EU REACH 247 10-May-2025

Declaration of Conformity European Union REACH Regulation (Candidate 247)

The European Union Directive 1907/2006 on the Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) entered into force on 1 June 2007. The current statement is reflective of Candidate list 247, released January 21, 2025.

- REACH compliant means that the identified products are categorized as articles under the REACH
 Regulations and as such do not contain more than 0.1% by weight per article of substances listed in
 the latest Candidate Substances of Very High Concern (SVHC) list as of 247 Substances, the latest
 released by the European Chemicals Agency.
- None of the components that make up the finished article contains more than 0.1% by weight per article of any of the listed substances, unless otherwise stated.
- The weight of the SVHC candidate substances contained in State of the Art, Inc. products shipped into the EU has not exceeded one metric ton per year and annual reporting to ECHA is not required.
- Presence of SVHC Lead (7439-92-1) is present, as indicated below, in many termination finishes and as a component of thick film materials to achieve product performance requirements.
- Products may contain (as indicated below) materials listed as restricted for applications in Annex XVII of the EU REACH Regulation. End user must assure application meets Annex XVII entries indicated below.

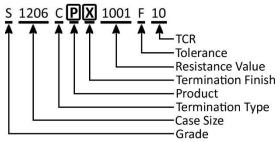
To the best of its knowledge, State of the Art, Inc. product compliance with REACH can be identified by part number as listed on subsequent pages.

Many of State of the Art, Inc. products are procured with a tin-lead solder termination finsh. This termination finish has SVHC Lead (7439-92-1) present with worst case concentration of 8% wt/wt. Nominal device weight is provided on product data sheets.

We work with our suppliers to ensure accurate data for all products. We will continue to identify any potential use of materials as specified in the REACH directive and confirm the representation made in this compliance statement remains accurate. To that end, we reserve the right to amend this statement at any time based on subsequent developments or information.

If you need more detailed information, please contact sales@resistor.com for further information.

The REACH compliance for semi-precision thick film products is determined by the product and termination finish codes in our part number as shown below. The boxed P is the product code and the boxed X is the termination finish code. Zero ohm jumpers have a resistance value code of "000" and do not have tolerance or TCR codes.



The following semi-precision thick film chip resistors and zero ohm resistors are **not** REACH compliant:

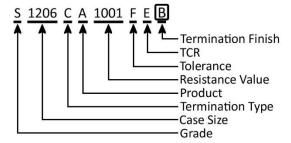
- Products B or R (high power thick film resistors) may contain SVHC Cadmium Oxide (1306-19-0) in the termination material. Please contact State of the Art, Inc. with purchase and lot information to confirm if SVHCs are present.
- Termination Finish code P (platinum/gold) contains SVHC Cadmium Oxide (1306-19-0).
- Value codes between 0.05Ω and 1.0Ω may contain SVHC Cadmium Oxide (1306-19-0). Please contact State of the Art, Inc. with purchase and lot information to confirm if SVHCs are present.
- Termination finish code X (tin-lead solder over nickel barrier) contains SVHC Lead (7439-92-1).

REACH Annex XVII restriction of use:

• Entry 63 applies due to Lead (Pb) in glass frit used in thick film materials.

Precision Thin Film Chip Resistors

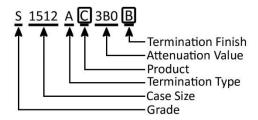
The REACH compliance of precision thin film chip resistors is determined by the termination finish code in our part number as shown below. The boxed B is the termination finish code.



The following precision thin film Chip Resistors are **not** REACH compliant:

• Termination finish code B (tin-lead solder over nickel barrier) contains SVHC Lead (7439-92-1).

The REACH compliance of fixed attenuators is determined by the termination finish code in our part number as shown below. The boxed B is the termination finish and boxed C is the product code.



The following fixed attenuators are **not** REACH compliant:

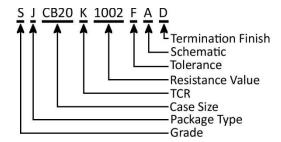
• Termination finish code B (tin-lead solder over nickel barrier) contains SVHC Lead (7439-92-1).

REACH Annex XVII restriction of use:

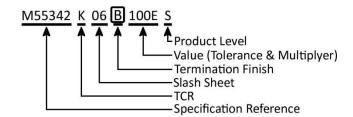
 Product codes D and W: Entry 63 applies due to lead (Pb) in glass frit used in thick film materials.

Semi-Precision Thick Film Networks (JEDEC and SLAMDIP)

All semi-precision thick film networks contain SVHC Lead (7439-92-1) in the termination material and are <u>not</u> REACH compliant. Product can be identified using example part number shown below.



The REACH compliance of MIL-PRF-55342 resistors is determined by the termination material code in the MIL-PRF-55342 part number as shown below. The boxed B is the termination finish code.



The following MIL-PRF-55342 chip resistors are **not** REACH compliant:

- Termination Finish code U (platinum/gold) contains SVHC Cadmium Oxide (1306-19-0).
- Termination Finish code B (tin-lead solder over nickel barrier) contains SVHC Lead (7439-92-1).

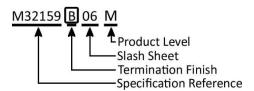
REACH Annex XVII restriction of use:

MIL-PRF-55342 thick film resistors represented by TCR codes ≥ 100 ppm/°C and Tolerances ≥1%:
 Entry 63 applies due to lead (Pb) in glass frit used in thick film materials.

Note: Does not apply to MIL-PRF-55342 thin film resistors specifically ordered with these characteristics.

MIL-PRF-32159 Zero Ohm Resistors (Jumpers)

The REACH compliance of MIL-PRF-32159 zero ohm jumpers is determined by the termination material code in the MIL-PRF-32159 part number shown below. The boxed B is the termination finish code.



The following MIL-PRF-55342 chip resistors are **not** REACH compliant:

- Termination Finish code U (platinum/gold) contains SVHC Cadmium Oxide (1306-19-0).
- Termination Finish code B (tin-lead solder over nickel barrier) contains SVHC Lead (7439-92-1).

REACH Annex XVII restriction of use:

• Entry 63 applies due to Lead (Pb) in glass frit used in thick film materials.

All MIL-PRF-914 resistor networks contain SVHC Lead (7439-92-1) in the termination material and are <u>not</u> REACH compliant. Product can be identified using example part number shown below.

