Attachement 1 260401Ver.

Specifications of parts compliant with the EU RoHS Directive

1. Apply

The terms "RoHS compliant", etc. described in the specifications or drawings of the parts to be delivered to Carrier Japan Corporation. mean that they meet the requirements specified in Section 2 below.

2. Restriction on the content of specific hazardous substances

In the specified hazardous substances shown in the table below, the content of any part of the delivered product shall be below the threshold value. However, the inclusion prohibition is exempted only for usable uses (including exemption applications accepted in the future) for which the exemption from the EU RoHS Directive is permitted in Section 3.

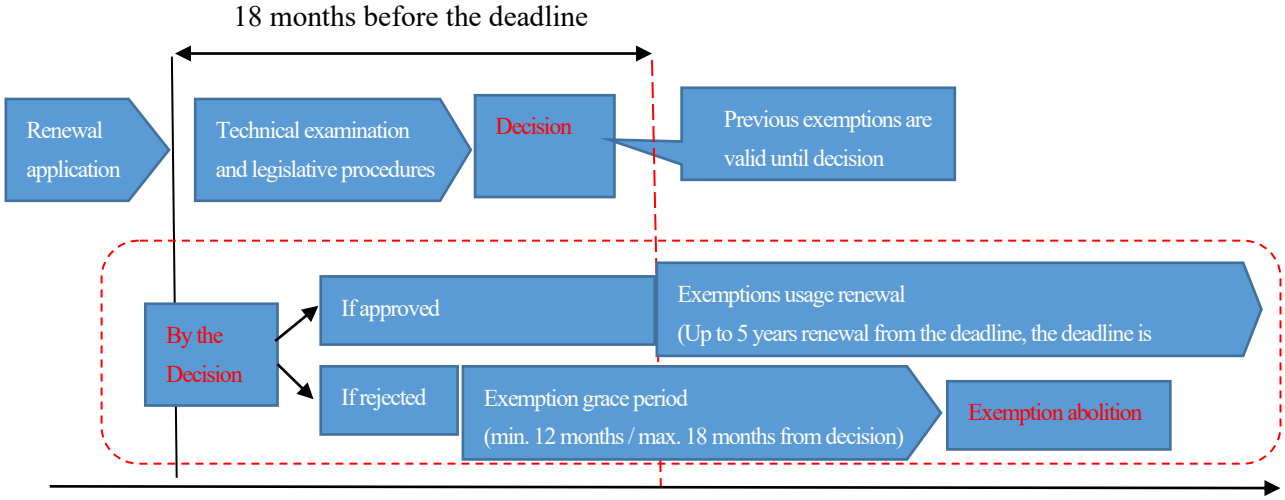
substance	threshold	substance	threshold
Lead	1,000ppm	Bis (2-ethylhexyl) phthalate (DEHP)	1,000ppm
Mercury	1,000ppm		
Hexavalent chromium	1,000ppm	Dibutyl phthalate (DBP)	1,000ppm
Cadmium	100ppm	Butyl benzyl phthalate (BBP)	1,000ppm
Polybrominated biphenyls (PBBs)	1,000ppm	Diisobutyl Phthalate (DIBP)	1,000ppm
Polybrominated diphenylethers (PBDEs)	1,000ppm		

3. Exemption from European RoHS Directive

The exemptions from the RoHS Directive will be reviewed as appropriate and the application period is up to 5 years. If there is a reason such as there is no alternative technology that can be avoided during this period, it is possible to apply for renewal to the European Commission, and some are currently in the process of applying for renewal to the European Commission.

If approved, the exemption period will be extended by up to 5 years, but if rejected, the exemption will be abolished with a grace period.

<Exempted usage renewal Procedure>



The following is an example of the renewal application procedure related to air conditioner. If the extension of the deadline is rejected, the exempted use will be abolished with a grace period. Please check the latest information on the official website of the RoHS Directive below when making the final decision, including other exemptions.
https://ec.europa.eu/environment/waste/rohs_eee/adaptation_en.htm

No.	Exempted usage
6(a)	Lead as an alloying element in steel for machining purposes and in galvanised steel containing up to 0,35 % lead by weight
6(a)-I	Lead as an alloying element in steel for machining purposes containing up to 0,35 % lead by weight (*1)
6(a)-II	Lead as an alloying element in batch hot-dip galvanised steel components containing up to 0,2 % lead by weight (*1)
6(b)	Lead as an alloying element in aluminium containing up to 0,4 % lead by weight
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 (*1)
6(b)-II	Lead as an alloying element in aluminium for machining purposes with a lead content up to 0,4 % by weight (*1)
6(b)-III	Lead as an alloying element in aluminium casting alloys containing up to 0,3 % lead by weight provided it stems from lead-bearing aluminium scrap recycling (*1)
6(c)	Copper alloy containing up to 4 % lead by weight (*1)
7(a)	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)
7(a)-I	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead) for internal interconnections for attaching die, or other components along with a die in semiconductor assembly with steady state or transient/impulse currents of 0,1 A or greater or blocking voltages beyond 10 V, or die edge sizes larger than 0,3 mm × 0,3 mm
7(a)-II	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead) for integral (meaning internal and external) connections of die attach in electrical and electronic components, if all the following conditions are met: − the thermal conductivity of the cured/sintered die-attach material is > 35 W/(m × K), − the electrical conductivity of the cured/sintered die-attach material is > 4,7 MS/m, − solidus melting temperature is higher than 260 °C

No.	Exempted usage
7(a)-III	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead) in first level solder joints (internal or integral connections – meaning internal and external) for manufacturing components so that subsequent mounting of electronic components onto subassemblies (i.e. modules, sub-circuit boards, substrates, or point-to-point soldering) with a secondary solder does not reflow the first level solder. This sub-entry excludes die attach applications and hermetic sealings
7(a)-IV	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead) in second level solder joints for the attachment of components to printed circuit board or lead frames: (1) in solder balls for the attachment of ceramic ball-grid-array (BGA); (2) in high temperature plastic overmouldings (> 220 °C)
7(a)-V	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead) as a hermetic sealing material between: (1) a ceramic package or plug and a metal case; (2) component terminations and an internal sub-part
7(a)-VI	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead) for establishing electrical connections between lamp components in incandescent reflector lamps for infrared heating, high intensity discharge lamps, or oven lamps
7(a)-VII	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead) for audio transducers where the peak operating temperature exceeds 200 °C
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
7(c)-II	Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher
7(c)-V	Electrical and electronic components containing lead in a glass or glass matrix compound that fulfils any of the following functions: (1) for protection and electrical insulation in glass beads of high-voltage diodes and glass layers for wafers; (2) for hermetic sealing between ceramic, metal and/or glass parts; (3) for bonding purposes in a process parameter window for < 500 °C combined with a viscosity of 1013,3 dPas (‘glass-transition temperature’); (4) for use as a resistive material such as ink, with a resistivity range from 1 ohm/square to 100 megohm/square, excluding trimmer potentiometers; (5) for use in chemically modified glass surfaces for microchannel plates (MCPs), channel electron multipliers (CEMs) and resistive glass products (RGPs).

No.	Exempted usage
7(c)-VI	Electrical and electronic components containing lead in a ceramic that fulfils any of the following functions: (1) for use in piezoelectric lead zirconium titanate (PZT) ceramics; (2) for providing ceramics with a positive temperature coefficient (PTC).
8(b)-I	admium 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.

(*1) The exemption shall not cover EEE for supply to the general public where the EEE or accessible part thereof may, during normal or foreseeable conditions of use, be placed in the mouth by children. However, the exemption shall apply where the following can be both demonstrated:

- the rate of lead release from such an EEE or any accessible part, whether coated or uncoated, does not exceed 0,05 μg/cm^2 per hour (equivalent to 0,05 μg/g/h),
- for coated articles, that the coating is sufficient to ensure that this release rate is not exceeded for a period of at least two years of normal or reasonably foreseeable conditions of use of the EEE.

For the purpose of this footnote, it is considered that an EEE or accessible part of an EEE may be placed in the mouth by children if it is smaller than 5 cm in one dimension or has a detachable or protruding part of that size.'.