



28 July, 2021

## Riedon RoHS 3 Certificate (July 2021)

The European Union (EU) - issued Directive 2002/95/EC on the Restriction of certain Hazardous Substances (RoHS) applies to most electrical and electronic equipment placed on the market after July 1, 2006. The Directive was repealed and replaced by the Directive 2011/65/EU of 8 June 2011 ("Recast" or "RoHS 2"), which became effective January 1, 2013. A second revision ("RoHS 3") was put into effect in July 2019.

The directive originally required elimination or limited use of the following chemicals (limit 0.1% of weight, or 1000 ppm, of any "homogeneous material"):

- Lead (Pb) (0.1%)
- Mercury (Hg) (0.1%)
- Cadmium (Cd) (limit is 0.01% or 100 ppm by weight)
- Hexavalent Chromium (Cr<sup>+6</sup>) (0.1%)
- Polybrominated Biphenyl (PBB) (0.1%)
- Polybrominated Diphenyl Ether (PBDE) (0.1%)

Since the 2019 revision, the directive has been updated periodically, with additional Substances of Very High Concern (SVHC) being added to the Candidate List at each update.

Under the most recent directive updated on **July 8, 2021**, an additional **8** chemicals were added. The Candidate List now contains **219 chemicals** that may harm people or the environment:

**Riedon, Inc. confirms that our standard resistor products, as described in the company website [www.riedon.com](http://www.riedon.com), are all in compliance with the most recent July 2021 RoHS directive. Unless specifically identified by Riedon in our product spec sheets, all standard products are compliant without exemptions. Currently, Riedon has identified thirty seven standard resistor products which are RoHS 3 Compliant with Exemption:**

**Riedon Resistor Products:**

	<b><u>Exemption (*)</u></b>
ASC-Series – Anti Sulphur Chip Resistor	7(c)-1
CHR-Series – Non Magnetic Chip Resistor	7(c)-1
CLR-Series – Thick Film Chip Resistor	7(c)-1
CLS-Series – Thick Film Chip Resistor	7(c)-1
FPS-Series – Precision Shunt Resistor	7(a)
HVC-Series – Thick Film SMD Resistor	7(c)-1
MG-Series – Metal Film Resistor	7(c)-1
NHR-Series – Power Resistor	7(c)-1
NHS-Series – Power SMD Resistor	7(c)-1
NPR-Series – Power Resistor	7(c)-1
NPS-Series – Power SMD Resistor	7(c)-1
PCR-Series – Pulse Withstanding Chip Resistor	7(c)-1
PFC-Series – Thick Film Power SMD Resistor	7(c)-1
PFS-Series – Power SMD Film Resistor	7(a) & 7(c)-1
PFU-Series – High Voltage High Power Resistor	7(a) & 7(c)-1
PF1260-Series – Power Film Resistor	7(a) & 7(c)-1
PF2200-Series – Power Film Resistor	7(a) & 7(c)-1
PF2470-Series – Power Film Resistor	7(a) & 7(c)-1

**Riedon Ammeter Shunt and Fuse Block Products:**

	<b><u>Exemption (*)</u></b>
MKA – Ammeter Shunt with base	6(c) & 7(a)
MKB – Ammeter Shunt with base	6(c) & 7(a)
MKC – Ammeter Shunt with base	6(c) & 7(a)
RCS – Ammeter Shunt	6(c) & 7(a)
RS – Ammeter Shunt with base	6(c) & 7(a)
RSH – Ammeter Shunt	6(c) & 7(a)
RSI – Ammeter Shunt	6(c) & 7(a)
RSJ – Ammeter Shunt	6(c) & 7(a)
RSL – Ammeter Shunt	6(c) & 7(a)
RSN – Ammeter Shunt with base	6(c) & 7(a)
RSW – Ammeter Shunt	6(c) & 7(a)
SWA – Ammeter Shunt	6(c) & 7(a)
SWB – Ammeter Shunt	6(c) & 7(a)
SWE – Ammeter Shunt	6(c) & 7(a)
WB – Ammeter Shunt with base	6(c) & 7(a)
WO2 – Ammeter Shunt	6(c) & 7(a)
CFB – Fuse Block	6(c)
FB – Fuse Block	6(c)
NFB – Fuse Block	6(c)



(\*) **Exemption 6(c)** – *“Copper alloy containing up to 4% lead by weight”*

(\*) **Exemption 7(c)-1** – *“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”*

(\*) **Exemption 7(a)** – *“Lead in high melting temperature type solders (i.e. lead-based alloys containing 85% by weight or more lead)”*

**Note:** Applications for Renewal for all exemptions listed above are currently under review by the European Commission and will remain in effect until a determination is made.

Please contact Riedon directly if you have any questions concerning this certification.



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