



Introduction to the Telefonica UK Ltd Restricted Substances List

Version 1, November 2014

All products and equipment must meet legal requirements e.g. UK RoHS Regulations (Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment), REACH Annex XVII restrictions, ODS Regulation, POPs Regulation and the Biocides Regulation. Products designed for children must also comply with substance restrictions set out within the UK Toy Safety Regulations. Telefonica UK's restricted substances list applies *in addition* to current legislation; legislative requirements must always be met.

The scope of the restricted substances list covers the following electrical and electronic equipment supplied to Telefonica UK:

- handsets and included accessories;
- tablets and included accessories; and
- network infrastructure equipment.

The scope does not cover test equipment, non-electrical or non-electronic accessories, batteries or packaging (i.e. packaging used to protect the unit during transportation and retail, not an integral part of the final unit). These must comply with substance restrictions within current legislation.

The requirements apply to new products and equipment launched from the specified restriction date and supplied to Telefonica UK. They do not apply to products or equipment launched before the specified restriction date. For example, if a product was launched on 01/12/2015 it could continue to be sold to Telefonica UK without meeting a substance restriction dated 01/01/2016 because it had been launched before the specified restriction date.

The list will be implemented as a Telefonica UK purchasing specification. Suppliers should be prepared to issue a declaration of conformity or non-conformity with this list if requested by Telefonica UK. For the majority of products and equipment in scope, the list will be used as a rating criteria rather than a 'gating' requirement.

This list will be updated periodically. Telefonica UK is open to feedback from suppliers regarding this list, for example, if a supplier considers:

- the continued use of a restricted substance to have substantial environmental or social benefits;
- the continued use of a substance to be critical in order to maintain technical performance;
- a substitute/alternative substance to have significant detrimental environmental, health, safety or social impacts.

Telefonica UK substance restrictions for handsets, tablets and included accessories.

V1 November 2014.

Substance	CAS	Substance restriction for handsets, tablets and included accessories.	Exemptions
Antimony trioxide	1309-64-4	Maximum 0.1% by weight per homogenous material by 01/01/2016. This restriction only applies to polymeric materials e.g. plastics, resins and rubbers.	Antimony trioxide in non-polymeric materials e.g. ceramics, glass, some fabrics.
Benzene	71-43-2	Should be eliminated from use in the production process by 01/01/2016. At minimum down to Tier 2 suppliers.	None.
Beryllium and beryllium compounds (including Beryllium Oxide)	Multiple e.g. 7440-41-7, 1304-56-9, 12228-40-9, 7787-46-4, 543-81-7	Maximum 0.1% by weight per homogenous material by 01/01/2016.	BeCu alloy (exempted until performance of alternatives is proven).
Brominated flame retardants (BFRs)	Multiple	<p>Brominated flame retardants must not exceed 0.09% of Br by weight per homogeneous material by 01/01/2016.</p> <p>Combined presence of BFRs and CFRs (chlorinated flame retardants) must not exceed 0.15% of Br and Cl per homogeneous material by 01/01/2016.</p> <p>N.B. where legal restrictions on specific BFRs (e.g. EU RoHS limits for PBBs, PBDEs) impose more stringent limits, these must always be applied.</p>	None.
Chlorinated flame retardants (CFRs)	Multiple	<p>Chlorinated flame retardants must not exceed 0.09% of Cl by weight per homogeneous material by 01/01/2016.</p> <p>Combined presence of BFRs (brominated flame retardants) and CFRs must not exceed 0.15% of Br and Cl per homogeneous material by 01/01/2016.</p> <p>N.B. where legal restrictions on specific CFRs impose more stringent limits, these must always be applied.</p>	None.

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Substance	CAS	Substance restriction for handsets, tablets and included accessories.	Exemptions
Medium-chain chlorinated paraffins (MCCPs) C14-17 i.e. 14-17 carbon atoms	Multiple e.g. 85535-85-9	Maximum 0.1% by weight per homogenous material by 01/01/2016.	None.
Short-chain chlorinated paraffins (SCCPs) C10 - C13 i.e. 10-13 carbon atoms	85535-84-8	Maximum 0.1% by weight per homogenous material by 01/01/2016.	None.
Tris(2-chloroethyl) phosphate (TCEP)	115-96-8	Maximum 0.1% by weight per homogenous material by 01/01/2016.	None.
Trichloroethylene Perchloroethylene Tetrachloroethylene	79-01-6 127-18-4 127-18-4	Should be eliminated from use in the production process by 01/01/2016. At minimum down to Tier 2 suppliers.	None.
Diarsenic pentaoxide Diarsenic trioxide	1303-28-2 1327-53-3	Should be eliminated from use in the production process by 01/06/2016. At minimum down to Tier 2 suppliers.	None.
Benzyl butyl phthalate, BBP Dibutyl phthalate, DBP Bis(2-ethylhexyl) phthalate = di(2-ethylhexyl)phthalate, DEHP Diisobutyl phthalate, DIBP Diethyl phthalate, DEP	85-68-7 84-74-2 117-81-7 84-69-5 84-66-2	Maximum 0.1% by weight per homogenous material by 01/01/2016. This applies to each named phthalate individually.	Use as a ceramic component additive. Threshold of 0.5% by weight per homogenous material will apply for recycled plastics.

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Substance	CAS	Substance restriction for handsets, tablets and included accessories.	Exemptions
Perfluorooctanic acids (PFOA)	335-67-1	Maximum 0.005% by weight per homogenous material by 01/01/2016.	None.
Polycyclic aromatic hydrocarbons (PAHs)	Multiple e.g. 50-32-8, 192-97-2, 56-55-3, 218-01-9, 205-99-2, 205-82-3, 207-08-9, 53-70-3	Maximum concentration of 0.5 mg/kg in materials in prolonged or repetitive contact with skin from 01/01/2016.	None.
PVC and PVC blends	9002-86-2 + others.	Banned from use from 01/01/2016. Threshold of 0.1% PVC per homogeneous material where applicable.	None.
Nickel	7440-02-0	<p>From 01/01/2016, for any products/parts intended to come into direct contact with skin (regardless of duration), the migration rate from the outer surface layer must not exceed 0.5µg/cm²/ week. The current version of test method EN1811 should be used.</p> <p>Note this migration rate applies for the reasonable duration of the product's life. Any foreseeable wearing of the outer surface should still meet the specified migration rate.</p>	Note the restriction only applies to product/parts which come into direct contact with skin on a regular and ongoing basis as a result of product use. Products/parts with occasional and irregular skin contact are excluded.

MONITORING:

- A monitoring programme should be in place for the following substances.
- R&D into the suitability of alternatives (technical performance + environmental/health impacts) is encouraged.
- For monitored substances, the following information must be provided on request from Telefonica UK:
 - i. details of whether the named substance is generally present in equipment supplied + main applications/locations;
 - ii. formal timeline for phase-out or reduction. If no timeline is established, please indicate when this will be in place and what investigations you are conducting within your supply chain;
 - iii. (iii) confirmation if you are undertaking any research into the suitability of alternatives in terms of technical performance and environmental/health impacts. Commercially sensitive details will not be required.

Substance	CAS	Monitoring requirement for handsets, tablets and included accessories	Exemptions
Antimony compounds	Multiple e.g. 545386-98-9, 139598-41-7, 127153-81-5, 126426-74-2, 89899-81-0, 77824-44-3	Monitoring requirement as outlined above.	None.
Bromine compounds	Multiple	Monitoring requirement as outlined above.	None.
Chlorine compounds	Multiple	Monitoring requirement as outlined above.	None.
Phthalates	Multiple	Monitoring requirement as outlined above.	None.
Bisphenol A	80-05-7	Monitoring requirement as outlined above.	None.
Nonylphenols (NP) and Nonylphenol ethoxylates (NPEO)	25154-52-3 9016-45-9	Monitoring requirement as outlined above.	None.
Isocyanates	Multiple e.g. 822-06-0, 624-83-9, 101-68-8, 3173-72-6, 584-84-9	Monitoring requirement as outlined above.	None.
Nanomaterials	n/a	Monitoring requirement: please report presence of nanomaterials and application.	None.

RoHS exemptions	n/a	Reporting requirement - please declare which RoHS exemptions are being used i.e. if any RoHS exemptions are being used in product lines within scope please list these exemptions. Note individual product-by-product information is not required.	N/a.
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Telefonica UK substance restrictions for network infrastructure equipment.

V1 November 2014.

Substance	CAS	Substance restriction for network infrastructure equipment	Exemptions
Benzene	71-43-2	Should be eliminated from use in the production process by 01/01/2016. At minimum down to Tier 2 suppliers.	None.
Beryllium Oxide	1304-56-9	Maximum 0.1% by weight per homogenous material by 01/01/2016.	None.
Brominated flame retardants (BFRs)	Multiple	Brominated flame retardants must not exceed 0.09% of Br by weight per homogeneous material by 01/01/2017. Please note, in some cases legal restrictions on BFRs (e.g. EU RoHS limits for PBBs, PBDEs) may impose more stringent limits and these must always be applied.	For network infrastructure ONLY - reacted TBBPA in high frequency cards is exempt from the restriction.
Tris(2-chloroethyl) phosphate (TCEP)	115-96-8	Maximum 0.1% by weight per homogenous material by 01/01/2016.	None.
Trichloroethylene Perchloroethylene Tetrachloroethylene	79-01-6 127-18-4 127-18-4	Should be eliminated from use in the production process by 01/01/2016. At minimum down to Tier 2 suppliers.	None.
Benzyl butyl phthalate, BBP Dibutyl phthalate, DBP Bis(2-ethylhexyl) phthalate = di(2-ethylhexyl)phthalate, DEHP Diisobutyl phthalate, DIBP Diethyl phthalate, DEP	85-68-7 84-74-2 117-81-7 84-69-5 84-66-2	Maximum 0.1% by weight per homogenous material by 01/01/2016. This applies to each named phthalate individually.	Use as a ceramic component additive. Threshold of 0.5% by weight per homogenous material will apply for recycled plastics.
Perfluorooctanic acids (PFOA)	335-67-1	Maximum 0.005% by weight per homogenous material by 01/01/2016.	None.

Substance	CAS	Substance restriction for network infrastructure equipment	Exemptions
Polycyclic aromatic hydrocarbons (PAHs)	Multiple e.g. 50-32-8, 192-97-2, 56-55-3, 218-01-9, 205-99-2, 205-82-3, 207-08-9, 53-70-3	Maximum concentration of 1mg/kg in materials in prolonged or repetitive contact with skin from 01/01/2016.	None.
PVC and PVC blends	9002-86-2 + others.	Banned from use from 01/01/2017. Threshold of 0.1% PVC per homogeneous material where applicable.	Antennae and radar covers are exempt from this restriction.
Nickel	7440-02-0	From 01/01/2016, for any products/parts intended to come into direct contact with skin (regardless of duration), the migration rate from the outer surface layer must not exceed 0.5µg/cm ² / week. The current version of test method EN1811 should be used. Note this migration rate applies for the reasonable duration of the product's life. Any foreseeable wearing of the outer surface should still meet the specified migration rate.	Note the restriction only applies to product/parts which come into direct contact with skin on a regular and ongoing basis as a result of product use. Products/parts with occasional and irregular skin contact are excluded.

MONITORING:

A monitoring programme should be in place for the following substances. R&D into the suitability of alternatives (technical performance + environmental/health impacts) is encouraged.

For monitored substances, the following information must be provided on request from Telefonica UK:

- i. details of whether the named substance is generally present in equipment supplied + main applications/locations;
- ii. formal timeline for phase-out or reduction. If no timeline is established, please indicate when this will be in place and what investigations you are conducting within your supply chain;
- iii. (iii) confirmation if you are undertaking any research into the suitability of alternatives in terms of technical performance and environmental/health impacts. Commercially sensitive details will not be required.

Substance	CAS	Monitoring requirement for network infrastructure equipment	Exemptions
Antimony compounds	Multiple e.g. 545386-98-9, 139598-41-7, 127153-81-5, 126426-74-2, 89899-81-0, 77824-44-3	Monitoring requirement as outlined above.	None.
Antimony trioxide	1309-64-4	Monitoring requirement as outlined above. Note there is no Telefonica UK restriction for network infrastructure equipment at present but a restriction is likely to be considered in the next revision.	None.
Beryllium and beryllium compounds	Multiple e.g. 7440-41-7, 1304-56-9, 12228-40-9, 7787-46-4, 543-81-7	Monitoring requirement as outlined above. Note there is currently a Telefonica UK restriction for BeO in network infrastructure equipment. Wider restrictions covering beryllium and its compounds are likely to be considered in the next revision.	None.
Bromine compounds	Multiple	Monitoring requirement as outlined above.	None.

Substance	CAS	Monitoring requirement for network infrastructure equipment	Exemptions
Chlorine compounds	Multiple	Monitoring requirement as outlined above.	None.
Chlorinated flame retardants (CFRs)	Multiple	Monitoring requirement as outlined above. Note there is no Telefonica UK restriction for network infrastructure equipment at present but a restriction is likely to be considered in the next revision.	None.
Phthalates	Multiple	Monitoring requirement as outlined above.	None.
Bisphenol A	80-05-7	Monitoring requirement as outlined above.	None.
Nonylphenols (NP) and Nonylphenol ethoxylates (NPEO)	25154-52-3 9016-45-9	Monitoring requirement as outlined above.	None.
Isocyanates	Multiple e.g. 822-06-0, 624-83-9, 101-68-8, 3173-72-6, 584-84-9	Monitoring requirement as outlined above.	None.
Short-chain chlorinated paraffins (SCCPs) C10 - C13 i.e. 10-13 carbon atoms	85535-84-8	Monitoring requirement as outlined above. Note EU legal restriction already exists. TEF UK will consider introducing more stringent restriction for SCCPs in network infrastructure equipment in the next revision if practically feasible.	None.

Substance	CAS	Monitoring requirement for network infrastructure equipment	Exemptions
Medium-chain chlorinated paraffins (MCCPs) C14-17 i.e. 14-17 carbon atoms	Multiple e.g. 85535-85-9	Monitoring requirement as outlined above. Note there is no Telefonica UK restriction for network infrastructure equipment at present but a restriction is likely to be considered in the next revision.	None.
Diarsenic pentaoxide Diarsenic trioxide	1303-28-2 1327-53-3	Monitoring requirement as outlined above. Note there is no Telefonica UK restriction for network infrastructure equipment at present but a restriction is likely to be considered in the next revision.	None.
Nanomaterials	n/a	Monitoring requirement: please report presence of nanomaterials and application.	None.
RoHS exemptions	n/a	Reporting requirement - please declare which RoHS exemptions are being used i.e. if any RoHS exemptions are being used in product lines within scope please list these exemptions. Note individual product-by-product information is not required.	N/a.