)	JP Building
	4	Classification of released amount and speed of formaldehyde, defined by JP industrial standards (JIS) or JP agricultural standards (JAS)	JIS/JAS-F
	5	Act on the Promotion of Effective Utilization of Resources (Requirements for management of the chemical substance present in "Specified Reuse-Promoted Product" as defined in Article 2-10)	JP Resource
	6	Act on the Protection of the Ozone Layer Through the Control of Specified Substances and Other Measures (Specified Substances, alternative substances)	JP Ozone
EU	7	Directive 2011/65/EU (Annex II)	RoHS Directive
	8	Directive 94/62/EC (Article 11: Concentration levels of heavy metals present in packaging)	Packaging Directive
	9	Regulation (EC) No 1907/2006 (Annex XVII)	REACH Regulation
	10	Regulation (EC) 2019/1021 (Annex I)	POPs Regulation
	11	Directive 2006/66/EC (Article 4: Prohibitions)	Battery Directive
US	12	Specific states, Toxic in packaging regulations	US Packaging
	13	Specific states, Chlorinated phosphate ester flame Retardants regulations	US C-Flame Retardants
	14	Specific states, Brominated flame retardants regulations	US B-Flame Retardants
	15	State of California, Health and Safety Code (HSC) (Section 116875 to 116890: ARTICLE 4. Lead Materials)	California Lead
	16	Toxic Substances Control Act	TSCA
TW	17	Commodity Inspection Act (Marking of presence, Section 5, CNS 15663)	TW RoHS
CN	18	Management Methods for the Restriction of the Use of Hazardous Substances in Electrical and Electronic Products (Art. 3.5 Toxic substance)	CN RoHS
Other	19	Rinnai-Customer defined substances	-

Revision history

1st edition	30 August 2004	Version 1
Revised	20 April 2011	Version 2
	2 July 2012	Version 3.0
	1 April 2018	Version 4
	29 July 2019	Version 4.1
	20 January 2021	Version 4.2
	13 April 2021	Version 4.3
	1 July 2022	Version 4.4
	15 September 2023	Version 4.5
	24 June 2024	Version 4.6

Main changes in version 4.6

The following revisions are made in accordance with revisions to related laws and regulations.

3. Addition of prohibited substances and revision of appearance

Version 4.5	Version 4.6 (Updated)
New additions	Tris phosphate(Phenol,isopropylated phosphate)(3:1)
	Dechlorane Plus"™ 1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene
	UV-328 (2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol)

※Other typographical corrections

4.1. Exempted use defined by RoHS (Annex III)

Exempted use deadline update

4.2. Addition and deletion of other excluded uses

No	Substance group	Version 4.5	Version 4.6(Updated)
33	perfluorohexane-1-sulphonic acids their salts and related substances	PFHxS used in specific parts accepted by Rinnai	delete
34	Tris phosphate(Phenol,isopropylated phosphate)(3:1)	New additions	PIP(3:1) used in specific parts accepted by Rinnai
35	Dechlorane Plus"™ 1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene	New additions	Dechlorane Plus used in specific parts accepted by Rinnai
36	UV-328 (2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol)	New additions	UV-328 used in specific parts accepted by Rinnai

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