



Xerox Environment, Health and Safety Supplier Requirements: Chemical Bans/Restrictions and Part Marking

EHS 1001

Version 7.0
22 November 2010



Prepared by:
Xerox Corporation
Environment, Health and Safety
800 Phillips Road, Bldg. 0205-99F
Webster, New York 14580 USA
©2010 by Xerox Corporation. All rights reserved.

XEROX® and all Xerox product names mentioned in this publication are trademarks of XEROX CORPORATION.



Table of Contents

1 Introduction	5
1.1 Objective	5
1.2 Applicability	5
1.3 Responsibilities of Xerox Suppliers	5
1.4 Future Updates	5
1.5 Questions/Additional Information	5
2 Specification	6
2.1 Regulatory Compliance	6
2.2 Ozone Depleting Substances	6
2.3 Chemical Substance Bans and Restrictions	6
2.4 Parts Marking	6
2.5 Packaging	6
Appendix A	7
Xerox Specifications for Control of Chemical Substances in Products, Parts, Materials and Packaging	7
A.1 OBJECTIVE	7
A.2 DEFINITIONS	7
A.3 SPECIFICATIONS	8
A.3.i Prohibited Substances	8
RoHS ¹ Prohibited Substances	8
Other Prohibited Substances	9
TABLE A3. ROHS Exemptions	12
A.3.ii Reportable Substances (“Reportable” if intend to use)	18
Table B1. Xerox Reportable Substances	18
REACH Reportable Substances	19
Appendix B	20
Xerox Environment, Health and Safety Policy	20
Appendix C	21
EHS1001 Compliance Forms	21
Appendix D	22
Revision History	22





1 Introduction

1.1 Objective

This document establishes Xerox Corporation's environmental, health and safety (EH&S) requirements for its suppliers with regard to regulatory compliance, chemical bans and restrictions, and parts marking. The requirements support Xerox's commitment to regulatory compliance, safe products, protection of the environment/human health and customer satisfaction as stated in the company's corporate EH&S policy (Appendix B).

1.2 Applicability

Xerox Corporation's suppliers of products, materials, parts and packaging.

1.3 Responsibilities of Xerox Suppliers

Xerox suppliers:

- shall meet all requirements of this standard
- shall certify compliance with this specification using all forms in Appendix C
- shall retain information and/or data to demonstrate compliance with this specification including but not limited to the Xerox or supplier part number, part or material description, substance or substances disclosed, substance percentage used by weight, supplier certificates of compliance of components and materials, results of analysis and analytical source where applicable, and the name of a responsible person
- shall complete all forms when providing both new and updated component part information. Partial form completion, even when providing updates is not acceptable for our information management system.
- shall provide, upon request, Xerox and/or third parties responsible for verification with copies of the aforementioned information as well as any other applicable compliance documentation
- shall ensure that their suppliers also utilize socially responsible supply chain due diligence practices including but not limited to mining and smelting operations.
- shall have an Environmental Management System

1.4 Future Updates

Xerox will review this document on a periodic basis and will make any necessary revisions to ensure that these requirements remain relevant to current EH&S regulations, stakeholder requirements and industry practices. The changes are explained in Appendix D. Forms completed using earlier versions of this document remain valid unless new data is specifically requested.

1.5 Questions/Additional Information

Please direct any questions about these requirements to your Xerox procurement contact.



2 Specification

2.1 Regulatory Compliance

Suppliers shall comply with all applicable EH&S laws and regulations in the jurisdictions in which they operate and shall comply with all EH&S laws and regulations applicable to the product, part, material, packaging or commodity provided to Xerox.

2.2 Ozone Depleting Substances

Supplier shall not incorporate an Ozone Depleting Substance (ODS) as defined by the Montreal Protocol and the US Environmental Protection Agency Clean Air Act Amendments of 1990 in the manufacture or processing of a product, part, or commodity provided to Xerox. A list of ODS' is available at <http://www.epa.gov/ozone/ods.html>.

2.3 Chemical Substance Bans and Restrictions

Supplier shall meet the *Xerox Specifications for Control of Chemical Substances in Products, Parts, Accessories, Materials and Packaging* as specified in Appendix A. Additional requirements apply to consumables; see Xerox Standards EHS-701 (chemical substances and mixtures) and EHS-1010 (paper and media). For Packaging, reference Xerox Standard EHS-710.

Supplier shall provide the weight (in grams) of each battery contained in any given part or product.

2.4 Parts Marking

Supplier shall mark plastic parts, assemblies and end-items provided to Xerox, with the resin content identification code as specified in Xerox Multinational Design Standard 88P215 "Methods and Requirements for Part Marking Identification" or ISO Standard 11469, "Plastics – Generic identification and marking of plastic parts". Note that this requirement applies to parts weighing more than 25 grams.

2.5 Packaging

- Supplier must comply with the requirements as defined in Xerox Standard EH&S-710, "EH&S Requirements for Packaging"
http://www.xerox.com/downloads/usa/en/f/FILE_EHSA_XRX_INFO_REQUIREMENTS_710.pdf
- This standard specifies the minimum environment, health, and safety requirements for packaging of products, parts, or materials shipped to any manufacturing site, distribution center or customer from suppliers or other Xerox locations.



Appendix A

Xerox Specifications for Control of Chemical Substances in Products, Parts, Materials and Packaging

A.1 OBJECTIVE

This appendix details Xerox Corporation's specifications for prohibiting and restricting certain chemical substances in products, parts, materials and packaging provided to Xerox for use in Xerox products. Additional requirements apply to Xerox consumables.

A.2 DEFINITIONS

Accessories: items not integral to, but necessary for, use of a product. Accessories include, but are not limited to, items such as power cords, finishers, feeders or product manuals.

Batteries: any source of electrical energy generated by direct conversion of electrical energy, and consisting of one or more primary battery cells (non-rechargeable) or of one or more secondary battery cells (rechargeable).

Consumables: items such as inks, toners, fuser lubricant or papers.

Electronic product: electrical and electronic equipment that is within the scope of the waste electrical and electronic equipment Directive 2002/96/EC and/or the restriction of the use of certain hazardous substances in electrical and electronic equipment Directive 2002/95/EC.

Impurity: residual quantities of chemical substances that are unintentionally present in raw materials or are by-products of the manufacturing process.

Ingredient: any chemical substance intentionally used in the formulation of a material for use in the manufacture of electrical and electronic products or components thereof.

Material: any chemical substance or homogeneous mixture of substances.

New product: any piece of equipment put on the market for the first time, regardless of the date of launch of the particular model, and supplied as new.

Packaging: refers to containment for the purposes of marketing, protection or handling of a product and shall include a unit package, an intermediate package and a shipping container.

Part: any functional unit comprised of one or more mechanical or electrical components.

Put on the market: the initial action by which a product is made available for the first time, i.e. leaves the factory or enters distribution, in the applicable territory.

Re-used product: any piece of equipment that has already been placed for the first time on the applicable market and is then supplied as used or previously owned, without modification other than repair, reconditioning or upgrade.

Spare parts: any part made available for replacement of like parts in existing equipment.



A.3 SPECIFICATIONS

A.3.i Prohibited Substances

The substances listed in Tables A1 and A2 shall not be used as ingredients in any material or part provided to Xerox for use in equipment, or in spare parts for use in products, or in accessories, or in packaging except as defined by further qualification or exemptions. Additional requirements apply to Xerox consumables as outlined in EH&S 701 Xerox Environment, Health and Safety Requirements for Materials.

RoHS¹ Prohibited Substances:

Table A1 covers European Union RoHS prohibited or banned substances. These requirements apply to electronic products put into distribution for the first time after July 1, 2006 and/or parts and materials intended for use in electronic products put into distribution for the first time after July 1, 2006. Xerox only allows the use of these prohibited materials for applications that have been determined by the European Union to be exempt because substitutes are technically infeasible at this time or because substitutes would have adverse safety or environmental effects.

A list of approved RoHS exemptions may be found in Table A3.

Table A1. RoHS Prohibited Substances

Substance	Qualification
Cadmium and its compounds	Prohibited unless its application is exempted per ROHS ¹ . The substances shall not be present in concentrations exceeding 0.01% by weight per homogeneous material used in parts or products ² .
Hexavalent Chromium and its compounds	Prohibited unless its application is exempted per ROHS ¹ . The substances shall not be present in concentrations exceeding 0.1% by weight per homogeneous material used in parts or products ² .
Lead and its compounds	Prohibited unless its application is exempted per ROHS ¹ . The substances shall not be present in concentrations exceeding 0.1% by weight per homogeneous material used in parts or products ² .
Mercury and its compounds	Prohibited unless its application is exempted per ROHS ¹ . The substances shall not be present in concentrations exceeding 0.1% by weight per homogeneous material used in parts or products ² .
Polybrominated biphenyls (PBBs)	The substances shall not be present in concentrations exceeding 0.1% by weight per homogeneous material used in parts or products ² .
Polybrominated diphenylether (PBDEs) including deca-BDE	The substances shall not be present in concentrations exceeding 0.1% by weight per homogeneous material used in parts or products ² .

¹ EU Directive 2002/95/EC on the restrictions of the use of hazardous substances in electrical and electronic equipment (RoHS)

² EU Decision 2005/618/EC establishing the maximum concentration values for ROHS. Homogeneous material means a material that can not be mechanically disjointed into different materials. The term "homogeneous" means "of uniform composition throughout", for example individual types of plastics, ceramics, glass, metals, alloys, paper, board, resins, plating, coating and finishes. The term



Other Prohibited Substances

Applies to any material or part provided to Xerox for use in equipment, or in spare parts for use in products, or in accessories, or in packaging

Table A2. Other Prohibited Substances in Xerox products, parts, materials, accessories and packaging

Substance	Qualification	Reference
Asbestos and asbestos materials	Shall not be an ingredient.	Annex XVII of EU REACH 1907/2006, formerly 76/769/EEC*, Marketing and Use of Dangerous Substances and amendments: (83/478/EEC; 85/610/EEC; 87/217/EEC; 91/659/EEC; 99/77/EEC). United States: Toxic Substances Control Act (restricts new uses);
Azo Colorants	Shall not be an ingredient if chemical breakdown results in release of aromatic amines listed in Directive 2002/61/EC.	Annex XVII of EU REACH 1907/2006, formerly 76/769/EEC, Marketing and Use of Dangerous Substances and amendments: (2002/61/EC; 2003/03/EEC).: http://europa.eu.int/eurlex/pt/en/oj/dat/2002/l_243/l_24320020911en00150018.pdf ; Blue Angel Eco-Logo
Benzene	Shall not be an ingredient, or present as an impurity in concentrations $\geq 0.1\%$ by weight.	Annex XVII of EU REACH 1907/2006, formerly 76/769/EEC, Marketing and Use of Dangerous Substances, Blue Angel Eco-Logo
Cadmium and its compounds	In non-electronic products and accessories : banned from use as pigment, dye, or stabilizer in concentrations greater than 0.01% by weight . In packaging : the sum of the concentration levels of incidentally introduced lead, cadmium, mercury and hexavalent chromium must be less than 100 parts per million. In batteries : banned in concentrations =0.002% by weight	Annex XVII of EU REACH 1907/2006, formerly 76/769/EEC, Marketing and Use of Dangerous Substances and amendments: (91/338/EEC, 2006/66/EC, 93/86/EEC); 2002/95/EC (EU/RoHS Directive and its amendments) ; China Management Measures on EIP Pollution Control; EU Battery Directive 2006/66/EC; EU Packaging & Packaging Waste Directive 94/62/EC Article 11
Cobalt Dichloride (7646-79-9)	Shall not be an ingredient in concentrations greater than 0.1% by weight in products, parts or packaging.	EU REACH 1907/2006, formerly amendment 2001/90/EC of 76/769/EEC, Marketing and Use of Dangerous Substances

“mechanically disjointed” means that the materials can be, in principle, separated by mechanical actions such as for example: unscrewing, cutting, crushing, grinding and abrasive processes.



Substance	Qualification	Reference
Fluorinated Greenhouse Gases (PFC, SF6, HFC (6 or fewer carbon atoms))	Shall not be an intentionally added ingredient in non-refillable containers and non-confined direct evaporation systems containing refrigerants. Shall meet all requirements of EC 842/2006.	EC No 842/2006
Formaldehyde	Shall not exceed specified emission limits for composite wood products. Wood packaging materials, including pallets, are exempt from these requirements. See Table A2.1 for specific emission limits.	California Code of Regulations Sections 93120-93120.12, Title 17.
Halogenated Materials (brominated flame retardants, chlorinated flame retardants, PVC)	Shall not be intentionally added ingredients in external plastic casings or enclosures. PVC shall not be used in packaging.	Xerox Requirement
Hexachlorobenzene	Shall not be an intentionally added ingredient.	Xerox Requirement Canada - Prohibition of Certain Toxic Substances Regulations, 2005.
Hexavalent Chromium and its compounds	In packaging : the sum of the concentration levels of incidentally introduced lead, cadmium, mercury and hexavalent chromium must be less than 100 parts per million.	2002/95/EC (EU RoHS Directive and its amendments); China Management Measures on EIP Pollution Control; EU Packaging & Packaging Waste Directive 94/62/EC Article 11
Inorganic Cyanide Compounds	Shall not be intentionally added ingredients. See Table A2.2 for a specific list of compounds.	Xerox Requirement
Lead and its compounds	Banned from use in paints or as a stabilizer in concentrations greater than 0.01% by weight. In packaging : the sum of the concentration levels of incidentally introduced lead, cadmium, mercury and hexavalent chromium must be less than 100 parts per million. In batteries : requires marking with the chemical symbol if concentrations $\geq 0.004\%$ by weight.	Annex XVII of EU REACH 1907/2006, formerly 76/769/EEC, Marketing and Use of Dangerous Substances and amendments: (86/677/EEC, 2006/66/EC, 93/86/EEC); 2000/53/EC 2002/95/EC (EU/RoHS Directive and its amendments), China Management Measures on EIP Pollution Control; EU Battery Directive 2006/66/EC; EU Packaging & Packaging Waste Directive 94/62/EC Article 11;
Mercury and its compounds	In packaging : the sum of the concentration levels of incidentally introduced lead, cadmium, mercury and hexavalent chromium must be less than 100 parts per million. In batteries : banned in concentrations $\geq 0.0005\%$ by weight In button batteries : banned in concentrations $>2\%$ by weight	Annex XVII of EU REACH 1907/2006, formerly 76/769/EEC, Marketing and Use of Dangerous Substances and amendments: (86/677/EEC, 2006/66/EC, 98/101/EEC; 2002/95/EC (EU/RoHS Directive and its amendments); EU Battery Directive 2006/66/EC; EU Packaging & Packaging Waste Directive 94/62/EC Article 11
Ozone Depleting Substances (ODS)	Shall not be ingredients and shall not be used to manufacture components supplied to Xerox	List of ODS' available at http://www.epa.gov/ozone/ods.html
Pentachlorophenol	Shall not be an intentionally added ingredient. Prohibited in the treatment of wood.	Annex XVII of EU REACH 1907/2006, formerly 76/769/EEC, Marketing and Use of Dangerous Substances with amendment, 1999/51/EC



Substance	Qualification	Reference
Perfluorooctane sulfonate (PFOS) and its salts	Shall not be an intentionally added ingredient in preparations in concentrations of = 0.005% by weight.	Annex XVII of EU REACH 1907/2006, formerly 76/769/EEC, Marketing and Use of Dangerous Substances and amendment 2006/122/EC: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:372:0032:0034:EN:PDF
Perfluorooctanoic acid (PFOA) and its salts	Shall not be an intentionally added ingredient in semi-finished products or articles, or parts at concentrations = 0.1% by weight calculated with reference to the mass of structurally or microstructurally distinct parts.	Canadian Environmental Protection Act, P.C. 2008-974 Xerox Requirement
Phenol,2-(2H-benzotriazol-2-yl)-4,6-bis (1,1-dimethylethyl)- (CAS# 3846-71-7)	Shall not be an intentionally added ingredient.	Japanese law concerning the evaluation of chemical substances
Polychlorinated Biphenyls (PCBs)	Shall not be intentionally added ingredients.	The Law concerning the Examination and Regulation of Manufacture etc. of Chemical Substances (Class 1 chemical substances: Japanese law), Annex XVII of EU REACH 1907/2006, formerly 76/769/EEC, Marketing and Use of Dangerous Substances with amendment 85/478/EEC
Polychlorinated Naphthalenes (more than three chlorine atoms)	Shall not be intentionally added ingredients.	The Law concerning the Examination and Regulation of Manufacture etc. of Chemical Substances (Class 1 chemical substances: Japanese law).
Polychlorinated terphenyl (PCTs)	Shall not be intentionally added ingredients.	The Law concerning the Examination and Regulation of Manufacture etc. of Chemical Substances (Class 1 chemical substances: Japanese law), Annex XVII of EU REACH 1907/2006, formerly 76/769/EEC, Marketing and Use of Dangerous Substances with amendment 85/478/EEC.
Polyvinyl chloride (packaging)	Shall not be used for plastic packaging	Xerox Requirement ; Blue Angel
Radioactive Substances	Shall not be ingredients.	U.S. Nuclear Regulatory Commission Title10 CFR Part 20 (Annex C). Laws for the Regulation of Nuclear Source Material, Nuclear Fuel Material, and Reactors, 1986 (Japanese law)
Short Chain Chlorinated Paraffins (C10-C13)	Shall not be intentionally added ingredients.	EU REACH 1907/2006



Substance	Qualification	Reference
Tin Compounds Trisubstituted organostannic compounds (includes tributyl tin (TBT) and triphenyl tin (TPT)) Tributyl Tin Oxide (TBTO) Dibutyl Tin (DBT) compounds Dioctyl Tin (DOT) compounds	Shall not be intentionally added ingredients.	Commission Decision 2009/425/EC The Law concerning the Examination and Regulation of Manufacture etc. of Chemical Substances (Class 2 chemical substances: Japanese law); Class 1 chemical substances Japanese law and REACH candidate list - TBTO) Amendment to EU Directive 76/769/EEC, effective 2012. Annex XVII of EU REACH 1907/2006

Table A2.1 – State of California Phase 1 and Phase 2 Formaldehyde Emission Standards

State of California Phase 1 and Phase 2 Formaldehyde Emission Standards for **Hardwood Plywood (HWPW), Particleboard (PB), and Medium Density Fiberboard (MDF) – Phase 1 (P1) and Phase 2 (P2) Emission Standards (ppm)**

Effective Date	HWPW-VC	HWPW-CC	PB	MDF	Thin MDF
1-1-2009	P1: 0.08	-----	P1: 0.18	P1: 0.21	P1: 0.21
7-1-2009	-----	P1: 0.08	-----	-----	-----
1-1-2010	P2: 0.05	-----	-----	-----	-----
1-1-2011	-----	-----	P2: 0.09	P2: 0.11	-----
1-1-2012	-----	-----	-----	-----	P2: 0.13
7-1-2012	-----	P2: 0.05	-----	-----	-----

Based on primary test method [ASTM E 1333-96(2002) in parts per million (ppm)
 Note: HWPW-VC=vener core; HWPW-CC=composite core

Table A2.2 – Inorganic Cyanide Compounds

No.	Chemical Name	CAS Number	Formula
1	Hydrogen cyanide	74-90-8	HCN
2	Sodium cyanide	143-33-9	NaCN
3	Potassium cyanide	151-50-8	KCN
4	Silver cyanide	506-64-9	AgCN
5	Cyanogen bromide	506-68-3	BrCN
6	Barium cyanide	542-62-1	Ba(CN) ₂
7	Copper cyanide	544-92-3	CuCN
8	Nickel cyanide	557-19-7	Ni(CN) ₂
9	Zinc cyanide	557-21-1	Zn(CN) ₂
10	Barium tetracyanoplatinate	562-81-2	BaPt(CN) ₄
11	Dipotassium tetracyanomercurate	591-89-9	K ₂ Hg(CN) ₄
12	Calcium cyanide	592-01-8	Ca(CN) ₂
13	Mercury dicyanide	592-04-1	Hg(CN) ₂
14	Lead dicyanide	592-05-2	Pb(CN) ₂
15	Copper cyanide	4367-08-2	Cu(CN) ₂
16	Potassium dicyanocuprate	13682-73-0	CuK(CN) ₂
17	Potassium cobaltic cyanide	13963-58-1	K ₃ Co(CN) ₆
18	Potassium dicyanoaurate	13967-50-5	KAu(CN) ₂
19	Sodium copper cyanide	14264-31-4	Na ₂ Cu(CN) ₃
20	Copper dicyanide	14763-77-0	Cu(CN) ₂



21	Potassium nickel cyanide	39049-81-5	$K_2Ni(CN)_3$
----	--------------------------	------------	---------------

TABLE A3. ROHS Exemptions³

Note: For the purposes of Article 5(1)(a) of Directive 2002/95/EC, a maximum concentration value of 0,1 % by weight in homogeneous materials for lead, mercury, hexavalent chromium, polybrominated biphenyls (PBB) and polybrominated diphenyl ethers (PBDE) and of 0,01 % by weight in homogeneous materials for cadmium shall be tolerated."

Substance	Exemption #	Exemption Description	Exemption Expiration
Mercury, Lead, Hexavalent Chromium, Cadmium, PBDEs, PBBs	---	Spare parts for use in electronic products first put on the EU marketplace before 1 July 2006. Parts for upgrading the functionality or extending the capacity of electronic products first put on the EU marketplace before 1 July 2006. Re-used electrical and electronic products first put on the EU marketplace before 1 July 2006.	
Mercury	1(a)	Mercury in single capped (compact) fluorescent lamps not exceeding (per burner): For general lighting purposes < 30 W: 5 mg	Expires on 31 December 2011; 3,5 mg may be used per burner after 31 December 2011 until 31 December 2012; 2,5 mg shall be used per burner after 31 December 2012
	1(b)	Mercury in single capped (compact) fluorescent lamps not exceeding (per burner): For general lighting purposes >= 30 W and < 50 W: 5 mg	Expires on 31 December 2011; 3,5 mg may be used per burner after 31 December 2011
	1(c)	Mercury in single capped (compact) fluorescent lamps not exceeding (per burner): For general lighting purposes >= 50 W and < 150 W: 5 mg	
	1(d)	Mercury in single capped (compact) fluorescent lamps not exceeding (per burner): For general lighting purposes >= 150 W: 15 mg	
	1(e)	Mercury in single capped (compact) fluorescent lamps not exceeding (per burner): For general lighting purposes with circular or square structural shape and tube diameter <= 17 mm	No limitation of use until 31 December 2011; 7 mg may be used per burner after 31 December 2011
	1(f)	Mercury in single capped (compact) fluorescent lamps not exceeding (per burner): For special purposes: 5 mg	
	2(a)(1)	Mercury in double-capped linear fluorescent lamps for general lighting purposes not exceeding (per lamp): Ti-band phosphor with normal lifetime and a tube diameter < 9 mm (e.g. T2): 5 mg	Expires on 31 December 2011; 4 mg may be used per lamp after 31 December 2011

³ EU Directive 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS). These exemptions are consistent with Commission Decision and Corrigenda 2010/ 571/EU of 24th September 2010.

Mercury	2(a)(2)	Mercury in double-capped linear fluorescent lamps for general lighting purposes not exceeding (per lamp): Ti-band phosphor with normal lifetime and a tube diameter >= 9 mm and <= 17 mm (e.g. T5): 5 mg	Expires on 31 December 2011; 3 mg may be used per lamp after 31 December 2011
	2(a)(3)	Mercury in double-capped linear fluorescent lamps for general lighting purposes not exceeding (per lamp): Ti-band phosphor with normal lifetime and a tube diameter > 17 mm and <= 28 mm (e.g. T8): 5 mg	Expires on 31 December 2011; 3,5 mg may be used per lamp after 31 December 2011
	2(a)(4)	Mercury in double-capped linear fluorescent lamps for general lighting purposes not exceeding (per lamp): Ti-band phosphor with normal lifetime and a tube diameter > 28 mm (e.g. T12): 5 mg	Expires on 31 December 2012; 3,5 mg may be used per lamp after 31 December 2012
	2(a)(5)	Mercury in double-capped linear fluorescent lamps for general lighting purposes not exceeding (per lamp): Ti-band phosphor with long lifetime (>= 25000 h): 8 mg	Expires on 31 December 2011; 5 mg may be used per lamp after 31 December 2011
	2(b)(1)	Mercury in other fluorescent lamps not exceeding (per lamp): Linear halophosphate lamps with tube > 28 mm (e.g. T10 and T12): 10 mg	Expires on 13 April 2012
	2(b)(2)	Mercury in other fluorescent lamps not exceeding (per lamp): Non-linear halophosphate lamps (all diameters): 15 mg	Expires on 13 April 2016
	2(b)(3)	Mercury in other fluorescent lamps not exceeding (per lamp): Non-linear ti-band phosphor lamps with tube diameter > 17 mm (e.g. T9)	No limitation of use until 31 December 2011; 15 mg may be used per lamp after 31 December 2011
	2(b)(4)	Mercury in other fluorescent lamps not exceeding (per lamp): Lamps for other general lighting and special purposes (e.g. induction lamps)	No limitation of use until 31 December 2011; 15 mg may be used per lamp after 31 December 2011
	3(a)	Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for special purposes not exceeding (per lamp): Short length (<= 500 mm)	No limitation of use until 31 December 2011; 3,5 mg may be used per lamp after 31 December 2011
	3(b)	Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for special purposes not exceeding (per lamp): Medium length (> 500 mm and <= 1500 mm)	No limitation of use until 31 December 2011; 5 mg may be used per lamp after 31 December 2011

Mercury	3(c)	Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for special purposes not exceeding (per lamp): Long length (> 1500 mm)	No limitation of use until 31 December 2011; 13 mg may be used per lamp after 31 December 2011
	4(a)	Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for special purposes not exceeding (per lamp): Mercury in other low pressure discharge lamps (per lamp)	No limitation of use until 31 December 2011; 15 mg may be used per lamp after 31 December 2011
	4(b)-I	Mercury in High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner) in lamps with improved colour rendering index $R_a > 60$: P ≤ 155 W	No limitation of use until 31 December 2011; 30 mg may be used per burner after 31 December 2011
	4(b)-II	Mercury in High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner) in lamps with improved colour rendering index $R_a > 60$: 155 W < P ≤ 405 W	No limitation of use until 31 December 2011; 40 mg may be used per burner after 31 December 2011
	4(b)-III	Mercury in High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner) in lamps with improved colour rendering index $R_a > 60$: P > 405 W	No limitation of use until 31 December 2011; 40 mg may be used per burner after 31 December 2011
	4(c)-I	Mercury in other High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner): P ≤ 155 W	No limitation of use until 31 December 2011; 25 mg may be used per burner after 31 December 2011
	4(c)-II	Mercury in other High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner): 155 W < P ≤ 405 W	No limitation of use until 31 December 2011; 30 mg may be used per burner after 31 December 2011
	4(c)-III	Mercury in other High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner): P > 405 W	No limitation of use until 31 December 2011; 40 mg may be used per burner after 31 December 2011
	4(d)	Mercury in High Pressure Mercury (vapour) lamps (HPMV)	Expires on 13 April 2015
	4(e)	Mercury in metal halide lamps (MH)	
4(f)	Mercury in other discharge lamps for special purposes not specifically mentioned in this Annex		
Lead	5(a)	Lead in glass of cathode ray tubes	
	5(b)	Lead in glass of fluorescent tubes not exceeding 0,2 % by weight	



Lead	6(a)	Lead as an alloying element in steel for machining purposes and in galvanized steel containing up to 0,35 % lead by weight	
	6(b)	Lead as an alloying element in aluminium containing up to 0,4 % lead by weight	
	6(c)	Copper alloy containing up to 4 % lead by weight	
	7(a)	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)	
	7(b)	Lead in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signalling, transmission, and network management for telecommunications	
	7(c)-I	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectric devices, or in a glass or ceramic matrix compound	
	7(c)-II	Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher	
	7(c)-III	Lead in dielectric ceramic in capacitors for a rated voltage of less than 125 V AC or 250 V DC	Expires on 1 January 2013 and after that date may be used in spare parts for EEE placed on the market before 1 January 2013
	9(b)	Lead in bearing shells and bushes for refrigerant-containing compressors for heating, ventilation, air conditioning and refrigeration (HVACR) applications	
	11(a)	Lead used in C-press compliant pin connector systems	May be used in spare parts for EEE placed on the market before 24 September 2010
	11(b)	Lead used in other than C-press compliant pin connector systems	Expires on 1 January 2013 and after that date may be used in spare parts for EEE placed on the market before 1 January 2013
	12	Lead as a coating material for the thermal conduction module C-ring	May be used in spare parts for EEE placed on the market before 24 September 2010
	13(a)	Lead in white glasses used for optical applications	

Lead	14	Lead in solders consisting of more than two elements for the connection between the pins and the package of microprocessors with a lead content of more than 80 % and less than 85 % by weight	Expires on 1 January 2011 and after that date may be used in spare parts for EEE placed on the market before 1 January 2011
	15	Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages	
	16	Lead in linear incandescent lamps with silicate coated tubes	Expires on 1 September 2013
	17	Lead halide as radiant agent in high intensity discharge (HID) lamps used for professional reprography applications	
	18(a)	Lead as activator in the fluorescent powder (1 % lead by weight or less) of discharge lamps when used as speciality lamps for diazoprinting reprography, lithography, insect traps, photochemical and curing processes containing phosphors such as SMS ((Sr,Ba)2MgSi2O7:Pb)	Expires on 1 January 2011
	18(b)	Lead as activator in the fluorescent powder (1 % lead by weight or less) of discharge lamps when used as sun tanning lamps containing phosphors such as BSP (BaSi2O5:Pb)	
	19	Lead with PbBiSn-Hg and PbInSn-Hg in specific compositions as main amalgam and with PbSn-Hg as auxiliary amalgam in very compact energy saving lamps (ESL)	Expires on 1 June 2011
	20	Lead oxide in glass used for bonding front and rear substrates of flat fluorescent lamps used for Liquid Crystal Displays (LCDs)	Expires on 1 June 2011
	23	Lead in finishes of fine pitch components other than connectors with a pitch of 0,65 mm and less	May be used in spare parts for EEE placed on the market before 24 September 2010
	24	Lead in solders for the soldering to machined through hole discoidal and planar array ceramic multilayer capacitors	
	25	Lead oxide in surface conduction electron emitter displays (SED) used in structural elements, notably in the seal frit and frit ring	
	26	Lead oxide in the glass envelope of black light blue lamps	Expires on 1 June 2011

Lead	27	Lead alloys as solder for transducers used in high-powered (designated to operate for several hours at acoustic power levels of 125 dB SPL and above) loudspeakers	<u>Expired on 24 September 2010</u>
	29	Lead bound in crystal glass as defined in Annex I (Categories 1, 2, 3 and 4) of Council Directive 69/493/EEC [1]	
	31	Lead in soldering materials in mercury free flat fluorescent lamps (which e.g. are used for liquid crystal displays, design or industrial lighting)	
	32	Lead oxide in seal frit used for making window assemblies for Argon and Krypton laser tubes	
	33	Lead in solders for the soldering of thin copper wires of 100 µm diameter and less in power transformers	
	34	Lead in cermet-based trimmer potentiometer elements	
	37	Lead in the plating layer of high voltage diodes on the basis of a zinc borate glass body	
Lead and Cadmium	21	Lead and cadmium in printing inks for the application of enamels on glasses, such as borosilicate and soda lime glasses	
Cadmium	8(a)	Cadmium and its compounds in one shot pellet type thermal cut-offs	Expires on 1 January 2012 and after that date may be used in spare parts for EEE placed on the market before 1 January 2012
	8(b)	Cadmium and its compounds in electrical contacts	
	13(b)	Cadmium and lead in filter glasses and glasses used for reflectance standards	
	30	Cadmium alloys as electrical/mechanical solder joints to electrical conductors located directly on the voice coil in transducers used in high-powered loudspeakers with sound pressure levels of 100 dB (A) and more	
	38	Cadmium and cadmium oxide in thick film pastes used on aluminium bonded beryllium oxide	
	39	Cadmium in colour converting II-VI LEDs (< 10 µg Cd per mm ² of light-emitting area) for use in solid state illumination or display systems	Expires on 1 July 2014



Hexavalent chromium	9	Hexavalent chromium as an anticorrosion agent of the carbon steel cooling system in absorption refrigerators up to 0,75 % by weight in the cooling solution	
---------------------	---	---	--



A.3.ii Reportable Substances (“Reportable” if intend to use)

The following substances (Table B1) have been shown to have the potential to cause adverse health effects, the potential to generate hazardous waste, have supply chain limitations or have unknown health and environment impacts

If a “reportable” material is considered for use in equipment, spare parts, or accessories it must be reported to Xerox using form EHS-1001B.

Additional requirements apply to Xerox consumables as defined in Xerox EH&S Standard 701 for Materials.

Table B1. Xerox Reportable Substances

Antimony and its compounds
Arsenic and its compounds
Beryllium and its compounds
Nickel and its compounds
Halogenated Materials (e.g. Brominated Flame Retardants (BFRs), Chlorinated Flame Retardants (CFRs), plasticizers, and Polyvinylchloride (PVC) Note: PBBs, PBDEs, SCCPs and PVC in packaging are prohibited
Phthalate (DINP)
Phthalate (DIDP)
Phthalate (DNOP)
Selenium and its compounds



REACH Reportable Substances

EU REACH Regulation 1907/2006 designates certain chemicals as “substances of very high concern” Use of these substances in Xerox parts, accessories or consumables is to be reported to Xerox using form EHS1001C. In some instances, individual substances are already prohibited from use in products or parts supplied to Xerox, as outlined in Tables A1 and A2.

Important Note

The number of substances of very high concern will increase in time as the European Chemicals Agency adds substances to its Candidate List. The Candidate List will be updated periodically and therefore it is essential that suppliers inform themselves of the latest position, since this is updated by the European Chemicals Agency every six months. Information on the latest list of substances of very high concern is available through the European Chemicals Agency website via the link below.

When completing Xerox EHS-1001 Form C, “Supplier Use of REACH Substances”, Xerox requires its suppliers to be aware of the latest candidate list and to report accordingly. Suppliers are required to inform Xerox of any changes / updates to their previous submissions should the reportable substance content change following future releases of the REACH candidate list.

The table of REACH substances of very high concern, chemical identifier numbers and date of inclusion can be accessed at the following website location:

http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp.



Appendix B

Xerox Environment, Health and Safety Policy

Xerox Corporation is committed to the protection of the environment and the health and safety of its employees, customers and neighbors. This commitment is applied worldwide. The following principles shall govern all business practices in the design, manufacture, procurement, marketing, distribution, maintenance, reuse/recycling and disposal of products and related services:

1. Protection of the environment and the health and safety of our employees, customers and neighbors from unacceptable risks takes priority over economic considerations and will not be compromised.
2. Xerox operations must be conducted in a manner that safeguards health, protects the environment, conserves valuable materials and resources, and minimizes risk of asset losses.
3. Xerox is committed to designing, manufacturing, distributing and marketing products and processes to optimize resource utilization, prevent pollution and minimize environmental impacts.
4. All Xerox operations and products are, at a minimum, committed to compliance with applicable governmental requirements and Xerox standards.
5. Xerox is dedicated to continuous improvement of its performance in environment, health and safety.



Appendix C

EHS1001 Compliance Forms

See separate attachments for these Compliance Forms:

- Form EHS-1001A Xerox Supplier Certification of Compliance for Prohibited or Banned Substances
- Form EHS-1001B Xerox Supplier Report of "Reportable" Substance Use
- Form EHS-1001C Xerox Supplier Certification of REACH Reportable Substances



Appendix D

Revision History

Date	Section	Change
October 2004, revision 2.1	VIA.4	Consumables removed from scope of standard
October 2004, revision 2.1	Appendix B2	Table B3 changed to "reportable substances" and list reduced to relevant metals and compounds in hazardous waste legislation (all organic compounds removed, bismuth added)
March 2005, revision 2.2	Table B2. ROHS Exemptions	Updated table with exemptions approved by EU Technical Advisory Committee on December 10, 2005
March 2005, revision 2.2	Appendix C	Revision to form EHS 1001A, B and C to clarify their intent and use
March 2005, revision 2.2	Table 1, Prohibited Substances	This table was split into Table 1A to reflect RoHS requirements only and Table 1B for other prohibited substances. This change was made to avoid confusion. The requirements remain the same.
March 2005, revision 2.2	Footnote, A.3.i	Revised to include the EU's definition of "homogenous substance".
March 2005, revision 2.2	Table 3	Nickel, Tin and Zinc compounds reinstated for hazardous waste purposes.
November 2005, revision 2.3	Table 1-A	Table and footnote revised for consistency with Decision 2005/618/EC and Commission guidance dated May 2005.
November 2005, revision 2.3	Table 2	Table revised to align the numbering system with that in the Annex to Directive 2002/95/EC, to include new listings from Commission guidance dated May 2005, and to adopt new exemptions in Decisions 2005/717/EC and 2005/747/EC. Footnote revised.
November 2005, revision 2.3	Table B3	Table revised to include radioactive substances, and flame retardants other than PBBs and PBDEs.
January 2006, revision 3.0	Table 1-B	Table revised to be consistent with Joint Industry Guide.
January 2006, revision 3.0	Table B3	Table revised to be consistent with Joint Industry Guide.
December 2006, revision 3.1	Table 2	Table revised to adopt new exemptions in Decisions 2006/310/EC, 2006/690/EC, 2006/691/EC and 2006/692/EC.
August 2007 revision 3.2	1.3	Added EMS responsibility.
	2.5	Added packaging requirements.
	A.2	Added definition of batteries.
	Table 1-B	Table revised to include ban on use of cadmium in portable batteries in Directive 2006/66/EC and updated to harmonized list. Added prohibition of halogen-containing plastics as packaging.
	Table 2	Table revised to remove exemption [28] on chromium passivation, which became obsolete on 1 July 2007.



June 6, 2008 revision 4.0	Tables 1A, 1B, 2, 3 and Forms EHS-1001A and EHS-1001B	<p>Table 1A - Specification that deca-BDE is prohibited was added under Polybrominated diphenylether (PBDEs)</p> <p>Table 1B - Hexachlorobenzene and Perfluorooctane Sulfonates were added</p> <p>Table 1B - Requirements for batteries was added under Cadmium, Lead and Mercury</p> <p>Table 1B - References were added</p> <p>Table 2 RoHS Exemptions - Exemption 9a for decaBDE in polymeric applications was removed</p> <p>Table B3 Reportable Substances - Added the following: BisphenolA, Indium, DEHP</p> <p>Table B3 Reportable Substances - Polybrominated Flame retardants now includes HBCDD and TBBPA</p> <p>Table B3 Reportable Substances - Added specification that use of PVC in packaging is prohibited</p> <p>Table B3 Reportable Substances - Changed "Nickel compound - not including the metallic element" to Nickel and its compounds</p> <p>Form EHS-1001A - Replaced column A.3.ii for reporting weight of component batteries, and removed exemption 9a</p> <p>Form EHS-1001B - Added columns for BisphenolA, Indium, DEHP</p> <p>Form EHS-1001B - Changed text in Polybrominated Flame retardants to include HBCDD and TBBPA</p>
December 1, 2008 revision 4.1	Table 1B Table B3	<p>Table 1B - Replaced 91/157/EEC with 2006/66/EC</p> <p>Table 1B - Specified marking requirement for batteries containing lead</p> <p>Tables 1B and 1C - Added specification for formaldehyde emissions</p> <p>Table 1D - Added table of inorganic cyanide compounds</p> <p>Table B3 - Replaced Diethylhexyl phthalates (DEHP) with Phthalates (including DEHP, BBP, DBP)</p>
March 31, 2009 revision 5.0	Table 1B Table B3 Table B4 and EHS1001C	<p>Appendix A.2 - added a definition for engineered nanomaterials</p> <p>Table A1 - Added references to Blue Angel</p> <p>Table A2 - Added Phenol,2-(2H-benzotriazol-2-yl)-4,6-bis (1,1-dimethylethyl), removed PBDO.</p> <p>Table B1 - Deleted HBCDD, DEHP, BBP and DBP as these are now included in Table C1. Risk assessment data has resulted in the delisting of TBBPA. Added DINP, DIDP, DNOP, TCEP and engineered nanomaterials.</p> <p>Table C1 - Added REACH substances of very high concern and associated EHS-1001C reporting form.</p> <p>Editorial changes to table numbering scheme</p>
June 15, 2009 revision 5.0 March 29, 2010 revision 6.0	Table A3 Table A2 Table B1 Table C1	<p>Added EU RoHS exemptions 30-38</p> <p>Updated to version 5, June 2009.</p> <p>Table A2 - Added cobalt dichloride, PFOA, fluorinated GHGs and select tin compounds</p> <p>Table A2 - Added threshold concentration for reporting and clarification regarding justification for listed substances.</p> <p>Table A3 - Added exemption #39 for cadmium.</p> <p>Section 2.3 - Added clarification to the scope of the standard.</p> <p>Table B1 - Deleted TCEP which is now included in Table C1; Deleted engineered nanomaterials and indium; added more specificity with respect to halogenated materials.</p> <p>Table C1 - Added additional REACH substances of very high concern and date of inclusion.</p> <p>Modified Appendix C (excel file) in alignment with Tables B1 and C1.</p>
September 30, 2010 Revision 6.1	Section 2.4 Table A2	<p>Section 1.3 - Added expectation that suppliers provide complete forms, partial data submissions are not acceptable. Added socially responsible supply chain due diligence expectation.</p> <p>Section 2.4 - Changed threshold to 25g</p> <p>Table A2 - Removed 1,2,2-trichloroethane</p> <p>Table A2 - Added halogenated materials in external enclosures.</p> <p>Table B1 - Removed bismuth and BPA.</p> <p>Table C1 - Added additional REACH svhc candidate substances.</p>
October 11, 2010	Table A3	Table A3 updated to reflect EU exemption review - Commission Decision and Corrigenda 2010/571/EU of 24 th Sept 2010