

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, Authorization and Restriction of Chemicals (EU REACH) as well as the NXP Semiconductors specific situation regarding EU REACH. It outlines the various obligations applicable to NXP's products and the requirements regarding articles. Specifically, EU REACH requires us:

- 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 products do not contain the substances within the **211** 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 19, 2021**¹;
- The weight of the SVHC candidate substances (see attached appendices) contained in NXP products shipped into the EU has not exceeded one metric ton per year and annual reporting to ECHA is not required;
- NXP products do not contain the substances within the **54** entries subject to authorization under EU REACH Annex XIV as published by ECHA with latest publication date **February 27, 2020**¹;
- NXP products do not contain any of the substances above the maximum limits under the given application 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 products and packaging materials that may contain EU REACH SVHC candidate substances in excess of 0.1% by weight. The substances are:

- 1-Methyl-2-pyrrolidone (NMP) (EC# 212-828-1, CAS# 872-50-4) per EU Decision ED/31/2011 on 2011/06/20 (**see Note 1**)
- Diboron trioxide (EC# 215-125-8, CAS# 1303-86-2) per EU Decision ED/87/2012 on 2012/06/18 (**see Note 2**)
- Lead monoxide (EC# 215-267-0, CAS# 1317-36-8) per EU Decision ED/169/2012 on 2012/12/19 (**see Note 2**)
- 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**)

Notes:

1. 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 may declare this substance in excess of 0.1% by weight for impacted articles; however, this substance, in its original molecular form is contained in these materials as a small residue and cannot be released under normal or reasonably foreseeable conditions.²
2. 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, Lead monoxide, and Lead titanium trioxide. NXP may 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).
3. Some suppliers of epoxy, die encapsulation, and die underfill materials have reported this substance in their material composition declaration. NXP may declare this substance in excess of 0.1% by weight for impacted articles.
4. Some suppliers of carrier tapes, epoxy resins, and substrate materials have reported this material, under the name "Bisphenol A", in their material composition declaration as a raw polymer ingredient. NXP may declare this substance in excess of 0.1% by weight for impacted articles; however, this substance, in its original molecular form is contained in these materials as a small residue and cannot be released under normal or reasonably foreseeable conditions.
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. NXP may 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. NXP may declare this substance in excess of 0.1% by weight for impacted articles.

² NXP is investigating with the relevant material suppliers to confirm the actual content in the affected materials.

Obsolete Materials

NXP previously reported within its products and packaging 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 materials were:

- Cobalt Dichloride (EC# 231-589-4, CAS# 7646-79-9) was designated an EU REACH SVHC per ED/67/2008 on 28-Oct-2010. Humidity indicator cards (HICs) sealed inside moisture control bags prior to December 31, 2009 may contain this substance. For former Freescale parts, the sunset date was March 1, 2009. See GA13437 for details.
- DEHP (EC# 204-211-0, CAS# 117-81-7) was designated an EU REACH SVHC per ED/67/2008 on 28-Oct-2010. PVC containers used for former Freescale TSSOP24, S-MPF16 and S-MFP20 packages shipped from one contract assembly site before July 1, 2010, may contain this substance. See PCN#14252 for details.
- Disodium Tetraborate, Anhydrous (EC# 215-540-4, CAS# 1330-43-4) was designated an EU REACH SVHC per ED/30/2010 on 18-Jun-2010. Cardboard over-pack boxes & tape shipped from a single former Freescale USA Distribution Center before August 15, 2010 may have contained this substance.