

SES-QUA-0009-A

# Group of Soshin Electric companies

# Green Procurement Guidelines

Rev. 5



Soshin Powertech Co., Ltd. Soshin Device Co., Ltd. Risshin Electronics Co., Ltd. Soshin Electronics (M) Sdn. Bhd. Soshin Electronics (SZ) Limited

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Attachment: Environmentally Controlled Substance List of the Group of Soshin Electric companies

# Introduction

We at the Group of Soshin Electric companies are committed to continually endeavoring to preserve the global natural environment, a duty which we regard as a key business issue across all our business activities covering the stages of development, designing, manufacturing and marketing of products. Growing social concern about environmental issues and progression by the EU with environmental legislation has made requirements for fulfillment of social responsibilities by business enterprises mandatory and more stringent.

Having recognized that green procurement is an important role business enterprises must play, the Group of Soshin Electric companies has updated its Green Procurement Guidelines to facilitate procurement of products that are least hazardous to the environment.

Our Green Procurement Guidelines constitute the base for our procurement activities of the least environmentally hazardous product formation elements (parts, sub-materials, packaging materials, etc.) from supply sources which are actively and seriously exercising their efforts to reduce their supplies' hazard on the environment, in observance of legislation. Successful achievement of our procurement policy outlined above totally depends upon cooperation from you, our valued suppliers.

It is a social requirement that we establish an environmental management system, exert  $CO_2$  emission reduction activities, implement countermeasures to prevent exhaustion of resources such as water and other and preserve biodiversity and conflict materials, which we cordially request that our suppliers also observe.

In this sense, your understanding and support, which we highly appreciate, are also essential for mutual benefits and prospect.

Soshin Electric Co., Ltd. Procurement Division Environment Control Office

# 1. Environmental Activities of the Group of Soshin Electric Companies

## Management Philosophy

SOSHIN WAY - Connecting people with the future through communication

Toward "realization of a society where we can co-exist with the environment," we are committed to protecting the harmony between people and the earth through mutual trust.

"Even smaller and friendlier"

Each and every employee works voluntarily and actively to reduce greenhouse-gas emissions, and zero emissions, in order to realize the Group of Soshin Electric companies which stick to Green Parts (excerpt from the environmental section).

## **Environmental policy**

- Observance of laws, agreements and arrangements established with customers, and of self-defined standards
- Definition of environmental targets and their implementation by working together with local communities in an organized and continual manner to reduce environmental loads together
- Development, designing, manufacturing and marketing of products friendlier to the environment
- Exercising and monitoring efforts to prevent environmental pollution
- Further provision of education and enlightenment activities for employees of the Group of Soshin Electric companies and those who are involved in business with the Group for higher level consciousness of their roles and responsibilities

## 2. Purpose of Green Procurement by the Group of Soshin Electric Companies

We aim for supply of environmentally friendlier products to our customers through the development and design of the least environmentally hazardous products by promoting Green Procurement.

As a sphere of achievement efforts for the target, we will encourage procurement of the least environmentally hazardous materials and parts from suppliers who work on environmental preservation.

These Guidelines identify our basic ideas about green procurement and the specific requirements of the Group of Soshin Electric companies that we request our suppliers to meet.

The Group of Soshin Electric companies will share with our suppliers environmental preservation activity-related issues in a bid to deal with such issues in cooperation with them, based on these Guidelines. The Group is determined to show preference for the purchase of products and services from suppliers which have successfully addressed and will continue to address environmental issues giving even deeper consideration to the environment.

## 3. Scope of Application of Our Green Procurement Program

- (1) Raw materials (metal materials, solvents, medical agents and so on)
- (2) Parts (electrical and mechanical parts, semiconductor devices, wires, metal cases, screws, batteries and so on)
- (3) Sub-materials for use in products (plastics, pastes, silicone, ink, paint, adhesive, wire, metal cases, screws, solder, etc.)
- (4) Packaging materials (trays, reels, bags, cushions, cartons, tape, stickers, printing inks, etc.)
- \* Facilities, jigs and tools, and dies and molds for which there are no possibilities of being contained in products are exempted from application.

#### 4. Date of Application

These guidelines will take effect on January 1st, 2014.

#### 5. Environmentally Controlled Substances

- (1) Classification of environmentally controlled substances and list of applicable items Environmentally controlled substances are classified into substances prohibited from use, controlled substances, substances not to be contained in packing/packaging materials and substances not to be contained in batteries. For details, please refer to the separately available Environmentally Controlled Substance List of the Group of Soshin Electric companies.
- (2) Definition of terms
  - RoHS Directive:

A directive concerning restricted use in the EU of 6 specified hazardous substances contained in electrical and electronic equipment (such as lead, mercury, cadmium, chromium VI, Polybrominated biphenyl PBB and Polybrominated diphenyl ether PBDE)

• REACH Regulation

Regulation concerning the use and restriction in the EU of chemical substances for the protection of human health and the environment. The EU has assessed substances and made public a list of substances of very high concern (SVHC).

• Substances prohibited from use

Chemical substances which are prohibited in the substances within the scope of application of the Green Procurement Guidelines

• Controlled substances

Chemical substances to be investigated regarding use within the scope of the application of the Green Procurement Guidelines, and the amount if used

• Substances not to be contained in packing/packaging materials

Applicable to packing/packaging materials used for items covered by the scope of these Green Procurement Guidelines

- Substances not to be contained in batteries
  - Chemical substances not to be contained in batteries
- Homogeneous materials
  - Materials that cannot be disjointed into different materials by mechanical operations. The term "homogeneous" means "uniform in composition throughout."
- Intentionally added

Deliberate use in the formulation of a product where its continued presence is desired to provide a specific characteristic, appearance or quality

• Threshold level

Concentration level which defines the limit above (or equal to) which the presence of a substance in a product shall be declared based on the requirements of these Guidelines. Numerical threshold levels are provided in weight % (and parts per million, or ppm). The conversion to be used to calculate ppm is 0.1 % = 1000 ppm.

• Substance

(Material) A single chemical substance

• Preparation

Mixture of several substances such as solder not yet used, alloys, ink, paint, plating and so on

• Article

(Molded goods, parts and so on) Goods molded using substances or by preparation into a specific fixed configuration with unique functions, such as capacitors, resistors, circuit boards, bolts, nuts, cases and so on

• SDS (MSDS)

Safety data Sheet. A common format to furnish the receiving party with information about hazards that it may encounter and with handling precaution on an occasion where chemical substances and products defined in the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (PRTR Act) and the Industrial Safety and Health Act are dealt among businesses

• JAMP

Joint Article Management Promotion consortium

A consortium established to manage information on chemical substances containing articles and build and penetrate a specific mechanism to allow for disclosure and smooth transmission of such information across the supply chain

• MSDSplus

A basic sheet JAMP recommends for use to convey information on chemical substances contained in chemical substances and preparations. A format to convey to the buying party information on titles of relevant legislation, the presence of controlled substances, substances' names, their CAS numbers and concentration, to control ingredients contained in products

• AIS

A basic sheet recommended by JAMP for conveying information on chemical substances contained in molded goods. A format to convey to the buying party information on titles of legislation, the presence of controlled substances, substances' names, their CAS numbers and concentration, to control ingredients contained in products

• JAMA/JAPIA unified data sheet form (hereinafter, JAMA sheet)

Format for survey of chemical substances contained in parts and materials, made publicly available by JAPIA (Japan Auto Parts Industries Association)

• High precision analysis data:

Analysis data obtained in compliance with IEC62321, Electro technical products – Determination of levels of regulated substances, an international standard, designated for RoHS analysis. Precision analysis is acceptable but simple analysis (fluorescent X-ray analysis) is not.

#### 6. Request to Suppliers

- (1) Management system for environmentally controlled substances
  - We will assess your management system before commencing business and periodically thereafter. To know better about your management system, we will send a check list for you to complete and send back to us. We may send a team to your relevant operation sites as necessary. Should this be the case, you are requested to receive our team and provide it with assistance so that it can carry out the purpose of its visit without inconvenience.
  - 2) Compliance with laws concerning the goods to be delivered to us by you, and understanding and control of substances defined in the separately available Environmentally Controlled Substance List of the Group of Soshin Electric companies are requested. Please be reminded of the importance of accessing the latest version of our Green Procurement Guidelines of the Group of Soshin Electric companies at our URL, http://www.soshin.co.jp.
  - 3) Implementation of control by discriminant control is requested to prevent mixture of and contamination by environmentally controlled substances. In addition, recycled materials may be used subject to prior verification of their contents and retention of their production history. The use of closed-recycled plastic materials (plastic materials recycled through an internal or external crushing process of molded plastics) must be subject to lot-specific retention of records of their contents of RoHS prohibited substances.
  - 4) A change to goods to be delivered to us may be implemented only after we have approved the previously submitted change proposal subject to mutual confirmation of it.
- (2) Management of procuring parties and their sources (2nd-tier suppliers, hereafter)It must be ensured that our requirements and information including items contained in these

Guidelines are communicated to 2nd-tier suppliers and that guidance is provided to their management and understood.

(3) Survey of contents of chemical substances

Your cooperation to provide us with information regarding contents of environmentally controlled substances identified in our Environmentally Controlled Substance List of the Group of Soshin Electric companies is requested. Survey documents must be submitted upon our request.

Survey documents

Submission timing	Classification	Document title	Spec.	Remarks
At the times of the initial business	Information about characteristics and handling of chemical goods	SDS (MSDS)	JIS Z-7253	Most recent legislation must be complied with.
discussion, amendment made to legislation and changes intended to goods	Controlled-substanc e content information	MSDSplus	JAMP	The latest revision must be complied with. At least 90% by weight of all ingredients shall be disclosed using CAS numbers. <u>http://www.jamp-info.com/engli</u> <u>sh</u> Content rates of substances identified in the relevant laws shall be given in units of ppm in the event of the difficulty to produce MSDSplus.
	Analysis of contents of substances restricted or prohibited by law	High precision analysis data (report on analysis by means of high-precision analysis methods such as the ICP analysis and GC-MS)	IEC62321 (For 6 prohibited substances per RoHS Directive)	ISO/IEC17025 (General requirements for the competence of testing and calibration laboratories) The generators of the reports must be certified analysis laboratories.
	Letter of guarantee	Certificate for non-use	Soshin format	
When requested	Information about ingredients	JAMA sheet	Japan Auto Parts Indus-tries Association	The latest revision must be complied with.
		Green Procurement (JGPSSI) (Survey Response Tool designed by JGPSSI)	VT62474 national committee	The latest revision must be complied with.

1) Raw materials (Substances), paste and ink (Preparations)

Submission timing	Classification	Document title	Spec.	Remarks
At the times of the initial business discussion, amendment made to legislation and changes intended to	Controlled-substanc e content information	AIS	JAMP	The latest revision must be complied with. At least 90% by weight of all ingredients shall be disclosed using CAS numbers. <u>http://www.jamp-info.com/englis</u> <u>h</u>
goods	Analysis of contents of substances restricted or prohibited by law	High-precision analysis data specific to homogeneous material location (report on analysis by means of high-precision analysis methods such as the ICP analysis and GC-MS)	IEC62321 (6 sub <sup>-</sup> stances prohibited by RoHS Directive)	The generators of the reports must be analysis laboratories certified for ISO/IEC 17025:2005, General requirements for the competence of testing and calibration laboratories)
	Letter of guarantee	Certificate for non-use	Soshin format	
When requested	Basic information	SDS (MSDS)	JIS Z 7253	The latest legislation must be complied with.
	Information about ingredients	JAMA sheet	Japan Auto Parts Industries Association (JAPIA)	The latest revision must be complied with.
		Green Procurement (Survey Response Tool designed by JGPSSI)	VT62474 national committee	The latest revision must be complied with.

2) Parts, modules, etc. (Articles)

In addition to the above, we may request you analyze and examine requirements from our customers.

## [Requirements for high-precision analysis data]

Inclusion of the following items in the report is requested.

1)	Pre-processing method	Name of the official method used or of the method used. If this		
		is not used, the name of the method that is used instead		
2)	Analysis method	Name of the analysis method used or of the official method		
3)	Name of analyzer	Name of the person responsible for the analysis, name of the		
		analyzing laboratory and the certificate number for		
		ISO/IEC17025		
4)	Date of analysis:	Date of the analysis must not be greater than one year previously.		
5)	Analysis result	Enter the lower limit value of determination in case of ND.		
6)	Analysis flowchart	It must be clearly stated by entering "Completely solved" in an		
		analysis report or analysis flowchart that the specimen for analysis		
		was completely solved into solution during the preprocessing.		
7)	Analysis of plating	Plating must be analyzed separately for both plating film and		
		the base material. (Collective analysis of the plating film and		
		the base material together will end up with substantial		
		difference from the correct figures.)		

#### 7. Contact

For more information, please contact us at: Environment Control Office 664-1 Sarukubo, Saku-city, Nagano-prefecture, Japan TEL (+81)-267-67-4580 FAX (+81)-267-68-4553 E-mail environment@soshin.co.jp

#### 8. Revision records

Originally issued on May 21, 2004

Revised and 2nd edition issued on Sept. 19, 2006

Major change: Survey Substance List changed to comply with Ver. 3, which is JIG compatible, from JGPSSI Ver. 2

Revised and 3rd edition issued on Jan. 13, 2010

Major changes:Survey Substance List changed to comply with Ver. 4 of No.JIG-101Ed2.0.JAMP AIS and MSDSplus employed for compatibility withREACH requirements

Revised and 4th edition issued on Jan. 1, 2012

Major changes:Reference to Survey Substance List changed to JIG-101 Ed4.0Dibutyltin compounds (DBT) and Dioctyltin compounds (DOT) added to

substances prohibited from use

JIG-201 Ed1.0 adopted for substances prohibited from use in packaging materials

Revised and 5th edition issued on Dec. 1, 2013

Major changes:The list of environmentally controlled substances was separated from the<br/>body of the document with its title changed to the Group of Soshin Electric

companies' list of environmentally controlled substances.

Environmentally controlled substances were added and threshold values were changed based on relevant legislation and agreements with customers.

The List of Substances to be surveyed was changed from JIG-101 to JAMP Declarable Substances List.

Corrections to some technical terms were made and some terms added.

Revision was made to requests to customers.

The reference for processing method for prohibited substance analysis data was changed to IEC62321.

# Environmentally Controlled Substance List of -the Group of Soshin Electric companies, SES-QUA-0009-A

For more information about respective substances, please refer to JAMP Declarable Substances List available from the Joint Article Management Promotion-consortium @ <u>http://www.jamp-info.com/english</u>

Table	1:	Substances	prohibited	from	use	(Chemical	$\operatorname{substances}$	prohibited	from	being	contained	in
		parts and su	ub-material	s)								

No.	Substance / category	Threshold level	Examples of use
1	Cadmium / cadmium compounds	0.01 weight % (100 ppm) in homogeneous materials	Paints, inks, conductive pastes, plastics (including rubber, film, cable jackets, adhesive, adhesive tape, and insulation tape), surface finishes (plating and coatings), glass frits, glass paste, and metals including zinc (brass and hot-dip galvanization)
		0.002 weight % (20 ppm) in homogeneous materials	Solder (purchased separately from anything else)
	Exemption: Items m	eeting RoHS exemption pe	er Appendices (1)-1 and (1)-2
	For batteries, refer to	(4) substances prohibited	from use in batteries.
2	Chromium VI/ Chromium VI compounds	0.1 weight % (1000 ppm) in homogeneous materials	Plating film, paint, ink and glass paste
	Exemption:: Items me	eeting RoHS exemption pe	r Appendices (1)-1
	For batteries, refer to	(4) substances prohibited	from use in batteries.
3	Lead/lead compounds	0.01 weight % (100 ppm) in homogeneous materials	Paint, ink, plastics (including rubber, film, cable jacket, adhesives, adhesive tape, and insulation tape)
		0.05 weight % (500 ppm) in homogeneous materials	Solder (purchased separately from anything else)
		0.1 weight % (1000 ppm) in homogeneous materials	For applications other than those mentioned above (surface finish materials for external terminals of parts and lead wires)
	Exemption:: Items me For batteries, refer to	eeting RoHS exemption per (4) substances prohibited	r Appendices (1)-1 and (1)-2 from use in batteries.
4	Mercury / mercury compounds	Intentionally added or 0.1 weight % (1000 ppm) in homogeneous materials	All applications (fluorescent bulbs, electrical contact materials, pigments, anti-corrosion agents, switches, high-efficiency light emitters and anti-microbial processing)
	Exemption: Items me For batteries, refer to	eeting RoHS exemption per (4) substances prohibited i	r Appendices (1)-1 and (1)-2 from use in batteries.
5	Tributyl tin oxide (TBTO)	Intentionally added or 0.1 weight % (1000 ppm) in products	Preservative agents, fungicides, paint, anti-contamination agents, coolants, foaming agents, fire extinguishing agents and cleaning agents
6	Tri-substituted organostannic compounds	Intentionally added or 0.1 weight % (1000 ppm) in homogeneous materials	Stabilization agents, anti-oxidizing agents, anti-bacteria and anti-fungus agents, anti-contamination agents, preservative agents, fungicides, paint, pigments, dyes and anti-contamination agents
	Tri-substituted organo triphenyl tin compour	otin compounds are tin con nds (TPT).	npounds with three organic substitutions such as tributyl tin compounds (TBT) and

# Table 1, continued

No.	Substance/ category	Threshold level	Examples of use			
7	Dibutyltin (DBT) compounds	0.1 weight % (1000 ppm) of homogeneous materials	Stabilization agents for PVC, and hardening catalysts for silicon resins and urethane resins			
	Exempted items The following items m the EU countries) (1) One-component (2) Paint and coatin (3) Soft PVC profile	aay be contained by Jun. 30 and two-component room ag materials containing DE s whether by themselves o	0, 2014 if they fall under the following categories. (Marketable by Dec. 31, 2014 in temperature vulcanization sealants (RTV-1 and RTV-2 sealants) and adhesives BT compounds as a promoter, when applied on molded products r coextruded with hard PVC			
	<ul><li>(4) Fabrics coated with PVC containing DBT compounds as a stabilization agent, when outdoor use is intended</li><li>(5) Outdoor rainwater pipes, street gutters and fittings, roofing and cover materials for facades</li></ul>					
	Note: Weight % of metal is to be used for the concentration in the article. They can be exempt from applications when we stipulate specifically for contain use.					
8	Dioctyltin compound (DOT)	0.1 weight % (1000 ppm) in homogeneous materials	Stabilization agents for PVC, and hardening catalysts for silicon resins and urethane resins			
	Items which will be pr (1) Textile products (2) Nursery product (3) Two-component Note: Weight % of me stipulate specifically f	rohibited as soon as the ab and leather products inter as room temperature vulcani tal is to be used for the cor for contain use.	ove threshold values are reached nded for contact with skin ization molding kits (RTV-2 molding kits) icentration in the articles. They can be exempt from applications when we			
9	Polybrominated biphenyls (PBBs)	0.1 weight % (1000 ppm) in homogeneous materials	Flame retardant			
10	Polybrominated diphenyl-ethers (PBDEs) including Deca BDE)	Intentionally added or 0.1 weight % (1000 ppm) in homogeneous materials	All applications, and plastic products in general			
11	Polychlorinated biphenyl (PCBs) and specific substitutes (PCBs)	Intentionally added	Insulating oil, lubricating oil, electric insulating materials, solvents, electrolytes and fireproofing agents			
12	Polychlorinated terphenyls (PCTs)	0.005 weight % (50 ppm) in homogeneous materials	Insulating oil, lubricating oil, electric insulating materials, solvents, electrolytes and fireproofing agents			
13	Polychlorinated naphthalenes (more than 3 chlorine atoms)	Intentionally added	Lubricants, paints, stabilizing agents, (electric properties and flame retardancy and resistance to water			
14	Short-chain chlorinated paraffins (C10 - C13)	0.1 weight % in products (1000 ppm)	PVC plasticizers and flame retardant			
15	Perfluoro-octane sulfonate (PFOS)	Intentionally added or 0.1 weight % (1000 ppm) in homogeneous materials	Photolithography, photograph coating materials, hydraulic fluid, metal plating, detergents and paper coating agent			
	Exempted items (1) Photoresist or an (2) Photograph coat	nti-mirror coating for photo	olithography processes nts or printing plates			

## Table 1, continued

No.	Substance/ category	Threshold level	Examples of use		
16	Fluorinated greenhouse gases (PFC, SF6 and HFC)	Intentionally added	Coolant, digestive aids, fire extinguishing agent, cleaning agents, insulation materials and caustic gases		
17	Asbestos	Intentionally added	Insulating materials, fillers, abrading agents, dyes and heat insulating materials		
18	Certain azo dyes and pigments generating some aromatic amines	0.003 weight % (30 ppm) of finished textile products and leather products	Pigments, dyes, coloring agents		
	Substance falling under this category are aromatic azo dyes and pigments listed in Appendix (1)-3				
19	Ozone-layer depleting substances	Intentionally added	Coolant, foaming agents, fire extinguishing agents and cleaning agents		
	Substances falling un	der this category are those	e stipulated in the Annexes to the Montreal Protocol and are given in Appendix (1)-4.		
20	Phenol,2-(2H-benzit riazol-2-yl)-4,6-bis(1, 1-dimethyl-ethyl)	Intentionally added	Adhesives, paint, printing ink, plastics, ink ribbons, putty, cauking and sealing fillers (ultraviolet absorbers)		
21	Dimethyl fumarate	0.00001 weight % (0.1 ppm) in homogeneous materials	Insect repellers, anti-fungus agents		
22	polyvinyl chloride (PVC) and its mixture	Intentionally added	Following applications except for applications categorized for controlled substances Heat shrinkable tubes, insulating plates, base materials for non-contact IC cards, accessories, binding bands for connecting cables, flexible flat cables (FFC), decorative sheets, labels, sheets and laminates		
23	Beryllium oxide	Intentionally added	All applications		

## Note:

The threshold levels indicated for (1) Substances prohibited from use shall be applied to liquid materials (such as conductive paste and ink), if such materials have been dried, hardened or baked.

N⁰		Exemption	Threshold level	Scope and dates of applicability
	Mercury in burner):	n single capped (compact) fluorescent lamps not exceeding (per	-	-
	1(a)		5mg	Expires on December 31st in 2011
		For general lighting purposes < 30 W	<del>3.5mg</del>	Expires on December 21st in 2012 free January 1st in 2012
			2.5mg	From January 1st in 2013
	<i>4</i> )		5mg	Expires on December 31st in 2011
	1(b)	For general lighting purposes $\geq 30$ W and $< 50$ W	3.5mg	From January 1st in 2012
1	1(c)	For general lighting purposes $\geq 50$ W and $< 150$ W: 5 mg	For general lighting purposes ≥50 W and <150 W: 5 mg	-
	1(d)	For general lighting purposes $\geq 150$ W	15mg	-
	1()	For general lighting purposes with circular or square structural	unlimitedness	Expires on December 31st in 2011
	1(e)	shape and tube diameter	17mg	From January 1st in 2012
	1(f)	For special purposes	5mg	-
	2(a)	Mercury in double-capped linear fluorescent lamps for general lighting purposes not exceeding (per lamp)	-	-
	2(a)(1)	Tri-band phosphor with normal lifetime and a tube diameter	5mg	Expires on December 31st in 2011
	2(a)(1)	< 9 mm (e.g. T2)	4mg	From January 1st in 2012
	2(a)(2)	Tri-band phosphor with normal lifetime and a tube diameter	5mg	Expires on December 31st in 2011
		$\geq 9 \text{ mm} \text{ and } \leq 17 \text{ mm} \text{ (e.g. T5)}$	3mg	From January 1st in 2012
	$O(\lambda(n))$	Tri-band phosphor with normal lifetime and a tube diameter	5mg	Expires on December 31st in 2011
	2(a)(5)	> 17 mm and $\leq 28$ mm (e.g. T8)	3.5mg	From January 1st in 2012
	$\mathcal{O}(\mathcal{V}(I))$	The band all and the second life time and a table discustor	5mg	Expires on December 31st in 2012
	2(a)(4)	> 28  mm (e.g. T12)	3.5mg	From January 1st in 2013
2	o()(r)		8mg	Expires on December 31st in 2011
	2(a)(5)	Tri-band phosphor with long lifetime ( $\geq 25000$ h)	5mg	From January 1st in 2012
	2(b)	Mercury in other fluorescent lamps not exceeding (per lamp)	-	-
	<del>2(b)(1)</del>	Linear halophosphate lamps with tube $> 28$ mm (e.g. T10 and $\frac{T12}{T12}$ )	<del>10mg</del>	Expires on April 13th in 2012
	2(b)(2)	Non-linear halophosphate lamps (all diameters)	15mg	Expires on April 13th in 2016
	2(1)(2)	Nu lines to be a sheet of the state of the	unlimitedness	Expires on December 31st in 2011
	2(0)(3)	Non-linear triband phosphor lamps with tube diameter $> 17 \text{ mm}$ (e.g. T9)	15mg	From January 1st in 2012
	2(b)(4)	Lamps for other general lighting and special purposes (e.g.	unlimitedness	Expires on December 31st in 2011
	м		15mg	From January 1st in 2012
	fluorescen lamp)	t lamps (CCFL and EEFL) for special purposes not exceeding (per	-	-
	9()		unlimitedness	Expires on December 31st in 2011
	3(a)	Snort length (< 500 mm)	3.5mg	From January 1st in 2012
చ	25		unlimitedness	Expires on December 21st in 2011
	3(b)	Medium length (> 500 mm and $\leq 1$ 500 mm)	5mg	From January 1st in 2012
	2(-)	Longlongth (> 1.500 mm)	unlimitedness	Expires on December 21st in 2011
	3(0)	Long length (> 1 500 mm)	13mg	From January 1st in 202012

# Appendix (1) -1, substances exempted from applications by RoHS Directive

N⁰		Exemption	Threshold level	Scope and dates of applicability
			unlimitedness	Expires on December 31st in 2011
	4(a)	Mercury in other low pressure discharge lamps (per lamp)	15mg	From January 1st in 2012
	4(b)	Mercury in High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner) in lamps with improved colour rendering index Ra > 60	-	
	4(b)- I	$P \le 155 W$	unlimitedness 30mg	Expires on December 31st in 2011 From January 1st in 2012
			unlimitedness	Expires on December 21st in 2011
	4(b)- Ⅲ	$155 \text{ W} < P \le 405 \text{ W}$	From January 1st in 2012	From January 1st in 2012
	4(b)-Ⅲ	P > 405 W	unlimitedness	Expires on December 31st in 2011
4			40mg	From January 1st in 2012
1	4(c)	Mercury in other High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner)	-	-
	4(a)- I	P < 155 W	unlimitedness	Expired on December 31st in 2011
	407 1	1 2 100 W	25mg	From January 1st in 2012
	4(c)- II	155 W < D < 405 W	unlimitedness	Expired on December 31st in 2011
		$155 W < \Gamma \le 405 W$	30mg	From January 1st in 2012
			unlimitedness	Expires on December 31st in 2011
	4(c)-111	P > 405 W	40mg	From January 1st in 2012
	4(d)	Mercury in High Pressure Mercury (vapour) lamps (HPMV)	-	Expires on April 13th in 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	-	-
	5(a)	Lead in glass of esthode ray tubes	-	<u> </u>
5	5(h)	Lead in glass of fluorescent tubes not exceeding 0,2 % by	<0.2wt%	
	6(a)	weight Lead as an alloying element in steel for machining purposes and in galvanised steel containing up to 0,35 % lead by weight	<0.35wt%	-
6	6(b)	Lead as an alloying element in aluminium containing up to 0,4 % lead by weight	<0.4wt%	-
	6(c)	Copper alloy containing up to 4 % lead by weight	<4wt%	-
	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 tele-communications	-	-
	7(c)- I	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound	-	-
7	7(c)- II	Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher	-	-
	<del>7(c)-Ⅲ</del>	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
	7(c)-IV	Lead in PZT based dielectric ceramic materials for capacitors being part of integrated circuits or discrete semiconductors'	-	-

N⁰		Exemption	Threshold level	Scope and dates of applicability
8	8(a)	Cadmium and its compounds in one shot pellet type thermal cut-offe	-	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	-	-
	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	<0.75wt%	-
9	<del>9(a)</del>	DecaBDE in polymeric applications	-	July 1st abolition in 2008
	9(b)	Lead in bearing shells and bushes for refrigerant-containing compressors for heating, ventilation, air conditioning and refrigeration (HVACR) applications	-	-
10	10	omission	-	-
	<del>11(a)</del>	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	<del>11(b)</del>	Lead used in other than —C-press compliant pin connector- <del>systems</del>	-	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	<del>12</del>	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	-	-
13	13(b)	Cadmium and lead in filter glasses and glasses used for reflectance standards	-	-
14	14	Lead in coldere consisting of more than two elements for the connection between the pine and the package of microprocessors- with a lead content of more than 80 % and less than 85 % — by weight	-	Expired 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	15	Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages	-	-
16	16	Lead in linear incandescent lamps with silicate coated tubes	-	Expires on 1 September 2013
17	17	Lead halide as radiant agent in high intensity discharge (HID) lamps used for professional reprography applications	-	-
18	<del>18(a)</del>	Load as activator in the fluorescent powder (1 % lead by weight or less) of discharge lamps when used as speciality- lamps for diazo printing reprography, lithography, insect traps, photochemical and curing processes containing phosphors such as SMS ((Sr,Ba)2MgSi2O7 Pb)	<del>&gt;1wt%</del>	Expired 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)	<1wt%	-
19	<del>19</del>	Lead with PbBiSn-Hg and PbInSn-Hg in specific compositions as main amalgam and with PbSn-Hg as auxiliary amalgam in very compact – energy caving lamps (ESL)	-	Expires on 1 June 2011
20	<del>20</del>	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
21	21	Lead and cadmium in printing inks for the application of enamels on glasses, such as borosilicate and soda lime glasses	-	-

N⁰		Exemption	Threshold level	Scope and dates of applicability
22	22	Lead as impurity in RIC (rare earth iron garnet) Faraday rotators- used for fibre optic communication systems until 31 December- 2009	-	Expired 31 December 2009
23	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	24	Lead in solders for the soldering to machine through hole discoidal and planar array ceramic multilayer capacitors		-
25	25	Lead oxide in surface conduction electron emitter displays (SED) used in structural elements, notably in the seal frit and frit ring	-	-
26	26	Lead oxide in the glass envelope of black light blue lamps		Expires on 1 June 2011
27	27	Lead alloys as colder for transducers used in high-powered (designated to operate for several hours at acoustic power levels of 125 dB SPL and above) loudspeakers	-	Expired on 24 September 2010
28	28	Hexavalent chromium in correction preventive coatings of unpainted metal sheetings and fasteners used for correction protection and Electromagnetic Interference Shielding in equipment falling under category three of Directive 2002/06/EC (IT and telecommunications equipment).	-	Expired 1 July 2007
29	29	Lead bound in crystal glass as defined in Annex I (Categories 1, 2, 3 and 4) of Council Directive 69/493/EEC	-	-
30	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	-	-
31	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	32	Lead oxide in seal frit used for making window assemblies for Argon and Krypton laser tubes	-	-
33	33	Lead in solders for the soldering of thin copper wires of 100 µm diameter and less in power transformers	-	-
34	34	Lead in cermet-based trimmer potentiometer elements	-	-
35	35	Cadmium in photoresistors for optocouplers applied in Professional audio equipment until 31 December 2009.	-	Expired 31 December 2000
36	36	Mercury used as a cathode sputtering inhibitor in DC plasma- displays with a content up to 30 mg per display	-	Expired on 1 July 2010
37	37	Lead in the plating layer of high voltage diodes on the basis of a zinc borate glass body	-	-
38	38	Cadmium and cadmium oxide in thick film pastes used on aluminium bonded beryllium oxide	-	-
39	39	Cadmium in colour converting II-VI LEDs (< 10 µg Cd per mm2 of light-emitting area) for use in solid state illumination or display systems	-	Expires on 1 July 2014
40	40	Cadmium in photoresistors for analogue optocouplers applied in professional audio equipment	-	Expires on December 31st in 2013

# Appendix (1) - 2, 2011/65/EU (RoHS Directive) ANNEX XIV

Applications exempt from the restriction defined in 4 (1) specialized medical equipment (category 8) and monitoring and controlling equipment (category 9)

Classification		Exemption		
	1	Lead, cadmium and mercury in detectors for ionising radiation.		
	2	Lead bearings in X-ray tubes.		
	3	Lead in electromagnetic radiation amplification devices: micro-channel plate and capillary plate.		
Equipment utilising or	4	Lead in glass frit of X-ray tubes and image intensifiers and lead in glass frit binder for assembly of gas lasers and for vacuum tubes that convert electromagnetic radiation into electrons.		
detecting ionising radiation	5	Lead in shielding for ionising radiation.		
	6	Lead in X-ray test objects.		
	7	Lead stearate X-ray diffraction crystals.		
	8	Radioactive cadmium isotope source for portable X-ray fluorescence spectrometers.		
	1a	Lead and cadmium in ion selective electrodes including glass of pH electrodes.		
	1b	Lead anodes in electrochemical oxygen sensors.		
Sensors, detectors and electrodes	1c	Lead, cadmium and mercury in infra-red light detectors.		
	1d	Mercury in reference electrodes: low chloride mercury chloride, mercury sulphate and mercury oxide.		
	9	Cadmium in helium-cadmium lasers.		
	10	Lead and cadmium in atomic absorption spectroscopy lamps.		
	11	Lead and cadmium in atomic absorption spectroscopy lamps.		
	12	Lead and cadmium in metallic bonds to superconducting materials in MRI and SQUID detect		
	13	Lead in counterweights.		
Others	14	Lead in single crystal piezoelectric materials for ultrasonic transducers.		
Others	15	Lead in solders for bonding to ultrasonic transducers.		
	16	Mercury in very high accuracy capacitance and loss measurement bridges and in high frequency RF switches and relays in monitoring and control instruments not exceeding 20 mg of mercury per switch or relay.		
	17	Lead in solders in portable emergency defibrillators.		
	18	Lead in solders of high performance infrared imaging modules to detect in the range 8-14 $\mu m.$		
	19	Lead in Liquid crystal on silicon (LCoS) displays.		
	20	Cadmium in X-ray measurement filters.		

Notes:

Exemptions quoted above are as of Sept. 25, 2013 and do not guarantee compatibility with requirements of the latest relevant legislation.

Please refer to the original text of the latest relevant information for the most up-to-date details.

Items, application exemption periods of which have expired are crossed out with a line.

Numbers of items exempt from RoHS requirements are exemption numbers.

Name of aromatic amine	CAS No.
4-aminoazobenzene	60-09-3
o- Anisidine	90-04-0
2-naphthylamine	91-59-8
3,3'-dichlorobenzidine	91-94-1
4-aminobiphenyl	92-67-1
benzidine	92-87-5
o-Toluidine	95-53-4
4-chloro-2-toluidine	95-69-2
2,4-toluenediamine	95-80-7
o-azotoluene	97-56-3
5-Nitro-o-toluidine	99-55-8
3,3'-dichloro-4,4'-diaminodiphenyl methane	101-14-4
4,4'-diaminodiphenylmethane(MDA)	101-77-9
4.4'-diaminodiphenyl ether	101-80-4
p-chloroaniline	106-47-8
3,3'-dimethoxybenzidine	119-90-4
3,3'-Dimethylbenzidine	119-93-7
2-methoxy-5-methylaniline	120-71-8
2,4,5-trimethylaniline	137-17-7
4,4'-diaminodiphenyl sulfide	139-65-1
2,4-diaminoanisole	615-05-4
4.4-diamino-3.3'-dimethyldiphenyl-methane	838-88-0

# Appendix (1) - 4: Ozone-layer depleting substances

Name of ozone-layer depleting substances	CAS No.
CFC-11:Trichlorofluoromethane	75-69-4
CFC-12:Dichlorodifluoromethane	75-71-8
CFC-113: Trichlorofluoroethane	76-13-1
CFC-114:Dichlorotetrafluoroethane	76-14-2
CFC-115:Chloropentafluoroethane	76-15-3
Halon -1211:Bromochlorodifluoromethane	353-59-3
Halon -1301:Bromotrifluoromethane	75-63-8
Halon -2402:Dibromotetrafluoroethane	124-73-2
CFC-13:Chlorotrifluoromethane	75-72-9
CFC-111:Pentachlorofluoroethane	354-56-3
CFC-112:Tetrachlorodifluoroethane	76-12-0
CFC-211:Heptachlorofluoropropane	422-78-6
CFC-212:Hexachlorodifluoropropane	3182-26-1
CFC-213:Pentachlorotrifluoropropane	2354-06-5
CFC-214:Tetrachlorotetrafluoropropane	29255-31-0
CFC-215:Trichloropentafluoropropane	1599-41-3
CFC-216:Dichlorohexafluoropropane	661-97-2
CFC-217: Chloroheptafluoropropane	422-86-6
Tetrachloromethane (Tetrachlorocarbon)	56-23-5
1,1,1-Trichloroethane:Methylchloroform	71-55-66
Note: Typical ozone layer depleting substances are shown above. For other substances, please re List.	efer to JAMP Declarable Substances

No	Name of substance	Threshold level	Application	
1	Nickel	Intentional addition in the parts that come into contact with skin for a long period of time	Stainless steel, plating and use in contact with skin for an extended period of time (head phones, etc.)	
2	Polyvinyl chloride (PVC)	0.1 weight % of products (1000ppm)	Following applications except for applications for substances prohibited from use: Resin materials, electric wire covering material, insulators, chemical resistance, transparent sheath material	
3	Brominated flame retardants (other than PBDEs, and HBCDD)	See below	Flame retardants	
	Scope of application: Either of the following cases: (1) Total bromine contents in plastic materials of more than 1000 ppm or greater (2) Total contents in laminated printed wiring boards of more than 900 ppm of bromine in a laminated board			
4	Diisononyl phthalate (DINP) Diisodecyl phthalate (DIDP) di-n-butyl phthalate octyl (DNOP)	0.1 weight % (1,000ppm) in plasticized materials	Plasticizer, dye, pigments, paint, ink, adhesive	
5	Formaldehyde       See below       Insecticide of the wood, corrosion prevention, adhesive         Scope of applications:       (1) Intentional addition in products made of wood (plywood, particle boards, MDF) or in parts made of wood         (2) Textile products containing formaldehyde of more than 0.0075 weight % (75mm)			
6	Perchlorate	0.006 ppm in products	Coin cell batteries	
7	Diarsenic pentoxide	0.1% weight % (1000ppm) in products Content of 1000 ppm or greater is prohibited on and after Jul. 1, 2014, except for applications we specifically designate	Semiconductor substrates, glass defoaming agents, pigments, dyes, flame retardant	
8	Diarsenic trioxide	0.1% weight % (1000ppm) of products Content of 1000 ppm or greater is prohibited on and after Jul. 1, 2014, except for applications we specifically designate	Semiconductor substrates, glass defoaming agents, pigments, dyes, flame retardant	
9	Hexabromocyclododecane(HBCDD)	0.1% weight % of products	Flame retardant (used primarily for foamed	
10	and main Diastereoisomer Bis(2-ethylhexyl) phthalate (DEHP)	(1000ppm) 0.1% weight % (1000ppm) of products Content of 1000 ppm or greater is prohibited on and after Jul. 1, 2014, except for applications we specifically	polystyrene and certain fibers) Plasticizers, dyes, pigments, paints, inks, adhesives	

(2): List of controlled substances (Chemical substances subject to examination regarding the presence in parts and sub-materials, and amounts if present)

# (2): List of controlled substances, continued

No.	Name of substance	Threshold level	Application	
11	Dibutyl phthalate (DBP)	0.1% weight % (1000ppm) of products Content of 1000 ppm or greater is prohibited on and after Jul. 1, 2014, except for applications we specifically designate	Plasticizers, dyes, pigments, paints, inks, adhesives	
12	Butyl benzyl phthalate (BBP)	0.1% weight % (1000ppm) of products Content of 1000 ppm or greater is prohibited on and after Jul. 1, 2014, except for applications we specifically designate	Plasticizer, dye, pigments, paint, ink, adhesive	
13	Diisobutyl phthalate (DIBP)	0.1% weight % (1000ppm) of products Content of 1000 ppm or greater is prohibited on and after Jul. 1, 2014, except for applications we specifically designate	Plasticizer, dye, pigments, paint, ink, adhesive	
14	Tris (2-chloroethyl) phosphate (TCEP)	0.1% weight % (1000ppm) of products	flame retardant	
15	Cobalt chloride (CoCl2)	0.1% weight % (1000ppm) of products	Pneumatic control panels to indicate water contamination	
	Aluminosilicate and refractory ceramic fibers	0.1% weight % (1000ppm) of products	Heat insulation material of the high temperature performance evaluation equipment	
16	<ul> <li>The above mentioned aluminosilicate and refractory ceramic fibers are fibers that are covered by index number 650-017-00-8 in Annex VI, part 3, table 3.2 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, and that fulfill the following three conditions:</li> <li>a) Al<sub>2</sub>O<sub>3</sub> and SiO<sub>2</sub> are present within the following concentration ranges:</li> <li>- Al<sub>2</sub>O<sub>3</sub>: 43.5 - 47 weight %, and SiO<sub>2</sub>: 49.5 - 53.5 weight %, or</li> <li>- Al<sub>2</sub>O<sub>3</sub>: 45.5 - 50.5 weight %, and SiO<sub>2</sub>: 48.5 - 54 weight %</li> <li>b) Fiber length is 6 or less micrometers when two standard geometric errors are deducted from the weighted geometric mean diameter.</li> <li>c) Contents of alkaline oxides and alkaline-earth metal oxides(Na<sub>2</sub>O+K<sub>2</sub>O+CaO+MgO+BaO)must be 18 weight % or lower of the total weight</li> </ul>			
	Zirconia aluminosilicate and refractory ceramic fibers	0.1 weight % (1000ppm) of product	Heat insulation material of the high temperature performance evaluation equipment	
17	The above mentioned zirconia aluminos 650-017-00-8 in Annex VI, part 3, table 3 December 2008 on classification, labelin conditions: a) Almena (Al <sub>2</sub> O <sub>3</sub> ,), silicon dioxide (SiO - Al <sub>2</sub> O <sub>3</sub> : 35 - 36 weight %, SiO <sub>2</sub> : 47.5 b) Fiber length is 6 micrometers or less diameter	ilicate and refractory ceramic fiber 3.2 of Regulation (EC) No 1272/20 g and packaging of substances and 92) and zirconium oxide (ZrO2) are - 50 weight % and ZrO2: 15 - 17 w s when two standard geometric er	rs are fibers that are covered by index number 08 of the European Parliament and of the Council of 16 d mixtures, and that fulfill the following three present within the following concentration ranges: eight %, rors are deducted from the weighted geometric mean	
	c) Contents of alkaline oxides and alkaline-earth metal oxides (Na <sub>2</sub> O+K <sub>2</sub> O+CaO+MgO+BaO)must be 18 weight % or lower of the total weight.			

No.	Name of substance	Threshold level	Application
18	Boric acid	0.1 weight % (1000ppm) of product	Flame retardants in wood, cotton and other plan derived material, cross-linking agent, pH-adjusting agent, antiseptic agents
19	Disodium tetraborate, anhydrous	0.1 weight % (1000ppm) of product	Flame retardants in wood, cotton and other plan derived material, cross-linking agent, pH-adjusting agent, antiseptic agents
20	Tetraboron disodium heptaoxide, hydrate	0.1 weight % (1000ppm) of product	Flame retardants in wood, cotton and other plan derived material, cross-linking agent, pH-adjusting agent, antiseptic agents
21	Diheptyl phtahlate (DIHP)	0.1 weight % (1000ppm) of product	Plasticizers, dyes, pigments, paints, inks, adhesives and lubricants
22	Heptylundecylphthalt (DHNUP)	0.1 weight % (1000ppm) of product	Plasticizers, dyes, pigments, paints, inks, adhesives and lubricants
23	4-[4,4'-bis(dimethylaminopheny) methylene ]benzhydrylidene] 2,5-cyclohexadien-1-ylidene] dimethylammonium chloride (C.I. Basic Violet 3)	0.1 weight % (1000ppm) of product	Colorant for plastic and paints
24	Radioactive substance	Intentionally added	Optical properties (thorium), measuring instruments, gauges and detectors
25	Candidate substances for recognition for REACH Regulation (SVHC)	0.1 weight % (1000ppm) of product	Latest SVHC

# (2): List of controlled substances, continued

# (3) List of substances prohibited in packing / packaging materials

(Applicable to packing and packaging materials used for parts and materials delivered to us. Also applicable to packaging materials procured by us, the Group of Soshin Electric companies)

No.	Name of substance	Threshold level	Examples of use	
1	Cadmium and its compounds, chromium VI and its compounds, lead and its compounds and mercury and its compounds	Intentionally added or 0.1 weight % (1000 ppm) in total of the 4 substances of homogeneous materials indicated on the left	Pigments, paints, stabilizers for PVC	
	Halogen compounds and halogen resins	Intentionally added	Flame retardants and adhesives	
2	Typical chemical substances falling under this category: Bromine compounds, chloride compounds, polyvinyl chloride (PVC), fluorine resins and fluorine compounds Exemption: When parts and materials whose main function of which is not packaging are used for packaging "When the main function is not packaging" refers to instances where intended use is for the purposes other than protection or packaging (as containers or cushions) of products. Example: Halogen compounds and fluorine additives used as dyes for hologram labels or printing ink However, halogen compounds will be exempted from application if they are prohibited substances identified in Table 3: Substances not to be contained in packing/packaging materials.			
3	Cobalt chloride	When contained as an indicator in drying agents	Humidity indicator cards (HIC) and moisture indicator in silica gel	

(4) Substances prohibited from use in batteries (Chemical substances not to be contained in batteries)
 Substances prohibited from use

No.	Substances	Threshold Level	Targets
	Cadmium / the	Intentional addition	NiCd rechargeable batteries
	cadmium compound	Batteries" whose cadmium content, in proportion to their weight, is 0.002% or more	Battery except nickel cadmium, a manganese battery, an alkaline cell and the NiMH (Ni-MH) rechargeable battery
1		Batteries" whose cadmium content, in proportion to their weight, is 0.002% or more	Cell pack which used a cell except Ni-Cd
		Batteries" whose cadmium content, in proportion to their weight, is 0.001% or more	Manganese battery, the alkaline battery and the nickel hydrogen (Ni-MH) secondary cell
	Lead	Batteries" whose cadmium content, in proportion to their weight, is 0.4% or more	Battery
		Batteries" whose cadmium content, in proportion to their weight, is 0.4% or more	Battery pack
2		Batteries" whose cadmium content, in proportion to their weight, is 0.1% or more	Manganese battery
		Batteries" whose cadmium content, in proportion to their weight, is 0.004% or more The thing that the alkali manganese button form battery is more than 0.1% by weight (1,000ppm) in it	Alkali manganese button form battery
	Mercury	Batteries" whose cadmium content, in proportion to their weight, is 2% or more	Button form battery
3		Batteries" whose cadmium content, in proportion to their weight, is 0.0005% or more	Battery except the button form battery
		Batteries" whose cadmium content, in proportion to their weight, is 0.0005% or more	
		Batteries" whose cadmium content, in proportion to their weight, is 0.0001% or more	Manganese dry cell and an alkali manganese dry cell and NiMH (Ni-MH) rechargeable battery

Note: "Battery pack" is a number of batteries connected or packed into a form of a single package and put in housing and not intended for disassembly by end users.