



EU RoHS EXEMPTION LIST

The European Union's Restriction of Hazardous Substances (RoHS) Directive currently restricts the use of six substances at the homogeneous level within a broad range of electrical and electronic products, which are grouped into 11 categories.

These substances and acceptable thresholds are:

- Lead (Pb) \leq 0.1 percent
- Mercury (Hg) \leq 0.1 percent
- Cadmium (Cd) \leq 0.01 percent
- Hexavalent chromium (chromium VI, Cr+6) \leq 0.1 percent
- Polybrominated biphenyls (PBB) \leq 0.1 percent
- Polybrominated diphenyl ethers (PBDE) \leq 0.1 percent

When the European Union implemented RoHS, they understood the industry was not ready for a full restriction or reduction of these substances without any caveats. As part of the RoHS implementation, 36 exemptions were created that defined specific permitted uses for these substances. Each exemption was assigned an expiry date by which time these specific use cases for restricted substances would no longer be permitted. Over time, this list has grown to include approximately 150 exemptions. These have been listed below for reference.

The table included below is current as of **July 13, 2018**. Where indicated, some exemption extensions have been approved and will go into effect when the previous exemption expires. Additional exemption renewals and additions are expected in the near future. Exemptions bearing the status "exemption recommended" will remain active until an exemption decision is made.

EU RoHS Categories:

Category 1	Large household appliances: refrigerators, washers, stoves, air conditioners
Category 2	Small household appliances: vacuum cleaners, hair dryers, coffee makers, irons
Category 3	Computing and communications equipment: computers, printers, copiers, phones
Category 4	Consumer electronics: TVs, DVD players, stereos, video cameras
Category 5	Lighting: lamps, lighting fixtures, light bulbs
Category 6	Power tools: drills, saws, nail guns, sprayers, lathes, trimmers, blowers
Category 7	Toys and sports equipment: videogames, electric trains, treadmills
Category 8	Medical devices and equipment
Category 9	Control and monitoring equipment
Category 10	Automatic dispensers: vending machines, ATM machines
Category 11	All other electrical and electronic equipment

Status definitions:

- **Extension recommended** - Exemption has been recommended, but EC has not provided any draft regulation about the exemption. Current exemption still active.
- **Exemption requested** - Exemption not part of initial Oeko recommendations. Exemption still active.
- **Active** - Exemption still active until expiration date(s) noted.
- **New - Active** - New exemption created as part of renewal. Exemption active as of implementation date (so far, July 6).
- **Decided - Not yet active** - EC has provided draft regulation for the exemption. Current exemption is still active.
- **Expired** - Exemption is no longer valid, cannot be used for the listed categories.

EU RoHS Exemption List:

EXEMPTION NUMBER	DESCRIPTION	ANNEX	EXPIRY DATE	CURRENT STATUS
1	Mercury in single-capped (compact) fluorescent lamps not exceeding (per burner):	III	–	General exemption, broken out further
1(a)	For general lighting purposes < 30 W: 2.5 mg	III	TBD for 1 to 7 and 10 July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Extension recommended
1(b)	For general lighting purposes ≥ 30 W and < 50 W: 3.5 mg	III	TBD for 1 to 7 and 10 July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Extension recommended
1(c)	For general lighting purposes ≥ 50 W and < 150 W: 5 mg	III	TBD for 1 to 7 and 10 July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Extension recommended
1(d)	For general lighting purposes ≥ 150 W: 15 mg	III	TBD for 1 to 7 and 10 July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Extension recommended

EXEMPTION NUMBER	DESCRIPTION	ANNEX	EXPIRY DATE	CURRENT STATUS
1(e)	For general lighting purposes with circular or square structural shape and tube diameter ≤ 17 mm: 7 mg	III	TBD for 1 to 7 and 10 July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Extension recommended
1(f)	For special purposes: 5 mg	III	TBD for 1 to 7 and 10 July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Extension recommended
1(g)	For general lighting purposes < 30 W with a lifetime equal or above 20,000 h: 3.5 mg	III	Dec. 31, 2017 for 1 to 7 and 10	Extension requested
2(a)	Mercury in double-capped linear fluorescent lamps for general lighting purposes not exceeding (per lamp):	III	–	General exemption, broken out further
2(a)(1)	Tri-band phosphor with normal lifetime and a tube diameter < 9 mm (e.g. T2): 4 mg	III	TBD for 1 to 7 and 10 July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Extension recommended

EXEMPTION NUMBER	DESCRIPTION	ANNEX	EXPIRY DATE	CURRENT STATUS
2(a)(2)	Tri-band phosphor with normal lifetime and a tube diameter ≥ 9 mm and ≤ 17 mm (e.g. T5): 3 mg	III	TBD for 1 to 7 and 10 July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Extension recommended
2(a)(3)	Tri-band phosphor with normal lifetime and a tube diameter > 17 mm and ≤ 28 mm (e.g. T8): 3.5 mg	III	TBD for 1 to 7 and 10 July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Extension recommended
2(a)(4)	Tri-band phosphor with normal lifetime and a tube diameter > 28 mm (e.g. T12): 3.5 mg	III	TBD for 1 to 7 and 10 July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Extension recommended
2(a)(5)	Tri-band phosphor with long lifetime ($\geq 25,000$ h): 5 mg	III	TBD for 1 to 7 and 10 July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Extension recommended
2(b)	Mercury in other fluorescent lamps not exceeding (per lamp):	III	–	General exemption, broken out further

EXEMPTION NUMBER	DESCRIPTION	ANNEX	EXPIRY DATE	CURRENT STATUS
2(b)(1)	Linear halophosphate lamps with tube > 28 mm (e.g. T10 and T12): 10 mg	III	April 13, 2012 for all	Expired
2(b)(2)	Non-linear halophosphate lamps (all diameters): 15 mg	III	April 13, 2016 for all	Expired
2(b)(3)	Non-linear tri-band phosphor lamps with tube diameter > 17 mm (e.g. T9): 15 mg	III	TBD for 1 to 7 and 10 July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Extension recommended
2(b)(4)	Lamps for other general lighting and special purposes (e.g. induction lamps): 15 mg	III	TBD for 1 to 7 and 10 July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Extension recommended
3	Mercury in cold cathode fluorescent lamps (CCFL) and external electrode fluorescent lamps (EEFL) for special purposes not exceeding (per lamp):	III	–	General exemption, broken out further
3(a)	Short length (\leq 500 mm): 3.5 mg	III	TBD for 1 to 7 and 10 July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Extension recommended

EXEMPTION NUMBER	DESCRIPTION	ANNEX	EXPIRY DATE	CURRENT STATUS
3(b)	Medium length (> 500 mm and ≤ 1,500 mm): 5 mg	III	TBD for 1 to 7 and 10 July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Extension recommended
3(c)	Long length (> 1,500 mm): 13 mg	III	TBD for 1 to 7 and 10 July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Extension recommended
4(a)	Mercury in other low pressure discharge lamps (per lamp): 15 mg	III	TBD for 1 to 7 and 10 July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Extension recommended
4(b)	Mercury in high pressure sodium (vapor) lamps for general lighting purposes not exceeding (per burner) in lamps with improved color rendering index Ra > 60:	III	–	General exemption, broken out further
4(b)-I	P ≤ 155 W: 30 mg	III	TBD for 1 to 7 and 10	Extension recommended
4(b)-II	155 W < P ≤ 405 W: 40 mg	III	TBD for 1 to 7 and 10	Extension recommended
4(b)-III	P > 405 W: 40 mg	III	TBD for 1 to 7 and 10	Extension recommended

EXEMPTION NUMBER	DESCRIPTION	ANNEX	EXPIRY DATE	CURRENT STATUS
4(c)	Mercury in other high pressure sodium (vapor) lamps for general lighting purposes not exceeding (per burner):	III	–	General exemption, broken out further
4(c)-I	P ≤ 155 W: 25 mg	III	TBD for 1 to 7 and 10	Extension recommended
4(c)-II	155 W < P ≤ 405 W: 30 mg	III	TBD for 1 to 7 and 10	Extension recommended
4(c)-III	P > 405 W: 40 mg	III	TBD for 1 to 7 and 10	Extension recommended
4(d)	Mercury in high pressure mercury (vapor) lamps (HPMV)	III	April 15, 2015 for all	Expired
4(e)	Mercury in metal halide lamps (MH)	III	TBD for 1 to 7 and 10 July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Extension recommended
4(f)	Mercury in other discharge lamps for special purposes not specifically mentioned in this annex	III	TBD for 1 to 7 and 10 July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Extension recommended

EXEMPTION NUMBER	DESCRIPTION	ANNEX	EXPIRY DATE	CURRENT STATUS
4(g)	<p>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:</p> <p>(a) 20 mg per electrode pair plus 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</p> <p>(b) 15 mg per electrode pair plus 0.24 mg per tube length in cm, but not more than 80 mg, for all other indoor applications</p>	III	Dec. 31, 2018 for 1 to 7 and 10	Will expire
5(a)	Lead in glass of cathode ray tubes	III	July 21, 2016 for 1 to 7 and 10	Expired
5(a)	Lead in glass of cathode ray tubes	III	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Active
5(b)	Lead in glass of fluorescent tubes not exceeding 0.2 percent by weight	III	TBD for 1 to 7 and 10 July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Extension recommended
6(a)*	Lead as an alloying element in steel for machining purposes and in galvanized steel containing up to 0.35 percent lead by weight	III	July 1, 2019	Replaced

EXEMPTION NUMBER	DESCRIPTION	ANNEX	EXPIRY DATE	CURRENT STATUS
6(a)**	Lead as an alloying element in steel for machining purposes and in galvanized steel containing up to 0.35 percent lead by weight	III	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Decided, not yet active
6(a)-I**	Lead as an alloying element in steel for machining purposes containing up to 0.35 percent lead by weight and in batch hot dip galvanized steel components containing up to 0.2 percent lead by weight	III	July 21, 2021 1 to 7 and 10	New, not yet active
6(b)*	Lead as an alloying element in aluminum containing up to 0.4 percent lead by weight	III	July 1, 2019	Replaced
6(b)**	Lead as an alloying element in aluminum containing up to 0.4 percent lead by weight	III	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Decided, not yet active
6(b)-I**	Lead as an alloying element in aluminum containing up to 0.4 percent lead by weight, provided it stems from lead-bearing aluminum scrap recycling	III	July 21, 2021 1 to 7 and 10	New, not yet active
6(b)-II**	Lead as an alloying element in aluminum for machining purposes with a lead content up to 0.4 percent by weight	III	May 18, 2021 1 to 7 and 10	New, not yet active
6(c)*	Copper alloy containing up to 4 percent lead by weight	III	July 1, 2019	Replaced

EXEMPTION NUMBER	DESCRIPTION	ANNEX	EXPIRY DATE	CURRENT STATUS
6(c)**	Copper alloy containing up to 4 percent lead by weight	III	July 21, 2021 for all July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Decided, not yet active
7(a)*	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 percent by weight or more lead)	III	July 1, 2019	Replaced
7(a)**	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 percent by weight or more lead)	III	July 21, 2021 1 to 7 and 10 (except applications covered by exemption 24 of this annex) July 21, 2021 8 and 9 July 21, 2023 8 in vitro July 21, 2024 9 industrial and 11	Decided, not yet active
7(b)	Lead in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signalling, transmission, and network management for telecommunications	III	July 21, 2016 for 1 to 7 and 10	Expired
7(b)	Lead in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signalling, transmission, and network management for telecommunications	III	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Active

EXEMPTION NUMBER	DESCRIPTION	ANNEX	EXPIRY DATE	CURRENT STATUS
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	III	July 1, 2019	Replaced
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	III	July 21, 2021 1 to 7 and 10 (except exemption 34) July 21, 2021 8 and 9 July 21, 2023 8 in vitro July 21, 2024 9 industrial and 11	Decided, not yet active
7(c)-II	Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher	III	July 21, 2021 for all July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Decided, not yet active
7(c)-III	Lead in dielectric ceramic in capacitors for a rated voltage of less than 125 V AC or 250 V DC	III	Jan. 1, 2013 for all	Expired
7(c)-IV	Lead in PZT-based (lead-zirconium-titanate) dielectric ceramic materials for capacitors which are part of integrated circuits or discrete semiconductors	III	July 21, 2021 for all	Decided, not yet active
8(a)	Cadmium and its compounds in one-shot pellet type thermal cut-offs	III	Jan. 1, 2012 for all	Expired

EXEMPTION NUMBER	DESCRIPTION	ANNEX	EXPIRY DATE	CURRENT STATUS
8(b)	Cadmium and its compounds in electrical contacts	III	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Decided, not yet active
8(b)-I	Cadmium and its compounds in electrical contacts used in: <ul style="list-style-type: none"> ▪ Circuit breakers ▪ Thermal sensing controls ▪ Thermal motor protectors (excluding hermetic thermal motor protectors) ▪ AC switches rated at: <ul style="list-style-type: none"> (a) 6 A and more at 250 V AC and more; or (b) 12 A and more at 125 V AC and more (c) DC switches rated at 20 A and more at 18 V DC and more (d) Switches for use at voltage supply frequency \geq 200 Hz 	III	July 21, 2021 1 to 7 and 10	New, not yet active
9	Hexavalent chromium as an anticorrosion agent of the carbon steel cooling system in absorption refrigerators up to 0.75 percent by weight in the cooling solution	III	TBD for 1 to 7 and 10 July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Extension recommended
9(b)	Lead in bearing shells and bushes for refrigerant-containing compressors for heating, ventilation, air conditioning and refrigeration (HVACR) applications	III	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Active

EXEMPTION NUMBER	DESCRIPTION	ANNEX	EXPIRY DATE	CURRENT STATUS
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	III	July 21, 2019 for Category 1	Active
11(a)	Lead used in C-Press compliant pin connector systems	III	Sept. 24, 2010 for all	Expired
11(b)	Lead used in other than C-Press compliant pin connector systems	III	Jan. 1, 2013 for all	Expired
12	Lead as a coating material for the thermal conduction module C-ring	III	Sept. 24, 2010 for all	Expired
13(a)	Lead in white glasses used for optical applications	III	July 21, 2021 for all July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Active
13(b)	Cadmium and lead in filter glasses and glasses used for reflectance standards	III	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Active
13(b)-(I)	Lead in ion-colored optical filter glass types	III	July 21, 2021 for 1 to 7 and 10	Active
13(b)-(II)	Cadmium in striking optical filter glass types, excluding applications falling under point 39 of this annex	III	July 21, 2021 for 1 to 7 and 10	Active

EXEMPTION NUMBER	DESCRIPTION	ANNEX	EXPIRY DATE	CURRENT STATUS
13(b)-(III)	Cadmium and lead in glazes used for reflectance standards	III	July 21, 2021 for 1 to 7 and 10	Active
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 percent and less than 85 percent by weight	III	Jan. 1, 2011 for all	Expired
15	Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages	III	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Decided, not yet active
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: <ul style="list-style-type: none"> ▪ 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 	III	July 21, 2021 for 1 to 7 and 10	New, not yet active
16	Lead in linear incandescent lamps with silicate coated tubes	III	Sept. 1, 2013 for all	Expired
17	Lead halide as radiant agent in high intensity discharge (HID) lamps used for professional reprography applications	III	July 21, 2016 for 1 to 7 and 10	Expired

EXEMPTION NUMBER	DESCRIPTION	ANNEX	EXPIRY DATE	CURRENT STATUS
17	Lead halide as radiant agent in high intensity discharge (HID) lamps used for professional reprography applications	III	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Active
18(a)	Lead as activator in the fluorescent powder (1 percent 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)	III	Jan. 1, 2011 for all	Expired
18(b)	Lead as activator in the fluorescent powder (1 percent lead by weight or less) of discharge lamps when used as sun tanning lamps containing phosphors such as BSP (BaSi2O5:Pb)	III	July 21, 2021 for 1 to 7 and 10 July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Decided, not yet active
18(b)-I	Lead as activator in the fluorescent powder (1 percent lead by weight or less) of discharge lamps when used as sun tanning lamps containing phosphors such as BSP (BaSi2O5:Pb)	III	July 21, 2021 for 5 and 8, excluding entry 34 of Annex IV	New, not yet active
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	III	June 1, 2011 for all	Expired
20	Lead oxide in glass used for bonding front and rear substrates of flat fluorescent lamps used for Liquid Crystal Displays (LCDs)	III	June 1, 2011 for all	Expired

EXEMPTION NUMBER	DESCRIPTION	ANNEX	EXPIRY DATE	CURRENT STATUS
21	Lead and cadmium in printing inks for the application of enamels on glasses, such as borosilicate and soda lime glasses	III	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Decided, not yet active
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	III	July 21, 2021 for 1 to 7 and 10 except applications covered by entry 21(b) or entry 39	New, not yet active
21(b)	Cadmium in printing inks for the application of enamels on glasses, such as borosilicate and soda lime glasses	III	July 21, 2021 for 1 to 7 and 10 except applications covered by entry 21(a) or entry 39	New, not yet active
21(c)	Lead in printing inks for the application of enamels on other than borosilicate glasses	III	July 21, 2021 for 1 to 4, 6, 7 and 10	New, not yet active
23	Lead in finishes of fine pitch components other than connectors with a pitch of 0.65 mm and less	III	Sept. 24, 2010 for all	Expired
24*	Lead in solders for the soldering to machined through hole discoidal and planar array ceramic multilayer capacitors	III	July 1, 2019	Replaced
24**	Lead in solders for the soldering to machined through hole discoidal and planar array ceramic multilayer capacitors	III	July 21, 2021 for all July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Decided, not yet active

EXEMPTION NUMBER	DESCRIPTION	ANNEX	EXPIRY DATE	CURRENT STATUS
25	Lead oxide in surface conduction electron emitter displays (SED) used in structural elements, notably in the seal frit and frit ring	III	July 21, 2016 for 1 to 7 and 10	Expired
25	Lead oxide in surface conduction electron emitter displays (SED) used in structural elements, notably in the seal frit and frit ring	III	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Active
26	Lead oxide in the glass envelope of black light blue lamps	III	June 1, 2011 for all	Expired
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	III	Sept. 24, 2010 for all	Expired
29	Lead bound in crystal glass as defined in Annex I (Categories 1, 2, 3 and 4) of Council Directive 69/493/EEC	III	July 21, 2021 for all July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Decided, not yet active
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	III	July 21, 2016 for 1 to 7 and 10	Expired

EXEMPTION NUMBER	DESCRIPTION	ANNEX	EXPIRY DATE	CURRENT STATUS
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	III	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Active
31	Lead in soldering materials in mercury-free flat fluorescent lamps (e.g. used for liquid crystal displays, design or industrial lighting)	III	July 21, 2016 for 1 to 7 and 10	Expired
31	Lead in soldering materials in mercury-free flat fluorescent lamps (e.g. used for liquid crystal displays, design or industrial lighting)	III	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Active
32	Lead oxide in seal frit used for making window assemblies for argon and krypton laser tubes	III	July 21, 2021 for all July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Decided, not yet active
33	Lead in solders for the soldering of thin copper wires of 100 µm diameter and less in power transformers	III	July 21, 2016 for 1 to 7 and 10	Expired
33	Lead in solders for the soldering of thin copper wires of 100 µm diameter and less in power transformers	III	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Active

EXEMPTION NUMBER	DESCRIPTION	ANNEX	EXPIRY DATE	CURRENT STATUS
34	Lead in cermet-based trimmer potentiometer elements	III	July 21, 2021 for all July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Active
36	Mercury used as a cathode sputtering inhibitor in DC plasma displays with a content up to 30 mg per display	III	July 1, 2010 for all	Expired
37	Lead in the plating layer of high voltage diodes on the basis of a zinc borate glass body	III	July 21, 2021 for all July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Decided, not yet active
38	Cadmium and cadmium oxide in thick film pastes used on aluminum bonded beryllium oxide	III	July 21, 2016 for 1 to 7 and 10	Expired
38	Cadmium and cadmium oxide in thick film pastes used on aluminum bonded beryllium oxide	III	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial and 11	Active
39	Cadmium in color converting II-VI LEDs (< 10 µg Cd per mm of light-emitting area) for use in solid state illumination or display systems	III	Nov. 20, 2018 for all	Will expire
39(a)	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)	III	Oct. 31, 2019 for all	Decided, not yet active

EXEMPTION NUMBER	DESCRIPTION	ANNEX	EXPIRY DATE	CURRENT STATUS
40	Cadmium in photoresistors for analogue optocouplers applied in professional audio equipment	III	Dec. 31, 2013 for all	Expired
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)	III	Dec. 31, 2018 for 1 to 7, 10 and 11 July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial	Extension requested
42	Lead in bearings and bushes of professional use non-road equipment engines that meet the following criteria: (a) 15 L and larger total displacement professional use (b) Less than 15 L engines for professional non-road equipment designed for use where the time between a signal to start and full load is required to be less than 10 seconds, for example in emergency, standby generators and peak shaving generators (c) Less than 15 L engines for professional non-road equipment designed for operation in harsh and dirty environments such as construction sites, quarries, mines, etc. for example, in drills, air compressors, rock crushers, irrigation pumps and tub grinders	III	July 22, 2024 Category 11	New, not yet active

EXEMPTION NUMBER	DESCRIPTION	ANNEX	EXPIRY DATE	CURRENT STATUS
1	Lead, cadmium and mercury in detectors for ionizing radiation	IV	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial	Active
1(a)	Lead and cadmium in ion selective electrodes including glass of pH electrodes	IV	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial	Active
1(b)	Lead anodes in electrochemical oxygen sensors	IV	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial	Active
1(c)	Lead, cadmium and mercury in infrared light detectors	IV	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial	Active
1(d)	Mercury in reference electrodes: low chloride mercury chloride, mercury sulphate and mercury oxide	IV	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial	Active

EXEMPTION NUMBER	DESCRIPTION	ANNEX	EXPIRY DATE	CURRENT STATUS
2	Lead bearings in X-ray tubes	IV	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial	Active
3	Lead in electromagnetic radiation amplification devices: micro-channel plate and capillary plate	IV	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial	Active
4	Lead in glass frit of X-ray tubes and image intensifiers and lead in glass frit binder for assembly of gas lasers and for vacuum tubes that convert electromagnetic radiation into electrons	IV	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial	Active
5	Lead in shielding for ionizing radiation	IV	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial	Active
6	Lead in X-ray test objects	IV	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial	Active

EXEMPTION NUMBER	DESCRIPTION	ANNEX	EXPIRY DATE	CURRENT STATUS
7	Lead stearate X-ray diffraction crystals	IV	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial	Active
8	Radioactive cadmium isotope source for portable X-ray fluorescence spectrometers	IV	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial	Active
9	Cadmium in helium-cadmium lasers	IV	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial	Active
10	Lead and cadmium in atomic absorption spectroscopy lamps	IV	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial	Active
11	Lead in alloys as a superconductor and thermal conductor in MRI	IV	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial	Active

EXEMPTION NUMBER	DESCRIPTION	ANNEX	EXPIRY DATE	CURRENT STATUS
12	Lead and cadmium in metallic bonds creating superconducting magnetic circuits in Magnetic Resonance Imaging (MRI), SQUID, NMR (Nuclear Magnetic Resonance) or FTMS (Fourier Transform Mass Spectrometer) detectors	IV	June 30, 2021 for 8 and 9 (in vitro and industrial)	Active
13	Lead in counterweights	IV	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial	Active
14	Lead in single crystal piezoelectric materials for ultrasonic transducers	IV	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial	Active
15	Lead in solders for bonding to ultrasonic transducers	IV	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial	Active
16	Mercury in very high accuracy capacitance and loss measurement bridges and in high frequency RF switches and relays in monitoring and control instruments not exceeding 20 mg of mercury per switch or relay	IV	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial	Active

EXEMPTION NUMBER	DESCRIPTION	ANNEX	EXPIRY DATE	CURRENT STATUS
17	Lead in solders in portable emergency defibrillators	IV	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial	Active
18	Lead in solders of high performance infrared imaging modules to detect in the range 8–14 µm	IV	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial	Active
19	Lead in liquid crystal on silicon (LCoS) displays	IV	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial	Active
20	Cadmium in X-ray measurement filters	IV	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial	Active
21	Cadmium in phosphor coatings in image intensifiers for X-ray images. In spare parts for X-ray systems placed on the European Union market before Jan. 1, 2020	IV	Dec. 31, 2019 for 8 and 9 (in vitro and industrial)	Active
22	Lead acetate marker for use in stereotactic head frames for use with CT and MRI and in positioning systems for gamma beam and particle therapy equipment	IV	June 30, 2021 for 8 and 9 (in vitro and industrial)	Active

EXEMPTION NUMBER	DESCRIPTION	ANNEX	EXPIRY DATE	CURRENT STATUS
23	Lead as an alloying element for bearings and wear surfaces in medical equipment exposed to ionizing radiation	IV	June 30, 2021 for 8 and 9 (in vitro and industrial)	Active
24	Lead enabling vacuum tight connections between aluminum and steel in X-ray image intensifiers	IV	Dec. 31, 2019 for 8 and 9 (in vitro and industrial)	Active
25	Lead in the surface coatings of pin connector systems requiring nonmagnetic connectors that are used durably at a temperature below -20°C under normal operating and storage conditions	IV	June 30, 2021 for 8 and 9 (in vitro and industrial)	Active
26	Lead in the following applications that are used durably at a temperature below -20°C under normal operating and storage conditions: (a) Solders on printed circuit boards (b) Termination coatings of electrical and electronic components and coatings of printed circuit boards (c) Solders for connecting wires and cables (d) Solders connecting transducers and sensors Lead in solders of electrical connections to temperature measurement sensors in devices which are designed to be used periodically at temperatures below -150°C	IV	June 30, 2021 for 8 and 9 (in vitro and industrial)	Active

EXEMPTION NUMBER	DESCRIPTION	ANNEX	EXPIRY DATE	CURRENT STATUS
27	<p>Lead in</p> <ul style="list-style-type: none"> ▪ Solders ▪ Termination coatings of electrical and electronic components and printed circuit boards ▪ Connections of electrical wires, shields and enclosed connectors, which are used in: <p>(a) Magnetic fields within the sphere of 1 meter radius around the isocentre of the magnet in medical magnetic resonance imaging equipment, including patient monitors designed to be used within this sphere; or</p> <p>(b) Magnetic fields within 1 meter distance from the external surfaces of cyclotron magnets, magnets for beam transport and beam direction control applied for particle therapy</p>	IV	<p>June 30, 2020 for 8 and 9 (in vitro and industrial)</p>	Active
28	Lead in solders for mounting cadmium telluride and cadmium zinc telluride digital array detectors to printed circuit boards	IV	<p>Dec. 31, 2017 for 8 and 9 (in vitro and industrial)</p>	Expired
29	Lead in alloys, as a superconductor or thermal conductor, used in cryo-cooler cold heads and/or in cryo-cooled cold probes and/or in cryo-cooled equipotential bonding systems, in medical devices (Category 8) and/or in industrial monitoring and control instruments	IV	<p>June 30, 2021 for 8 and 9 (in vitro and industrial)</p>	Active
30	Hexavalent chromium in alkali dispensers used to create photocathodes in X-ray image intensifiers	IV	<p>Dec. 31, 2019 for 8 and 9 (in vitro and industrial)</p>	Active

EXEMPTION NUMBER	DESCRIPTION	ANNEX	EXPIRY DATE	CURRENT STATUS
31	Lead, cadmium and hexavalent chromium in reused spare parts, recovered from medical devices placed on the market before July 22, 2014, and used in Category 8 equipment placed on the market before July 22, 2021, provided that reuse takes place in auditable closed-loop business-to-business return systems, and that the reuse of parts is notified to the consumer. Expires on July 21, 2021	IV	Nov. 5, 2017 for 8 and 9 (in vitro)	Expired
31(a)	Lead, cadmium, hexavalent chromium, and polybrominated diphenyl ethers (PBDE) in spare parts recovered from and used for the repair or refurbishment of medical devices, including in vitro diagnostic medical devices, or electron microscopes and their accessories, provided that the reuse takes place in auditable closed-loop business-to-business return systems and that each reuse of parts is notified to the customer	IV	July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial	Active
32	Lead in solders on printed circuit boards of detectors and data acquisition units for Positron Emission Tomographs which are integrated into Magnetic Resonance Imaging equipment	IV	Dec. 31, 2019 for 8 and 9 (in vitro and industrial)	Active
33	Lead in solders on populated printed circuit boards used in Directive 93/42/EEC class IIa mobile medical devices other than portable emergency defibrillators. Class IIa	IV	June 30, 2016 for 8 and 9 (Class IIa)	Expired
33	Lead in solders on populated printed circuit boards used in Directive 93/42/EEC class IIa mobile medical devices other than portable emergency defibrillators. Class IIb	IV	Dec. 31, 2020 for 8 and 9 (Class IIb)	Active
34	Lead as an activator in the fluorescent powder of discharge lamps when used for extracorporeal photopheresis lamps containing BSP (BaSi2O5:Pb) phosphors	IV	July 21, 2021 for 8 and 9 (in vitro)	Active

EXEMPTION NUMBER	DESCRIPTION	ANNEX	EXPIRY DATE	CURRENT STATUS
35	Mercury in cold cathode fluorescent lamps for back-lighting liquid crystal displays, not exceeding 5 mg per lamp, used in industrial monitoring and control instruments placed on the market before July 22, 2017	IV	July 21, 2024 for 9 industrial	Active
36	Lead used in other than C-Press compliant pin connector systems for industrial monitoring and control instruments	IV	Dec. 31, 2020 for 9 industrial	Active
37	Lead in platinized platinum electrodes used for conductivity measurements where at least one of the following conditions applies: (a) Wide-range measurements with a conductivity range covering more than one order of magnitude (e.g. range between 0.1 mS/m and 5 mS/m) in laboratory applications for unknown concentrations (b) Measurements of solutions where an accuracy of ± 1 percent of the sample range and where high corrosion resistance of the electrode are required for any of the following: (i) Solutions with an acidity < pH 1 (ii) Solutions with an alkalinity > pH 13 (iii) Corrosive solutions containing halogen gas (c) Measurements of conductivities above 100 mS/m that must be performed with portable instruments	IV	Dec. 31, 2018 for 8 and 9 (in vitro and industrial)	Extension requested
38	Lead in solder in one interface of large area stacked die elements with more than 500 interconnects per interface which are used in X-ray detectors of computed tomography and X-ray systems	IV	Dec. 31, 2019 for 8 and 9 (in vitro and industrial)	Active

EXEMPTION NUMBER	DESCRIPTION	ANNEX	EXPIRY DATE	CURRENT STATUS
39	<p>Lead in micro-channel plates (MCPs) used in equipment where at least one of the following properties is present:</p> <ul style="list-style-type: none"> (a) A compact size of the detector for electrons or ions, where the space for the detector is limited to a maximum of 3 mm/MCP (detector thickness + space for installation of the MCP), a maximum of 6 mm in total, and an alternative design yielding more space for the detector is scientifically and technically impracticable (b) A two-dimensional spatial resolution for detecting electrons or ions, where at least one of the following applies: <ul style="list-style-type: none"> (i) A response time shorter than 25 ns (ii) A sample detection area larger than 149 mm² (iii) A multiplication factor larger than 1.3×10^3 (c) A response time shorter than 5 ns for detecting electrons or ions (d) A sample detection area larger than 314 mm² for detecting electrons or ions (e) A multiplication factor larger than 4.0×10^7 	IV	<p>July 21, 2021 for 8 and 9 July 21, 2023 for 8 in vitro July 21, 2024 for 9 industrial</p>	Active
40	Lead in dielectric ceramic in capacitors for a rated voltage of less than 125 V AC or 250 V DC for industrial monitoring and control instruments	IV	Dec. 31, 2020 for 9 industrial	Active
41	Lead as a thermal stabilizer in polyvinyl chloride (PVC) used as base material in amperometric, potentiometric and conductometric electrochemical sensors which are used in in-vitro diagnostic medical devices for the analysis of blood and other body fluids and body gases	IV	Dec. 31, 2018 for 8 in vitro	Extension requested

EXEMPTION NUMBER	DESCRIPTION	ANNEX	EXPIRY DATE	CURRENT STATUS
42	Mercury in electric rotating connectors used in intravascular ultrasound imaging systems capable of high operating frequency (> 50 MHz) modes of operation	IV	June 30, 2019 for 8 and 9	Extension requested
43	Cadmium anodes in Hersch cells for oxygen sensors used in industrial monitoring and control instruments, where sensitivity below 10 ppm is required	IV	July 15, 2023 for 9 industrial	Active

* Exemption will be replaced with new exemption, but remain in effect until noted expiration date.

** New exemption that will go into effect when replaced exemption expires.