



Corporate Policy

Zebra Technologies Corporation Global Environmental Compliance Specification

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Revision History

REV	DESCRIPTION	DATE	AUTHOR	APPROVER
A	INITIAL DOCUMENT DEVELOPMENT	3/16/17	A. CARGES N. CLEMENTE	C. DERROW K. KNIZEK
A.1	SECTION A – UPDATES TO 3.0 (ADD 2015/863, EU BATTERY DIRECTIVE, REFERENCE), 4.0 (BSMI DEFINITION), 7.0 (ADD UNDOT, SRICI REQUIREMENT & REMOVED NO-MERCURY), TABLE 1 (ADDED IEC62321 STANDARD), AND APPENDIX A (SEVERAL AMENDMENTS)	9/13/18	A. CARGES N. CLEMENTE	C. DERROW K. KNIZEK

SECTION A
ZEBRA SUPPLIERS
CPZ-CE-010 – ZEBRA TECHNOLOGIES
CORPORATION GLOBAL ENVIRONMENTAL
COMPLIANCE SPECIFICATION
REVISION: A.1

1.0 PURPOSE

Establish and define the business requirements of Zebra Technologies Corporation and its subsidiaries (Zebra) on the restriction or prohibition of certain chemical compounds and materials on all purchased materials, parts, components, and purchased assemblies that Zebra sells or incorporates into Zebra finished products.

2.0 SCOPE

This specification sets forth Zebra's material disclosure requirements for items and materials used in the manufacture and delivery of products to Zebra and its customers.

Section A of this specification applies to all Suppliers who supply materials, assemblies or finished products to Zebra worldwide.

These restrictions include, but are not limited to, batteries, material content, packaging materials, product labeling, product collaterals and marking requirements and ozone depleting substance restrictions. Conformance to these specification requirements as outlined is mandatory for the design and manufacture of compliant Zebra products to global regulations and directives.

3.0 REFERENCES

DIRECTIVE 2011/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF

8 JUNE, 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (recast).

Commission Delegated Directive (EU) 2015/863 of
31 March 2015 amending Annex II to Directive 2011/65/EU of the European Parliament and of the Council regarding the list of restricted substances

DIRECTIVE 2012/19/EU OF THE EUROPEAN PARLIAMENT OF THE COUNCIL OF 4 JULY 2012 on the waste electrical and electronic equipment (WEEE) (recast)

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 (REACH)

International Electrochemical Commission (IEC) Standard IEC 62474; Material Declaration for Products of and for the Electrotechnical Industry

EUROPEAN UNION DIRECTIVE 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC (Text with EEA relevance) 26.9.2006 L266/1

Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants (POPs) and amending Directive 79/117/EEC

Regulation (EU) No 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the marking available on the market and use of biocidal products

Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer

Regulation (EU) No 517/2014 of the European Parliament and of the Council of 16 April 2014 on fluorinated greenhouse gases and repealing Regulation (EC) No 842/2006

European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste

Chinese recommended standards on the national level GB/T 18455-2010 “Packaging Recycling Marks”

ISO 18601:2013 General requirements for the use of ISO standards in the field of packaging and recycling

4.0 DEFINITIONS

4.1 Global Directives and Terms

BSMI	Bureau of Standards, Metrology and Inspection under the Ministry of Economic Affairs is the authority responsible for standardization, metrology and product inspection in Taiwan
CAS Number	or CAS (Chemical Abstract Service) Registry Number is a unique number identifying chemical substances
China RoHS	China’s Measures for the Administration on Restricted Use of Hazardous Substances in Electrical and Electronic Products, Order #32 of the Ministry of Industry and Information Technology, the National Development and Reform Commission, the Ministry of Science and Technology, the Ministry of Finance, the Ministry of Environmental Protection, the Ministry of Commerce, the General Administration of Quality Supervision, Inspection and Quarantine, promulgated on January 6, 2016 and effective from July 1, 2016 (also referred to as “China RoHS”). These new measures have superseded the previous Administrative Measures for Controlling Pollution by Electronic Information Products Order #39) effective from March 1, 2007. The new measures provide a framework for restricted use of hazardous substances, compliance / qualification assessment, labeling, and labeling requirements. All in-scope products must include labels indicating the presence of restricted hazardous substances and, if toxic substances are present, period of safe usage (EPUP number).
EPUP	Environmentally Friendly Use Period (EPUP). Term under China RoHS to provide the period for use or service life during which hazardous substances contained in electrical and electronic products (E-Products) will not leak out or suddenly change and will not cause pollution to the

environment or serious damage to the persons or property as a result of a user's normal use according to the product's manuals.

REACH	is the European Community Regulation on chemicals and their safe use (EC 1907/2006). It deals with R egistration, E valuation, A uthorization and Restriction of C hemical substances.
RoHS	European Directive on Restriction of the use of certain Hazardous Substances (2011/65/EU; recast) in electrical and electronic equipment
SVHC	Substances of Very High Concern as defined in the REACH regulation; see the current list on the ECHA website
WEEE	European Directive for Waste Electrical and Electronic Equipment (2012/19/EU)

4.2 Zebra Terms

FMD	Full Material Disclosure (FMD) is a declaration which gives all details of material and substances in a part
SCF	Simplified Compliance Form (SCF) is the tool suppliers will use when requested to provide a FMD to Zebra
Sub-Tier Supplier	Any company selling or providing a material or part that is incorporated into Zebra Technologies Corporation products but is not directly sold to Zebra Technologies Corporation.
Supplier	The Company selling or providing a material part, or assembly to Zebra Technologies Corporation that Zebra Technologies Corporation intends to use in its products. Supplier, Tier 1 Supplier, and vendor are used interchangeably.

4.3 Other Terms and Acronyms

Article	An object which during production is given a special shape, surface or design which determines its function to a greater degree than does its chemical composition. This definition is provided by EU Regulation 1907/2006 concerning REACH as interpreted by the Court of Justice of the European Union in its September 2015 decision.
Banned Substances	These substances are not allowed for use at any level unless noted as an exemption in the acceptance criteria; this ban is based upon a global regulation or directive.
BFR	Brominated Flame Retardant
CE Mark	A mandatory conformity mark for products placed on the market within European Economic Area. The placement of the CE marking by the manufacturer on the product ensures that the product conforms to the essential requirements of the applicable EU Directives (including EU RoHS).
CFR	Chlorinated Flame Retardant

Component	A combination of homogeneous materials that have been formed into a single manufactured part.
Controlled Substance	These substances are limited for use in the manufacturing process or in certain applications at the levels specified in Appendix A.
E-Products	Electrical and Electronic Products, referring to devices and accessory products with rated working electrical voltages of no more than 1,500 volts direct current and 1,000 volts alternating current which function in reliance on current or electromagnetic fields, or function for the purpose of generating, transmitting and measuring such currents and electromagnetic fields, but excluding electric power generating, transmitting and distributing equipment. The official list of E-Products will be specified in a China RoHS Compliance Management Catalogue, to be formulated, adjusted (from time to time) and issued by the Ministry of Industry and Information Technology upon consultation with other relevant government authorities. This China RoHS Compliance Management Catalogue will also specify a list of hazardous substances (of which the use shall be restricted), restrictive use periods, exceptions and other relevant contents.
Homogeneous Material	One material of uniform composition throughout or a material, consisting of a combination of materials, that cannot be disjointed or separated into different materials by mechanical actions such as unscrewing, cutting, crushing, grinding and abrasive processes. Examples of homogeneous materials include a plastic cover to a computer screen, a copper wire inside a cable, and the solder part of a solder joint. However, additives used in a polymerization process must be reported if they are identified in the Appendix A of this specification.
Intentionally Added	The deliberate use in the formulation of a product or subpart where its continued presence is desired in the final product or subpart to provide a specific characteristic, appearance, or quality. Metal plating is an example of intentional addition. If a listed material or substance is contained in products or subparts purchased by the Supplier and are incorporated, such materials/substances must be disclosed if the Supplier has knowledge (or with reasonable inquiry should have knowledge) of the presence of such materials or substances. When the material/substance is intentionally added, it needs to be reported regardless of its content level.
Material	Consisting of one or more substances (e.g. an alloy is material, which in turn is made up of a number of defined substances)
Nanomaterial	A substance (as defined in Article 3 of the Regulation EC No 1907/2006) intentionally manufactured to a nanometric scale and containing particles in an unbound state or as an aggregate or as an agglomerate and where, for a minimum proportion threshold of the particles in the number size distribution, one or more external dimensions is in the size range of 1 nm – 100 nm.

Nanometer (nm)	A unit of length in the metric system equal 1 billionth of a meter.
PPM	Parts per Million (measure of concentration)
PPB	Parts per Billion (measure of concentration)
Product	The item that the respondent is supplying and/or designing (e.g. assembly, subassembly, component, raw material) for a customer.
PVC	Polyvinyl Chloride
Reportable Substances	These substances are not currently banned or controlled for use but a ban or voluntary phase-out is likely or they have an impact on the end-of-life management of the finished product.
Reporting Threshold	Concentration level which defines the limit equal to or above which the presence of a substance or material must be reported.
Subpart	A sub-unit of a product
Substances	Chemical elements and their compounds (e.g., lead is a chemical element, lead oxide is a compound, polyvinyl chloride is a compound). Registry numbers (RN) of the Chemical Abstracts System of the American Chemical Society (CAS numbers) are attributed to all chemical elements and most of their compounds and should be used for their identification
Substance Concentration	Zebra uses parts per million (ppm) to express the concentration of substances. The formula for parts per million (ppm) is $1,000,000 * \text{mass substance} / \text{mass of the homogeneous material}$. Concentrations are unit-less, for example $100 \text{ ppm} = 0.01\% = 100 \text{ mg/kg}$.

5.0 RESPONSIBILITIES

5.1 Supplier Responsibilities

- 5.1.1 Comply with all requirements listed in this specification for all parts, products and assemblies sold to Zebra, including providing a Full Material Disclosure in Zebra's SCF.
- 5.1.2 Report Controlled and Reportable substances using the SCF as indicated in Appendix A.
- 5.1.3 Cascade Zebra's specification requirements to their downstream, or Sub-Tier Suppliers. Complete downstream, or Sub-Tier Supplier data input is required to determine completeness of material and substance data.

5.2 Testing Lab Data Collection Agency Responsibilities

- 5.2.1 A testing lab may use its own data collection tools and forms for collecting environmental data, including Full Material Declaration.
- 5.2.2 A testing lab will provide all pertinent data that has been collected for a particular part, or parts, if requested by Zebra.
- 5.2.3 A testing lab will be certified to ISO 17025.

6.0 PROCESS

6.1 Restrictions and Requirements for Substances

Zebra requires all parts sold by Zebra to meet the acceptance criteria as outlined in Appendix A of this specification. This applies to parts that reference this specification and the corresponding acceptance criteria of this specification.

6.2 Reporting Requirements

Zebra requires full substance disclosures reported at the homogeneous material level using the SCF. FMD is necessary to meet Zebra's customer requirements and proactively prepare for current and future global environmental compliance requirements. Zebra reserves the right to reject data and declarations that are not submitted using the SCF.

When using the SCF, the Supplier shall report all Controlled Substances and Reportable Substances with concentrations in excess of the acceptance thresholds noted in Appendix A as contained within each homogeneous material. The Supplier shall report 100% of all homogeneous materials contained in the part or assembly. When reporting the composition of homogeneous materials, the use of "MISC" (Miscellaneous) may be used for a substance only when appropriate. (e.g. Proprietary or trade secret chemicals; however, ALL Banned Substances, Controlled Substances or Reportable Substances must be reported). Reporting "MISC" at a material level is not acceptable. The use of nanomaterials should be indicated in the comment section in the SCF header.

6.3 Analytical Testing

When the measurement of materials content is needed to verify compliance or when specifically requested by Zebra and the Supplier does not have the in-house resource to collect this data, the Supplier will use a 3rd party lab certified to perform chemical testing against the EN50581 and IEC 62321 standards

6.4 Test Methodologies

Recognized sample preparations and test standards must be used. A representative list of test methods is shown in TABLE 1 as a reference. Sample size and number of units tested must adhere to the standard applied. Test reports must be kept on file and made available on request.

6.5 Additional Restrictions and Requirements for Substances

Zebra currently prohibits the following substances above the allowable thresholds and without applicable exemptions in any of its applications:

- All substances under the *RoHS 2011/65/EU Directive*: Lead (Pb), Mercury (Hg), Cadmium (Cd), Hexavalent Chromium (Cr⁶⁺), Polybrominated biphenyls (PBB), and Polybrominated diphenyl ether (PBDE)
- Additional phthalates under *Directive (EU) 2015/863*: Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP), Diisobutyl phthalate (DIBP)

Please refer to Appendix A for a full listing of Banned and Controlled Substances.

6.5.1 REACH SVHC Reporting

Article 33 of REACH requires Suppliers to inform the recipients or consumers if a supplied article contains more than 0.1% (by weight per article) of any substance(s) on the SVHC candidate list. For the latest list please visit the ECHA website:

<http://echa.europa.eu/web/guest/candidate-list-table>

6.5.2 PVC (Polyvinyl Chloride)

PVC should not be used in amounts of more than 1000 PPM by weight (0.1%) in all EXTERNAL wires, cables, and cords. Several of the banned & restricted phthalates per the REACH and RoHS regulations are commonly used as plasticizers in PVC. Eliminating PVC will aid efforts in removing these phthalates from Zebra products.

6.6 China RoHS

China RoHS shall apply to all E-Products manufactured in, sold in, and imported from other countries or regions into China. Previously, as an exception, E-Products manufactured in China but exported from China to other countries or regions were not subject to regulation from the perspective of restricted use of hazardous substances. However, all E-Products manufactured in China (no matter whether for domestic sale or for export) must now comply with the China RoHS regulations.

According to Article 13 of China RoHS, manufacturers or importers of E-Products shall, in accordance with the national or industrial standards in relation to the labels for the restricted use of hazardous substances in E-Products, label their products launched to the market with relevant information, including the name and content of all hazardous substances contained in their products, the components that contain such hazardous substances, whether their products may be recycled for utilization, what impacts may be caused by the improper use or disposition on the environment and human health. If such information cannot be labelled on the products due to the limited product size, shape or exterior surface or function, such information shall be indicated in the product manuals.

Article 14 of China RoHS further provides that manufacturers or importers of E-Products shall, in accordance with the national or industrial standards in relation to the labels for the restricted use of hazardous substances in E-Products, label the environment-friendly period for use / service life on the E-Products that they manufacture or import. If such information cannot be labelled on the products due to the limited product size, shape or exterior surface or function, such information shall be indicated in the product manuals.


In addition to China RoHS, a set of Chinese recommended standards on the industrial level, Labeling Requirements for the Restricted Use of Hazardous

Substances in Electrical and Electronic Products (SJ/T 11364:2014), currently has the same threshold limits for the same six substances (lead, mercury, cadmium, hexavalent chrome, polybrominated biphenyl {PBB}, and polybrominated diphenyl ether {PBDE}) as the EU RoHS directive. All products and packaging used with the products placed on the market in China must be in compliance with the labeling and information disclosure provisions of China RoHS.

6.6.1 Disclosure Table (“Stuffer Sheet” or “China RoHS Table”) Requirements

Under the China RoHS requirements (including the relevant supporting standards), sellable electrical products will require a disclosure table (a.k.a. “stuffer sheet” or “China RoHS Table”). A China RoHS stuffer (CRS) sheet will disclose information regarding the presence of hazardous substance in the product and must be included with the product shipment into China. It must have the information written in both the English and Chinese language.

A product “stuffer sheet” or “China RoHS Table” (see Figure 1) will be created by a Zebra associate and be based upon information received from the Supplier that has been reviewed and approved by Zebra. This stuffer sheet data will be in both the English and Chinese language and be assigned a part number. The approved master stuffer sheet will be provided to the Supplier by Zebra. The Supplier will be responsible for printing and placing the stuffer sheet inside the primary packaging of all sellable products.

部件名称 (Parts)	有害物质 					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
金属部件 (Metal Parts)	X	0	0	0	0	0
电路模块 (Circuit Modules)	X	0	0	0	0	0
电缆及电缆组件 (Cables and Cable Assemblies)	0	0	0	0	0	0
塑料和聚合物部件 (Plastic and Polymeric Parts)	0	0	0	0	0	0
光学和光学组件 (Optics and Optical Components)	0	0	0	0	0	0
电池 (Batteries)	0	0	0	0	0	0

本表格依据SJ/T 11364 的规定编制。

0: 表示该有害物质在该部件所有均质材料中的含量均在 GB/T 26572 规定的限量要求以下。

X: 表示该有害物质至少在该部件的某一均质材料中的含量超出GB/T 26572 规定的限量要求。(企业可在此处, 根据实际情况对上表中打“X”的技术原因进行进一步说明。)

This table was created to comply with China RoHS requirements.

Figure 1

6.6.2 Applicability of China RoHS to Various Categories of Products

Subject to the definition of E-Products, the table below provides a brief representation of products that are in scope and not in scope for the requirements applicable in China.

	YES	NO
PRODUCTS WITH INTERNAL WIRING THAT CARRY AN ELECTRICAL CHARGE	X	
MECHANICAL PRODUCT WITH NO ELECTRONIC CIRCUITRY OR COMPONENTS		X
PRODUCT HAS INTERNAL CIRCUIT BOARDS AND OTHER ELECTRONIC COMPONENTS	X	
SOFT GOODS - HOLSTERS, POUCHES, ETC.		X
BATTERIES	X	
CABLES	X	
SCAN ENGINES	X	
HARDWARE - METAL BRACKETS, SCREWS, ETC.		X

6.6.3 Label & Marking Requirements

All E-Products manufactured in, sold in, and imported from other countries or regions into in the People’s Republic of China shall be marked with a logo (Figure 1 or Figure 2) on the product label that indicates the restricted use of hazardous substances in E-Products. It is required that the E-Products shall be labeled with either a Without-Hazardous-Substances logo in green (consisting of an English letter “e” surrounded with chasing arrows – figure 1) or a With-Hazardous-Substances logo in orange (consisting of an EPUP number surrounded with chasing arrows – figure 2). The minimum size of the label (Figure 1 or 2) is 5mm x 5mm. All products are required to be appropriately marked and written disclosure must indicate which family of components or assembly within the product contains any of the substances considered to fall under any of the six CMM substance classes. The logo shall be placed on the product label and the product label shall generally be placed at a conspicuous position of the E-Product (such as front side, or lateral side or back side with functional keys); only when the product label cannot be placed due to the product functions or designs, the product label should be placed at another position which is visible to the consumers when they are using the E-Products. Zebra Technologies requires that the supplier provide a sample product label and/or photograph for review and approval prior to manufacturing. Please note any labels placed on the product shall be constructed to ensure that they last for the duration of the product life cycle (including EPUP).



Fig. 1



Fig. 2

6.7 Taiwan RoHS (BSMI)

The Taiwan authority BSMI has announced implementation of RoHS requirements, which are largely the same as the well-established RoHS requirements in Mainland China, (and also similar to those of the European RoHS directive). The initial scope of affected products will be in effect 30 June 2017 with an expanded scope to be in effect 1 January 2018. This will be enforced as a part of the mandatory conformity assessment scheme for electronic products as administrated by the authority BSMI.

No additional action is required as Zebra will use China RoHS data to complete the Taiwan RoHS requirements.

7.0 REQUIREMENTS FOR BATTERIES

All Zebra battery Suppliers are required to complete the SCF document and provide Full Material Disclosure information on chemical substances that are present in the battery cells and battery packs supplied to Zebra. In addition, Suppliers must also provide the following documentation:

1. A Material and Safety Data Sheet (MSDS) or equivalent for cells housed within the battery pack and Safety Data Sheet (SDS) for the battery pack. Technical Data Sheets or Battery Specifications are not acceptable as an alternative document to the MSDS or SDS
2. Battery test reports for lithium ion batteries are also required to be completed and submitted. The following reports are acceptable:
 - a. United Nations Department of Transport (UNDOT) protocol 38.3 (latest IATA addition)
 - b. Shanghai Research Institute of Chemical Industry (SRICI)

8.0 PACKAGING

Zebra Suppliers should provide FMD at the homogeneous material level using the SCF for all manuals, printed materials, and packaging materials. All items of packaging must be marked with applicable recycling logos to ensure the used packaging material is directed into the appropriate recycling system. Refer to ISO 18601:2013 for standards on packaging and the environment.

9.0 RECORDS

Records are stored and retained in accordance with Zebra Technologies global records retention policies.

TABLE 1: TEST METHODOLOGIES (for reference and guidance)

Substance Class	Materials	Method of Verification (Methodology selection should be based on the testing of Homogeneous Materials)	Standard Reference
Cadmium compounds Lead compounds	Plastic, rubber, paints, inks	1. XRF 2. AAS 3. ICP-AES	Sample preparation: EN1122:2001 Analytical method: ISO 3856-4:1984 ISO 11885:1996
Lead/Lead Alloys	Metal	1. XRF 2. ICP-AES	IEC 62321
Mercury Compounds	Plastic, rubber, paints, inks	3. XRF 4. CV-AAS with vapor hydride generation apparatus 5. CV-AAS with thermal decomposition and/or gold-amalgamation 6. ICP-AES with vapor hydride generation apparatus	Sample preparation: EN13346 Analytical method: EN12338
Mercury	Metal	7. XRF 8. CV-AAS with thermal decomposition for analyzing Mercury content in fluorescent Tubes	IEC 62321
Hexavalent Chromium compounds	Metal	9. XRF – Should more than 1000ppm of Chromium be detected, differentiate between Tri and Hexa valences with the methods below: 10. Derivatization with Diphenylcarbazide followed by UV/VIS spectroscopy at 540nm 11. Grinding and measuring the water extract with ICP-AES (method not verified).	ISO 3613:2000 Dip test: ZVO-0102-QUA-02 UV/VIS method: ZVO-0101-UV-05 EPA 3060A/7196A

<p>Polybrominated biphenyls (PBB)</p> <p>Polybrominated Diphenyl ethers (PBDE)</p>	<p>Plastics, rubber and composites</p>	<p>12. XRF – Should more than 600ppm of Bromine be detected, differentiate between Br compounds with the methods below:</p> <p>13. For identification of PBB and PBDE: GC/MS (HRGC/MS)</p> <p>14. HPLC (High Performance Liquid Chromatography)</p>	
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APPENDIX A: GLOBAL ACCEPTANCE CRITERIA

The following substances that are listed cannot exceed the specified limit except where exemptions are noted:

Substances	Zebra Category	Acceptance Threshold (ppm at a homogeneous level unless otherwise indicated)	Reference
Asbestos and Asbestos Compounds	Banned	-	Regulation 1907/2006/EEC
Chlorofluorocarbons and Halons (Class I and II Ozone Depleting Chemicals)	Banned	-	Regulation 1005/2009/EU
Dimethylfumerate (CAS # 624-49-7)	Banned	-	EU Decision 2009/251/EC
Halogenated Dioxins and Furans	Banned	-	German Regulation
Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), and Hexafluoride (F6)	Banned	-	EU Regulation 517/2014/EU
Phenol, 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylethyl) (CAS # 3846-71-7)	Banned	-	Japanese law - Article 13 of the Law concerning the Evaluation of Chemical Substances and Regulation of their Manufacture, etc.
Polychlorobiphenyls and Derivatives (PCBs)	Banned	-	EU Regulation 850/2004/EC Canadian regulation

Polychloroterphenyls and Derivatives (PCTs)	Banned	-	EU Regulation 1907/2006/EEC
2,4-Dinitrotoluene (CAS # 121-14-2)	Controlled	1000	EU regulation 2006/1907/EU (REACH)
Azo Dyes Compounds	Controlled	30	EU Regulation 1907/2006/EEC
Arsenic and Arsenic Compounds	Controlled	1000	EU Regulation 1907/2006/EEC
Ethylene Glycol Monomethyl Ether and its Acetate	Controlled	5	California Safe Drinking Water and Toxic Enforcement Act (Prop 65)
Ethylene Glycol Monoethyl Ether and its Acetate	Controlled	5	California Safe Drinking Water and Toxic Enforcement Act (Prop 65)
Cadmium and Cadmium Compounds	Controlled	99	EU Directive 2011/65/EU (ROHS) EU Regulation 1907/2006/EEC
Cadmium, Chromium (VI), Lead and Mercury metals and compounds in packaging	Controlled	sum of listed metals not to exceed 100 ppm based on total package weight	EU Directive 94/62/EC; various US states
Cadmium and cadmium compounds in "portable" batteries	Controlled	20 ppm of the total battery cell weight.	EU Regulation 2006/66/EC
Hexavalent Chromium and Hexavalent Chromium Compounds	Controlled	1000	EU Directive 2011/65/EU (ROHS)
Chromium (VI) compounds in leather and textiles	Controlled	3	Germany - § 30 of the Food and Commodities Law (LMBG)
CI Pigment Red 104 (CAS # 12656-85-8), CI Pigment yellow 34 (CAS # 1344-37-2)	Controlled	1000	EU regulation 2006/1907/EU (REACH)

Cobalt Dichloride Compounds	Controlled	100	EU Regulation 2006/1907/EU
Diarsenic Trioxide (CAS # 1327-53-3), Diarsenic Pentaoxide (CAS # 1303-28-2)	Controlled	1000	EU regulation 2006/1907/EU (REACH)
RoHS Phthalates - Diisobutyl Phthalate (DIBP [CAS # 84-69-5]), Dibutyl Phthalate (DBP [CAS # 84-74-2]), Benzyl Butyl Phthalate (BBP [CAS # 85-68-7]), Bis(2-ethylhexyl) Phthalate (DEHP [CAS # 117-81-7])	Controlled	1000	Directive 2011/65/EU, 2015/863 (ROHS)
Formaldehyde Compounds	Controlled	1000	Lithuanian Hygiene Norm HN 96:2000; Austria - BGB I 1990/194: Formaldehydve rordnung, §2, 12/2/1990; Title 17 California Code of Regulations §§ 93120- 93120.12; etc
Hexabromocyclododecanes (HBCDDs)	Controlled	1000	EU Regulation 850/2004/EC
Lead and lead compounds	Controlled	1000	EU Directive 2011/65/EU (ROHS)
Lead Chromate (CAS # 7758-97-6)	Controlled	1000	EU regulation 2006/1907/EU (REACH)
Mercury and Mercury Compounds	Controlled	1000	Directive 2011/65/EU, RoHS
Mercury and mercury compounds in batteries	Controlled	5 ppm of the total battery cell weight	EU Directive 2006/66/EC
(4,4'-Diaminodiphenylmethane) MDA (CAS # 101-77-9)	Controlled	1000	EU regulation 2006/1907/EU (REACH)

5-tert-butyl-2,4,6-trinitro-m-xylene (Musk Xylene) (CAS # 81-15-2)	Controlled	1000	EU regulation 2006/1907/EU (REACH)
Polybrominated Biphenyls (PBBs)	Controlled	1000	EU Directive 2011/65/EU (ROHS)
Polybrominated Diphenyl Ethers (PBDEs)	Controlled	1000	EU Directive 2011/65/EU (ROHS)
Perchlorates	Controlled	0	California Perchlorate Contamination Prevention Act
Perfluoro Alkyl Sulfonates (PFAS), and Derivatives (including PFOS)	Controlled	100	EU Regulation 850/2004/EC
Perfluorooctanoic Acids (PFOAs)	Controlled	1000	Law on the Control of Products and Consumer Services
Short-Chained Chlorinated Paraffins	Controlled	1000	<u>Norway Product Regulations FOR-2004-06- 01-922/ Swiss Ordinance on Reduction of Risk from Chemical Products</u> EU Regulation 850/2004/EC
Organic Tin Compounds (Organostannic)	Controlled	1000	EU Regulation 2006/1907/EU
Trichloroethylene (CAS # 79-01-6)	Controlled	1000	EU regulation 2006/1907/EU (REACH)
Tris(2-chloroethyl)phosphate (CAS # 115-96-8)	Controlled	1000	EU regulation 2006/1907/EU (REACH)
Bisphenol-A (BPA) (CAS # 80-05-7)	Controlled	900	EU regulation 2006/1907/EU (REACH)

DINP Compounds	Controlled	900	California Safe Drinking Water and Toxic Enforcement Act (Prop 65)
REACH SVHC's otherwise not listed	Controlled	900	EU regulation 2006/1907/EU (REACH)