

BlackBerry Policy for Control of Substances in Products

BlackBerry

1. Overview

BlackBerry Limited and its subsidiaries and affiliates (“**BlackBerry**”) are concerned that certain substances can have adverse effects on human health or the environment. BlackBerry supports the precautionary principle and is continually investigating alternative and more sustainable materials. We abide by internally generated lists of banned, restricted and reportable substances (the “**BlackBerry Mandatory List**” and the “**BlackBerry Reportable List**”) for all parts, components, assemblies and materials (together “**Parts**”) used in BlackBerry products. The lists are adapted from the International Electrotechnical Commission’s International Standard IEC 62474 - Material Declaration for Products of and for the Electrotechnical Industry, the guidance of various regulatory and industry bodies regarding banning, restricting or reporting the use of hazardous substances (including, for example, the candidate list of Substances of Very High Concern announced by the European Chemicals Agency) and BlackBerry-specific requirements.

Our concern extends to our supply chain for Parts used in BlackBerry products. BlackBerry will work with our suppliers of Parts used in BlackBerry products (“**Suppliers**”) to continually improve the due diligence processes exercised regarding the Parts they supply to us. We expect our Suppliers to conduct their operations in an ethically, socially and environmentally responsible manner and in accordance with applicable law, BlackBerry’s Supplier Code of Conduct and this BlackBerry Policy for Control of Substances in Products (the “**Policy**”).

In selecting and retaining Suppliers, BlackBerry will take into consideration whether a Supplier can in an open and objective manner demonstrate its active pursuit of compliance with the Policy. Should a Supplier fail to demonstrate commitment to the Policy or fail to implement appropriate corrective actions to improve performance, BlackBerry will suspend making purchases from the Supplier, or, where appropriate, terminate its relationship with the Supplier.

This Policy does not limit or preclude the application of additional BlackBerry requirements to which Suppliers may be subject for the Parts they supply to BlackBerry.

2. Framework:

All Parts used in BlackBerry products must comply with this Policy. No Parts used in BlackBerry products shall contain any Substance on the Mandatory List or any Substance listed in the legal references in section 5 in an amount above the Upper Limit for that Substance as stated on the Mandatory List or in the legal reference. Where two different requirements exist, the most restrictive one will apply.

The **Mandatory and Reportable Lists** are comprised of two main elements, which specify each Substance, its control category and its acceptable Upper Limits (if any):

- The BlackBerry Mandatory List, as specified in the Appendix, identifies those Substances that are banned or restricted from use in BlackBerry products.

- The BlackBerry Reportable List, as specified in the Appendix, identifies those Substances that are not banned or restricted but which BlackBerry monitors and for which Suppliers are required to report. These Substances may be considered for later inclusion in the Mandatory List if BlackBerry deems it appropriate to do so based on scientific evidence of harm to human health or the environment or based on legislative requirements. Where a Supplier provides BlackBerry Parts to be used in BlackBerry products that contain any Substance on the Reportable List, the Supplier shall clearly report the presence of that Substance to BlackBerry.

3. Material Declarations and Testing Requirements:

Suppliers shall provide BlackBerry with a material declaration that fully discloses the substances in all homogenous level materials for all Parts they supply to BlackBerry. Suppliers shall submit such material declaration using IPC1752 XML format or the BlackBerry material declaration form, and submit it in both Excel and Adobe PDF formats, as directed by BlackBerry.

In addition to a material declaration, Suppliers shall provide analytical test reports, as directed by BlackBerry, for all Parts they supply to BlackBerry. These tests must be performed at the homogeneous level by an accredited lab using approved methods such as IEC-62321, EPA 3052, and BS EN 14582 (2007).

Suppliers shall exercise due diligence in confirming that the data in their material declarations is accurate, current and reflects each Part they supply to BlackBerry.

4. Additional Definitions:

“Article” shall have the definition assigned to that term in European Union Regulation (EC) No. 1907/2006 of the EU Parliament and of the Council of 18 Dec. 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and its amendments.

“Homogeneous Level Material” means a Material of uniform composition throughout that cannot be Mechanically Disjointed into different Materials. Examples of Homogeneous Level Materials include individual types of plastics, ceramics, glass, metals, alloys, paper, board, resins and coatings.

“Intentionally Added” means deliberate use in formulation of a Part or sub-Part where its continued presence is desired to provide a specific characteristic, appearance, attribute or quality.

“Material” is made up of one or more Substances (e.g. an alloy is a Material, which in turn is made up of a number of Substances).

“**Mechanically Disjointed**” means that a Material can, in principle, be separated by mechanical actions such as unscrewing, cutting, crushing, grinding or abrasive processes.

“**ppm**” means parts per million, a unit of measurement for weight percentage. 1ppm = 1mg/Kg.

“**Substance**” means a chemical element and its compounds (e.g. lead (chemical element), lead oxide (compound), polyvinyl chloride (compound)). Registry Numbers (RN) of the Chemical Abstracts System of the American Chemical Society (“CAS” numbers) and/or European Chemical (“EC” numbers) are attributed to all chemical elements and most of their compounds and should be used by Suppliers for their identification.

“**Upper Limit**” means the concentration level that defines the limit above which the presence of a Substance in a Part or Article shall be banned, restricted or reported in accordance with this Policy. Upper Limits in this Policy are provided in weight % and ppm. The conversion to calculate ppm is 0.1% weight = 1000 ppm. Where more than one set of Materials is involved resulting in different measurements for an Upper Limit of a Substance, the most restrictive one will apply.

5. External Specifications and Legislation:

Suppliers shall monitor and comply with the latest legislative amendments and updated industry guidance applicable to the Substances in the Parts they supply to BlackBerry. These include, but are not limited to, the following and their amendments:

- European Union Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (the ‘EU RoHS Directive Recast’).
- China RoHS – Administrative Measures on the Control of Pollution Caused by Electronic Information Products.
- Korea RoHS – The Act for Recycling of Electrical and Electronic Equipment and Automobiles, Bill Number 176319.
- European Union Directive 2006/122/ECOF relating to restrictions on the marketing and use of certain dangerous substances and preparations (perfluorooctane sulfonates and perfluorooctanyl sulfonates) (the ‘EU PFOS Directive’).
- Canada PFOS Regulations - The Perfluorooctane Sulfonate and its Salts and Certain Other Compounds Regulations (SOR/2008-178), the Perfluorooctane Sulfonate Virtual Elimination Act (S.C. 2008, c. 13), and the Regulations Adding

Perfluorooctane Sulfonate and Its Salts to the Virtual Elimination List (SOR/2009-15).

- The Canadian Environmental Protection Act, 1999 (CEPA 1999).
- European Union Decision 2009/251/EC requiring Member States to ensure that products containing the biocide dimethylfumarate (DMF) are not placed or made available on the market.
- California Safe Drinking Water and Toxic Enforcement Act of 1986 (also known as Proposition 65) restriction of lead (Pb) in polyvinyl chloride (PVC).
- European Union Regulation (EC) No. 1907/2006 of the EU Parliament and of the Council of 18 Dec. 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and its latest list of substances of very high concern (SVHC).
- The Montreal Protocol on Substances that Deplete the Ozone Layer and the United States Environmental Protection Agency's regulations issued under Sections 601-607 of the Clean Air Act to phase out the production and import of ozone-depleting substances, consistent with the schedules developed under the Montreal Protocol, and their amendments.
- European Union Directive 2006/66/EC on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC (the 'EU Battery Directive').
- JEDEC Solid State Technology Association and Electronic Components Association (ECA) Joint Standard JS709A of May 2012 defining "low halogen" electronic products.
- European Union Directive 94/62/EC on Packaging and Packaging Waste.
- International Electrotechnical Commission's International Standard IEC 62474 - Material Declaration for Products of and for the Electrotechnical Industry.

Appendix

Lists of Banned, Restricted and Reportable Substances

Mandatory List (Banned and Restricted)

No.	Substance	Control Category	Upper Limit (ppm in Homogeneous Level Material unless otherwise noted)	Application	Reference
1	Cadmium/Cadmium Compounds	Restricted	100	All, except batteries and packaging	EU RoHS Directive Recast 2011/65/EU
			20	Batteries	EU Battery Directive 2006/66/EC
2	Lead/Lead Compounds	Restricted	1000 ^(*)	All, except batteries and packaging	EU RoHS Directive Recast 2011/65/EU
			40	Batteries	EU Battery Directive 2006/66/EC
3	Mercury/Mercury Compounds	Restricted	1000	All, except batteries and packaging	EU RoHS Directive Recast 2011/65/EU
			5	Batteries	EU Battery Directive 2006/66/EC
4	Hexavalent Chromium/Hexavalent Chromium Compounds	Restricted	1000	All, except packaging	EU RoHS Directive Recast 2011/65/EU
5	Polybrominated Biphenyls (PBB)	Restricted	1000	All	EU RoHS Directive Recast 2011/65/EU
6	Polybrominated Diphenylethers (PBDEs) including Deca-BDE	Restricted	1000	All	EU RoHS Directive Recast 2011/65/EU
7	Azocolourants and Azodyes	Restricted	30	Textiles and leather articles which may come into contact with the human skin or oral cavity	EU REACH
8	Antimony Trioxide (CAS# 1309-64-4)	Restricted	1000	All	BlackBerry Requirement
9	Antimony Pentoxide (CAS# 1314-60-9)	Restricted	1000	All	BlackBerry Requirement

No.	Substance	Control Category	Upper Limit (ppm in Homogeneous Level Material unless otherwise noted)	Application	Reference
10	Dimethylfumarate (CAS# 624-49-7)	Restricted	0.1 mg/kg	All	EU 2009/251/EC
11	Lead in PVC	Restricted	100	All	BlackBerry Requirement
12	Beryllium/Beryllium Compounds	Restricted	50	All	BlackBerry Requirement
13	Bromine (Br) • Including all BFRs	Restricted	1000	All, except printed board laminates	JEDEC/ECA JS709A
			900	Printed board laminates	
14	Chlorine (Cl) • Including all CFRs ^(**) , PVCs and PVC-copolymers.	Restricted	1000	All, except, printed board laminates	JEDEC/ECA JS709A
			900	Printed board laminates	
15	Bromine (Br) + Chlorine (Cl) • All BFRs/CFRs ^(**) /PVCs and PVC-copolymers.	Restricted	1500	Printed board laminates	JEDEC/ECA JS709A
16	All unreacted borates and boron oxides	Restricted	0.1% of Article weight	All	EU REACH
17	Unreacted Tetraboron disodium heptaoxide, hydrate CAS# (12267-73-1)	Restricted	0.1% of Article weight	All	EU REACH
18	Bis (2-ethyl(hexyl) phthalate) (DEHP) (CAS# 117-81-7)	Restricted	0.1% of Article weight	All	EU REACH
19	Bis (2-methoxyethyl) phthalate (BMEP) (CAS# 117-82-8)	Restricted	0.1% of Article weight	All	EU REACH
20	Benzyl butyl phthalate (BBP) (CAS# 85-68-7)	Restricted	0.1% of Article weight	All	EU REACH
21	Dibutyl phthalate (DBP) (CAS# 84-74-2)	Restricted	0.1% of Article weight	All	EU REACH
22	Diisobutyl Phthalate (DIBP) (CAS# 84-69-5)	Restricted	0.1% of Article weight	All	EU REACH
23	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP) (CAS# 68515-42-4)	Restricted	0.1% of Article weight	All	EU REACH
24	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP) (CAS# 71888-89-6)	Restricted	0.1% of Article weight	All	EU REACH

No.	Substance	Control Category	Upper Limit (ppm in Homogeneous Level Material unless otherwise noted)	Application	Reference
25	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear) (CAS# 84777-06-0)	Restricted	0.1% of Article weight	All	EU REACH
26	Dipentyl Phthalate (DPP) (CAS# 131-18-0)	Restricted	0.1% of Article weight	All	EU REACH
27	N-pentyl-isopentyl Phthalate (CAS# 776297-69-9)	Restricted	0.1% of Article weight	All	EU REACH
28	Diisopentyl Phthalate (DIPP) (CAS# 605-50-5)	Restricted	0.1% of Article weight	All	EU REACH
29	Diisononyl Phthalate (DINP) (CAS# 28553-12-0)	Restricted	0.1% of Article weight	All	EU REACH
30	Organo-substituted tin compounds (for example, dibutyltin dichloride (DBT) or any trisubstituted tin halide)	Restricted	0.1% of Article weight	All	EU REACH
31	Hexabromocyclododecane (HBCDD) and all major diastereoisomers	Restricted	0.1% of Article weight	All	EU REACH
32	Perfluorooctanoic acid (PFOA) CAS# (335-67-1)	Restricted	50	All	BlackBerry Requirement
33	Perfluorooctanesulfone (PFOS) and its salts	Restricted	< 1000	All, except textiles or coated materials	EU PFOS Directive EUOF 2006/122/EC
			<1 µg/m ²	Textiles or coated materials	EU PFOS Directive EUOF 2006/122/EC
34	Ammonium pentadecafluorooctanoate (APFO) (CAS# 3825-26-1)	Restricted	0.1% of Article weight	All	EU REACH
35	Ozone Depleting Substances	Restricted	Intentionally Added	All	Montreal Protocol and EPA ODS
36	Radioactive Substances	Restricted	Intentionally Added	All	IEC 62474
37	Lead, Cadmium, Mercury, and Hexavalent Chromium compounds	Restricted	100 (the sum of concentration levels of the listed substances in each packaging or packaging component)	Packaging	EU 94/62/EC

No.	Substance	Control Category	Upper Limit (ppm in Homogeneous Level Material unless otherwise noted)	Application	Reference
38	Benzenamine, N-phenyl-, Reaction Products with Styrene and 2,4,4-Trimethylpentene (BNST) (CAS# 68921-45-9)	Restricted	50	Antioxidant additive used in lubricants	CEPA 1999
39	Trichloroethylene (CAS# 79-01-6)	Restricted	0.1% of Article weight	All	EU REACH
40	Diarsenic pentaoxide (CAS# 1303-28-2)	Restricted	0.1% of Article weight	All	EU REACH
41	Diarsenic trioxide (CAS# 1327-53-3)	Restricted	0.1% of Article weight	All	EU REACH
42	Trixylyl Phosphate (CAS# 25155-23-1)	Restricted	0.1% of Article weight	All	EU REACH
43	Nickel	Restricted	0.5 µg/cm ² /week for a period of at least two years of normal use of the article.	Parts which come into direct and prolonged contact with the skin	EU REACH
44	Short-chain Chlorinated Paraffins (C10-C13) (CAS# 85535-84-8)	Restricted	0.1% of Article weight	All	EU REACH
45	Medium-chain chlorinated paraffins, MCCPs (C14-17) (CAS# 85535-85-9)	Restricted	0.1% of Article weight	All	BlackBerry Requirement

(*) Except for valid exemptions pursuant to the EU RoHS Directive Recast 2011/65/EU

(**) Including but not limited to Polychlorinated Biphenyls (PCBs), Polychlorinated Terphenyls (PCTs), Polychlorinated Naphthalenes (PCN), Tris (2-chloroethyl) phosphate (TCEP), and Tris (2-chloroisopropyl) phosphate (TCPP).

Reportable List

No.	Substance	Control Category
1	Polycyclic Aromatic Hydrocarbons (PAHs)	Reportable
2	Asbestos	Reportable
3	Arsenic/Arsenic Compounds	Reportable
4	Bismuth/Bismuth Compounds	Reportable
5	Selenium/Selenium Compounds	Reportable
6	Bisphenol A (CAS# 80-05-7)	Reportable
7	Cobalt/Cobalt Compounds	Reportable
8	Any other phthalates not listed in the Mandatory List	Reportable
9	Rare Earth Elements (Scandium, Yttrium and Lanthanides family e.g. Lanthanum, Cerium, Neodymium, etc)	Reportable
10	Molybdenum (Mo)/Molybdenum Compounds	Reportable
11	Non-Ozone Depleting Global Warming Chemicals (e.g. Fluorinated Greenhouse Gases (PFC, SF6, HFC))	Reportable
12	Gold/Gold Compounds	Reportable
13	Tantalum/Tantalum Compounds	Reportable
14	Tin/Tin Compounds	Reportable
15	Tungsten/Tungsten Compounds	Reportable
16	Isocyanates	Reportable
17	Nonylphenols (NP)	Reportable
18	Nonylphenol ethoxylates (NPEO)	Reportable
19	Triphenyl phosphate (TPP)	Reportable