

Statement on EU REACH Provisions

This statement reflects a common understanding of the global semiconductor device manufacturers on the EU REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (EU REACH) as well as the NXP Semiconductors specific situation regarding EU REACH. It outlines the obligations applicable to NXP's semiconductor products and the requirements regarding articles. Specifically, EU REACH requires:

- To inform recipients if an article placed on the European market contains a Substance of Very High Concern (SVHC) in excess of 0.1% by weight. SVHCs are identified on the European Chemical Agency (ECHA) website;
- To notify ECHA if an article contains an SVHC in excess of 0.1% by weight and the total amount of the SVHC present in all articles produced or imported to the European market exceed one metric ton per year;
- To cease shipment of articles containing EU REACH Annex XIV Substances Subject to Authorization unless authorization has been obtained; and,
- To cease shipment of articles containing EU REACH Annex XVII substances when restrictions apply.

Having evaluated supplier certifications and material composition declarations, as well as NXP's specifications, NXP has, to the best of its knowledge and belief, determined that:

- Except as noted in the attached appendix, NXP semiconductor products do not contain the substances within the **240** entries currently on the SVHC Candidate List in excess of 0.1% by weight per article as published by ECHA with latest publication date **January 23, 2024**¹;
- The weight of the SVHC candidate substances (see attached appendices) contained in NXP semiconductor products shipped into the EU has not exceeded one metric ton per year and annual reporting to ECHA is not required;
- NXP semiconductor products do not contain the substances within the **59** entries subject to authorization under EU REACH Annex XIV as published by ECHA with latest publication date **April 11, 2022**¹;
- NXP semiconductor products do not contain any of the substances above the maximum limits under the given applications in Annex XVII of the EU REACH Regulation.

For further details, please contact us at ECO-Products@nxp.com.



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¹ Specific press releases can be found at <https://echa.europa.eu/news-and-events/news-alerts/all-news>

Appendix – EU REACH provisions

NXP Products

NXP has identified materials within its semiconductor product materials that may contain EU REACH SVHC candidate substances in excess of 0.1% by weight per article. The substances are:

- Diboron trioxide (EC# 215-125-8, CAS# 1303-86-2) per EU Decision ED/87/2012 on 2012/06/18 (**see Note 1**)
- Lead monoxide (EC# 215-267-0, CAS# 1317-36-8) per EU Decision ED/169/2012 on 2012/12/19 (**see Note 1**)
- Lead titanium trioxide (EC # 235-038-9, CAS# 12060-00-3) per EU Decision ED/169/2012 on 2012/12/19 (**see Note 2**)
- Methylhexahydrophthalic anhydride (EC# 247-094-1, CAS# 25550-51-0) per EU Decision ED/169/2012 on 2012/12/19 (**see Note 3**)
- 4,4'-isopropylidenediphenol (EC # 201-245-8, CAS # 80-05-7) per EU Decision ED/01/2017 on 2017/01/12 (**see Note 4**)
- Lead (EC# 231-100-4, CAS# 7439-92-1) per EU Decision ED/61/2018 on 2018/06/27 (**see Note 5**)
- 2-Methyl-4'-(methylthio)-2-morpholino propiophenone (EC# 400-600-6, CAS# 71868-10-5) per EU Decision ECHA/01/2020 on 2020/01/16 (**see Note 6**)
- Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide (EC# 278-355-8, CAS# 75980-60-8) per EU Decision D(2023)3788-DC on 2023/06/14 (**see Note 6**)

Notes:

1. Some suppliers of glass lead frit, substrates, capacitors, resistors, caps and non-conductive epoxy adhesive with a glass or ceramic base material have reported one or more of these substances as a raw ingredient: Diboron trioxide and Lead monoxide. To the best of our knowledge NXP will declare these substances in excess of 0.1% by weight for impacted articles; however, these substances are not present in their original molecular form and cannot be released under normal or reasonably foreseeable conditions. EU REACH communications to customers and ECHA are not applicable for articles containing glass and ceramics since they are classified under EU REACH as UVCB substances (substance of unknown or variable composition, complex reaction products or biological material).
2. Some suppliers of glass lead frit materials have reported this substance in their material composition declaration. To the best of our knowledge NXP will declare this substance in excess of 0.1% by weight for impacted articles, however these substances are present within crystalline structure; when declared with additional metallic oxides this substance is defined under EU REACH as a UVCB (reference Note 1).
3. Some suppliers of epoxy, die encapsulation, and die underfill materials have reported this substance in their material composition declaration. To the best of our knowledge NXP will declare this substance in excess of 0.1% by weight for impacted articles.
4. Some suppliers of epoxy resins, and substrate materials have reported this substance, under the name "Bisphenol A", in their material composition declaration. To the best of our knowledge NXP will declare this substance in excess of 0.1% by weight for impacted articles.
5. Some suppliers of substrates, solder materials (balls, wires, and pastes), capacitors, coils, inductors, resistors, bumped semiconductor die and die shields have reported this substance in their material composition declaration. To the best of our knowledge NXP will declare this substance in excess of 0.1% by weight for impacted articles.
6. Some suppliers of substrates have reported this substance in their material composition declaration. To the best of our knowledge NXP will declare this substance in excess of 0.1% by weight for impacted articles.

Previously Identified NXP Products

NXP previously reported within its semiconductor product materials that contained EU REACH SVHC candidate substances in excess of 0.1% by weight. These materials no longer use such EU REACH substances. The affected substances were:

- 1-Methyl-2-pyrrolidone (NMP) (EC# 212-828-1, CAS# 872-50-4) was designated an EU REACH SVHC per EU Decision ED/31/2011 on 2011/06/20. Some suppliers of dielectric coating and passivation polymer layer materials have reported this substance in their material composition declaration as a raw material ingredient (solvent), associated with legacy Marvell WiFi and Bluetooth devices. NXP investigated, with relevant material suppliers, to confirm content did not remain as residue in affected materials, reporting was updated in January 2021.

