

Green Procurement Guidelines

(Management Standards for Environment-related
Controlled Substances)

Standard number: HS-Q3-07

Enacted: 2 June 2003

Revised: 1 April 2010

(9th Edition) 1 April 2010

Approval	Confirmation	Creation
Quality Assurance Div.	Safety and Environment Sec.	Safety and Environment Sec.
Hoshino	Wakasugi	Ikkai

Kaga Components Co., Ltd.

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Record of revisions to regulations and standards (HS-A1-02 Attachment-01)							
Ed.	Date	Revision details	Page	ISSUE	Appr.	Staff	
1	06/02/2003	First Edition Standard name: "Operation Standards for Prohibited Substances". Regulation number: HS-Q3-07	4	1	Kaminishi	Sakurai	
2	12/01/2003	Management standards for controlled substances added to 1) item 6	5	2	Kaminishi	Sakurai	
3	05/20/2004	As the result of a comprehensive revision, the regulation name was changed from "Operation Standards for Prohibited Substances" to "Management Standards for Environment-related Controlled Substances"	2	3	Kaminishi	Sakurai	
4	04/01/2005	As the result of a comprehensive revision, the regulation name was changed from "Management Standards for Environment-related Controlled Substances" to "Green Procurement Guidelines" Major amendments of management standards for controlled substances include: 1) 1. Cadmium and cadmium compounds Specific date of supply ban added for Level 2 metals containing zinc 2) 15. 16 Polyvinyl chloride (PVC) and PVC blends Related products and specific date of supply ban clarified. 3) (4) Additional regulations for batteries added	1 to 22	1		Kaminishi Tōyama	
5	04/01/2006	1) The following items were added to the Environmental Policy: - promote afforestation. - development and design of products to deal with environment-related controlled substances. - Promotion of green purchasing.	2	2			
		2) Changes to the scope of application and supply ban dates for substances in environment-related controlled substance management standards. 1. Cadmium and Cadmium compounds "Surface treatments (e.g. plating), coatings" amended to "Surface treatments (electroplating, electroless plating), coatings" to clarify the purpose of surface treatments. "Parts composed of metals containing zinc (e.g. brass, zinc 100 ppm" was previously classified as level 2, however, this has been changed to a level 1 supply ban. "zinc die casts" has been deleted and "zinc hot dip galvanizing" has been added.	7	2			
		2. Lead and lead compounds "Lead contained in additives for electroless nickel plating and electroless gold plating" was previously managed as level 3, however, this has been changed to a level 1 supply ban as there is a possibility that the lead content in electroless nickel plating and electroless gold plating coatings can exceed 1000 ppm, depending upon management methods. Level 1 item "All kinds of alloys (including solder materials) with a lead/lead compound concentration that exceeds the regulated allowable concentration *1" changed to "All kinds of alloys (including solder materials) with a lead/lead compound concentration that exceeds the regulated allowable concentration (*1)".	8	2		Hoshino Tōyama	

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5	04/01/2006	"Lead contained in the following alloys (*1):" amended to "Allowable concentration of lead in the following alloys (*1):"	8	2	Hoshino	Tōyama
		4. Hexavalent chromium compounds "All purposes including rust prevention treatment (screws, steel plates, etc) and compounds used as ingredients in pigment components of inks and paints." separated into two phrases: "Purposes for which compounds are components or ingredients in paints, inks and other additives." and "Cases in which compounds remain on treated surfaces (screws, steel plates, etc.) as a result of plating, conversion treatment, etc."	9	2		
		6. Chlorinated Paraffins (CP) Substances for all purposes have been classified under a level 1 supply ban in accordance with Norwegian regulations, etc.				
		9. Brominated organic compounds: Polybrominated diphenylethers (PBDE) containing Decabromodiphenyl ether (DecaBDE). "Polybrominated diphenylethers (PBDE)" changed to "Polybrominated diphenylethers (PBDE) containing Decabromodiphenyl ether (DecaBDE)" to clarify that DecaBDE is contained in PBDE.	10	2		
		13. Specific azo compounds Details changed to clarify that "specific azo compounds" (compounds that produce one or more amine compounds when they are decomposed according to specified test methods) are affected. Measurement method citation changed from the German Law for Foods and Consumer Products to 76/769/EEC. Clarification to explain that amine compounds listed in Table 5.2 are also affected.				
15. Polyvinyl chloride (PVC) and PVC blends The phrase "new model" was deleted as management is the same as other level 1 substances. Level 2 and level 3 classifications were reviewed in consideration "FeliCa contactless IC card base materials" added to level 1 as PVC was not originally used. Since the issue of the 1 st edition, "Fabric and coatings for carry bags, carrying cases and carrying pouches for personal computers, digital cameras, video cameras and portable audio devices" have been switched to alternative materials. Therefore, these have been changed to a level 1 supply ban. Supply ban date for level 2 substances changed from January 1, 2007 to April 1, 2007. "Flexible flat cables (FFC)" added to level 2. "Suction cups for fitting automotive equipment", "Fabric and coatings for carry bags, carrying cases and carrying pouches for electronic business products" added to level 3.	12	2				

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5	04/01/2006	(3) Rules for packaging materials The following phrases related to measurement have been amended for clarification: (1) Hexavalent chromium must be first analyzed as total chromium and it must be confirmed that the total concentration of the four elements is less than 100 ppm. For this analysis, the same pre-conditioning methods as those used for cadmium and lead are applicable. (2) If this analysis finds that the total concentration of the four elements is 100 ppm or more, first confirm that the total concentration of cadmium, lead and mercury is 100 ppm. (3) After this, determine whether or not hexavalent chromium has been detected to make a final confirmation that hexavalent chromium is not present. "Warm water sampling process" in preconditioning methods for hexavalent chromium detection has been changed to "boiling water sampling process".			13	2		
		(4) Additional items for batteries Wording changed to "Batteries and battery packs (excluding small-size sealed acid batteries) with a lead content of 0.4% or more in proportion to the total weight of each battery" in order to clarify level 1 lead items. Addition of "For the Chinese market, this applies to manganese dry batteries and alkaline manganese batteries containing 0.0001% mercury or more" to level 1 mercury items in order to comply with Chinese battery regulations." "All NiCd batteries will be prohibited from January 2007." has been moved from level 1 to level 2. Addition of "For the Chinese market, this applies to manganese dry batteries and alkaline manganese batteries containing less than 0.0001% mercury" to exemptions for mercury."			14	2		
		5.7: "Controlled substances eradication plan" has been deleted and a "Level 1 prohibited substances and thresholds" table added.			19	2		
		5.8: "Substances, laws and regulations in various countries" has been updated with information current as of January 2006.			20	2		
		6.4: The download URL for survey response tools and other resources in "6.4: Detailed survey methods" has been changed to a URL on this company's website.			21	2		
		(3) The following substances have been added to the measurement substances in "3. ICP data" in "(3) Submission of environmental management data" in addition to cadmium and lead: Mercury and mercury compounds (Hg) Hexavalent chromium compounds (CR ⁺⁶) Polybrominated diphenylethers (PBDE) Polybrominated biphenyls (PBB)			22	2		Hoshino Tōyama
		6	04/02/2007	1) Updating of the Contents, changes in the page numbers: 18, 19, 20, 21 and 22. Addition of "Certificate for RoHS prohibited substances within products."			1	3
2)4. Kaga Components Co., Ltd Green Procurement System Addition of Hg, Cr and Br to X-ray fluorescence spectrometer.				5	2			

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6	04/02/2007	3) 5.4 Table 5.1 List of controlled substances The following substances have been newly added: Beryllium oxide, beryllium copper, specific phthalate esters, hydrofluorocarbon and perfluorocarbon.	6	3	Hoshino	Tōyama
		4) 5.4 Controlled substances and management standards Scope of object substances and the dates of ban modified.				
		1. Lead and lead compounds One of level 1 items changed to "** Electroless plating film such as electroless nickel plating and electroless gold plating..." Addition of level 3.	8	3		
		2. Hexavalent chromium compounds Deletion of "Metal chromium and chromium contained in alloys are excluded."	10	3		
		3. Chlorinated paraffins Substance title changed to "Short-chain Chlorinated Paraffins (SCCP)". Deletion of "Cl = 48 wt% or more."				
		4. Specific azo compounds A new row was established for the explanation "Specific azo compounds that produce one or more amines in Table 5.2 and amines in Table 5.2 when they are decomposed according to a test method specified in 76/769/EEC." as it relates to all specific azo compound items.	11	3		
		5. Table 5.2 was renamed Table 5.2a and moved from page 15 to page 12.	12	2		
		6. Polyvinyl chloride (PVC) and PVC blends Level 2 items, "Sheets and laminates used for the exterior of wooden speakers", "Insulating veneer, decorative veneer, labels, sheets, laminates", and "Flexible flat cables (FFC)", moved to level 1. Level 2 item "Connection Cords (1)" moved to level 3. Addition of new item "insulated internal wiring" to level 3.	13	3		
		7. The following substances have been newly added: Beryllium oxide. Level 2. Banned from April 1, 2008. Beryllium copper. Level 3. Specific phthalate esters. Level 3. Hydrofluorocarbon and perfluorocarbon. Level 3.	14	1		
		8. Items added relating to batteries: Level 2 item, "All NiCd batteries", moved to level 1.	16	3		
		5) 5.7 Level 1 prohibited substances and thresholds "Brominated organic compounds" in No. 8 and No. 9 changed to "Specific brominated organic compounds".	20	3		

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6	04/02/2007	6) 5.8 Substances, laws and regulations in various countries Updated as of January 2007.	21	3		
		7) Item 6.3, 3. ICP Data Stipulation of ICP data period of validity. Creation of "Certificate for RoHS prohibited substances within products". (HS-Q3-07 Form 3)	23	3		
		8) Certificate for environment-related substances within products "Brominated organic compounds" in No. 8 and No. 9 changed to "Specific brominated organic compounds".	Form 2			Hoshin Tōyama
7	04/01/2008	1) 5.4.(3)"Additional requirements" changed to "Requirements related to Packaging Materials" Addition of "5.4.(4) Requirements for Batteries" Correction of pages 19, 20, 21, 22, and 24 of the table of contents	1	4		
		2) Addition of Exemption in control level of 3.(3) Controlled substances Addition of 3.(7) Time for ban on delivery	4	2		
		3) Table 5.1 List of controlled substances in 5.4. Changed "Chlorinated paraffins (CP)" to "Short chain chlorinated paraffins (SCCP)" Addition of "Perfluorooctanesulfonic acid (PFOS) and "Specific benzotriazole."	6	4		
		4) The following additions and changes were applied to 5.4 (2) "Management standards for controlled substances." Cadmium and cadmium compounds	7	4		
		Addition of "ASTM F963-03" and "ASTM D 5517" in the Notes. Lead and lead compounds	8	4		
		Addition of "Anisotropic conductive film (ACF)" and "Anisotropic conductive paste (ACP)" in Exemptions, Addition of statement "ASTM F963-03, ASTM D 5517 and/or EN1122 is inappropriate as pre-conditioning method for lead in the Notes.	9	3		
		Addition of Polychlorinated naphthalene (PCN), and Polychlorinated terphenyl (PCT) in Polychlorinated biphenyls (PCB). Changed "Chlorinated paraffins (CP)" to "Short chain chlorinated paraffins (SCCP)"	10	4		
		Indicated clearly as Tributyltin compounds (TBT) and triphenyltin compounds (TPT)	11	4		
		In exemptions for polyvinylchloride (PVC) and PVC compounds "Transformer leads in which the joint is fixed by varnish impregnation" was made as an independent item. Changed description from "Application where general-purpose cables cannot be used" to "Cables where general purpose products cannot be used"	13	4		

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		Beryllium oxide Changed to "Level 1: All applications other than Level 3" (Effective immediately from April 1, 2008) and "Level 3: Special application and no alternative substance is available." Hydrofluorocarbon (HFC), Perfluorocarbon (PFC) Changed from "Level 3" to "Level 1" and added "Installed on the product." Date of ban on delivery "from April 1, 2008"	14	2		
		Addition of "Perfluorooctane sulfonic acid (including its salt) (PFOS)" Addition of "Specified benzotriazoles"	15	1		
		5) 5.4.(3) Rules for packaging materials Level 1 changed to "Packaging components and materials listed in Table 5.3." Exemption changed to "Returnable cases owned by the carriers or by the suppliers." Changed "Table 5.3 Identification of packaging material" to "Table 5.3 Specific examples of packaging components and material and their identification" and the following items were added: "Cartons", "Envelops", "Partitions/spacers", "Tray", "Reel"	16	3		
		Changed "Table 5.3 Identification of packaging material" to "Table 5.3 Specific examples of packaging components and material and their identification" and the following items were added: "Cartons", "Envelops", "Partitions/spacers", "Tray", "Reel"	17	2		
		6) 5.4(4) Rules for batteries Changed title from "Additional rules for batteries" to "Rules for batteries." Correction and addition of items for Cd, Pb and Hg. Addition of date of ban, "April 1, 2008" Deletion of "Exemptions"	18	4		
		7) 5.5 List of excepted substances Statement for related items and scope of regulations for "Cadmium, lead and mercury" were changed to be the same as 5.4.2 "Exemptions." Addition of "Polyvinyl chloride (PVC) and compounds of PVC" Addition of "Perfluorooctane sulfonic acid (PFOS)"	19	2		
		8) 5.6 Common uses for specific substances (reference) Addition of "Perfluorooctane sulfonic acid (including salt) (PFOS)"	20	2		
		9) 5.7 Level 1 prohibited substances and thresholds Correction of "Threshold (ppm)" to "Threshold (less than in ppm)" Changed "Polychlorinated paraffins (CP)" to "Short chain chlorinated paraffins (SCCP)" Correction of "Azo compounds" to "Specific azo compounds" The following substances were added. "Polyvinyl chloride (PVC)", "Beryllium oxide", "Hydrofluorocarbon (HFC)", "Perfluorocarbon (PFC)", "Perfluorooctane sulfonic acid (PFOS)", and "Specific benzotriazoles"	21	4		

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		10) 5.8 Substances, laws and regulations in various countries Note: Changed from "as of January, 2007" to "as of March, 2008" Addition of "Argentina: Portable electrical energy law" for lead and lead compounds.	22	4		
		Moved "Heavy metals (lead, cadmium, mercury and hexavalent chromium)" to page 23. Addition of "Beryllium oxide", "hydrofluorocarbon (HFC)", "Perfluorocarbon (PFC)", "Perfluorooctane sulfonic acid (PFOS)" and "Specific benzotriazoles"	23	1		
		11) ICP data in 6.4 (3) Submission of ICP data for "six substances for plastics" and "four substances for metals" is clearly indicated.	25	4		
		12) Certificate for products containing environment-related substances * For Level 1 substances, reference to "Attached Sheet" was changed to reference to "Green Procurement Guideline (HS-Q3-07)." Level 1 banned substances were changed from 14 to 18 substances.	Form 2			Hoshino Toyama
8	04/01/2009	1) Environmental Policy is revised as 2009 edition.	2	3		
		2) Addition of "Cobalt chloride and Ozone depleting substances" in 5.4 (1) Environmentally Controlled Substance.	6	5		
		3) The following additions and changes are applied to 5.4 (2) "Management standards for controlled substances"				
		1) Cadmium and cadmium alloys Packaging materials changed from (P. 15) to (P. 17) Addition of IEC 62321: 2008 as the measuring standards	7	5		
		2) Lead and lead alloys Packaging materials changed from (P. 15) to (P. 17) Addition of IEC 62321: 2008 as the measuring standards	8	5		
			9	4		
		3) Mercury and mercury compounds Packaging materials changed from (P. 15) to (P. 17) Statement of the Level 1 is reviewed and revised to "All applications other than those exempted."	10	5		
		4) Hexavalent chromium Packaging materials changed from (P. 15) to (P. 17)				
		15) PVC and PVC compounds "PVC tie" in Level 1 is revised to "Cable tie binding accessories and connecting cables, etc."	13	5		
		20) Perfluorooctane sulfonate (PFOS) Addition of Level 2 and date of ban is established as April 1, 2010.	15	2		
		22) Addition of cobalt chloride and date of ban for Level 1 is established as April 1, 2009 and for Level 2 as April 1, 2011.				

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		23) Addition of ozone depleting substances (ODS) and date of ban is established as "immediate."	16	1		
		4) Addition of IEC 62321: 2008 as the measuring standard in 5.4 (3) Rules for packaging materials	17	4		
		5) Addition of "Cobalt chloride and ozone depleting substances" to 5.7 Level 1 banned substances and amount.	22	5		
		6) 5.8 Substances, laws and regulations in various countries "As of March, 2008" is changed to "as of March, 2009."	23	5		
		Addition of "Cobalt chloride and ozone depleting substances" to the updates of laws and regulations	24	2		
		7) 6.4 Detailed survey method (1) Survey format is changed from JGP File Ver. 2 to JAMP AIS. It is stated that request for submission by JGP file may be made when necessary Addition of JAMP website address, and JGPSSI website address revised. (3) 1.Electronic data for JGP file is changed to JAMP AIS in XML format.	25	3		
		8) Addition of 19., Cobalt chloride, and 20., Ozone depleting substances, to Certificate for environment-related substances contained in products and addition of "Ver. 8" to the title.	Form 2			Hoshin Toyama
9	04/01/2009	1) Deletion of "5.2 Scope" and "5.3 Terms and definitions" in the contents page.	1	6		
		2) Amended statement of Environmental Policy 6 (5) to "Promotion of green procurement (Control of substances of environmental concern).	2	4		
		3) Addition of the statement "Development of alternative components and materials, and transfer to Level 2 and gradual elimination of use" under 3. (3) Level. 3	3	2		
		4) Addition of "Dibutyltin (DBT) compounds", "Diocetyl tin (DOT) compounds" and "Dimethyl fumarate (DMF) compounds" in Table 5.1 List of controlled substances. Revised expressions for "Tributyltin compounds (TBT)" and "Triphenyltin compounds (TPT)" as "Tri-substituted organotin compounds (including tributyltin compounds (TBT) and triphenyltin compounds (TPT))".	6	6		
		5) Cadmium and cadmium compounds under 5.2.(2) · Specified optical glass as Level 2 and the date of ban as June 1, 2010. · Totally revised the contents of (1) Pre-conditioning and (2) Measuring methods of "Standards for measurement".	7	6		
		6) Lead and lead compounds under 5.2.(2) · Specified glass used for applications other than listed in the exemption as Level 2 and the date of ban as June 1, 2010. · Specified solder used for joining the terminals and the packages of microprocessors that consists of two or more elements and contains more than 80 wt% but less than 85 wt% of lead as Level 2 and the date of ban as June 1, 2010. · Revised statements for exemption · Totally revised (1)Pre-conditioning and (2) Measuring method for "Measuring standards".	8 9	6 5		

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		7) 3) Mercury and mercury compounds under 5.2.(2) · Added statements for Level 2 and specified the date of ban as January 1, 2011. · Revised statements for exemption.	10	6		
		8) Revised 5.2.(2) -11) as Tri-substituted organotin compounds. Addition of 12) Dibutyltin (DBT) compounds and 13) Dioctyltin (DOT) compounds. A number moved it back after 14).	11	6		
		9) Revised reference for test method of 15) Azo compounds from 76/769/EEC to Annex XVII to REACH Regulation (EC) No 1907/2006.	12	6		
		10) Suction cups for fitting automotive equipment under 5.2(2), 17) Revised polyvinyl chloride which was classified as Level 3 to Level 1 and specified date of ban as April 1, 2010.	13	4		
		11) Deleted Level 3 and specified all applications as Level 1 under 5.2(2), 18) Beryllium Oxide.	14	6		
		12) 22) Perfluorooctane sulfonic acid under 5.2.(2) · Specified all applications other than those exempted as Level 1. · Specified photographic films for professional use and semiconductor photoresist as exemptions.	15	3		
		13) Addition of chemical names in Table 5.2c List of Ozone Depleting Substances (ODS) Addition of 26) Dimethyl fumarate (DMF) under 5.2(2), and specified date of ban as April 1, 2010.	16	3		
		14) Revised 5.2(3) "Rules for packaging materials" to "Rules related with packaging components and materials".	17	5		
		15) Rules for 5.2(4) Batteries · Addition of rules for cadmium and specified the date of ban as April 1, 2010. · Addition of rules for lead and specified the date of ban as April 1, 2010.	19	5		
		16) 5.3 Exemptions · Revised "Related items, scope of regulations" for lead and lead compounds. · Revised "Related items, scope of regulations" for mercury and mercury compounds. · Revised "Related items, scope of regulations" for perfluorooctane sulfonic acid (PFOS).	20	3		
		20) The following substances were added as substance components to 5.4 Common uses for specific substances (reference) · Dibutyltin (DBT) compounds · Dioctyltin (DOT) compounds · Beryllium oxide · Designated benzotriazoles · Cobalt chloride · Dimethyl fumarate (DMF)	21	3		

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		21) 5.5 Level 1 prohibited substances and thresholds · Revised No.9 substance name to Tri-substituted organotin compounds · Addition of No. 21, Dibutyltin, No. 22, Dioctyltin, and No. 23, Dimethyl fumarate	22	6		
		22) 5.6 Substances, laws and regulations in various countries · Updated according to information as of February 2010 · Revised substance name to Tri-substituted organotin compounds · Addition of dibutyltin, dioctyltin and dimethyl fumarate.	23 24	6 3		
		23) Deleted Note under of 6.4.(3), and added submission of JAMP and MSDSplus in the case of bulk material	26	6		
		24) Added the following revisions and additions in "Certificate for environment-related substances within products" · Revised Item 9 to Tri-substituted organotin compounds · Added 21, Dibutyltin, 22, Dioctyltin, and 23, Dimethyl fumarate. · Revised the certificate to Ver. 9 from Ver. 8. · Added a list for affected products.	Form 2			Hoshino Toyama

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(Green procurement supplier survey form) (HS-Q3-07 Form 1)

(Certificate for environment-related substances within products) (HS-Q3-07 Form 2)

(Certificate for RoHS prohibited substances within products) (HS-Q3-07 Form 3)

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Kaga Components Co., Ltd. Environmental Policy

In October 2002, Kaga Components Co., Ltd. created its corporate Environmental Management Manual. This manual is the foundation of our company's environmental conservation activities.

Environmental Policy

Basic philosophy

Our world is precious and our company has a responsibility to protect all the organisms that exist on our planet and the environment in which we work. Through environmental conservation, we aim to ensure the preservation of a clean, bio-diverse world for the next generation. It is the duty of the management and staff of Kaga Components Co., Ltd. to integrate environmental conservation into all aspects of the company including business activities, products and services. With the assistance of our suppliers, we hope to do as much as possible to preserve the environment. We declare the following as the foundation of our business activities; to live in harmony with the environment and maintain the trust of local residents and everyone connected with our company.

Our company shall:

- (1) abide by all laws, regulations and agreements related to the environment.**
- (2) ensure continuous improvement of environmental performance.**
- (3) effectively use resources through new technology and manufacturing improvements.**
- (4) increase our employees' environmental awareness and live in harmony with our society.**

Policy

As a company that develops, designs, manufactures and sells a range of power supplies and electronic components, we will contribute to society, and we wish to work in harmony with the environment by continually reducing the environmental impact in all aspects of our business activities, and maintain the trust of local residents, suppliers, employees and everyone connected.

In order to achieve these aims, our company shall:

- 1. establish environmental objectives and environmental goals.**
- 2. create and maintain an environmental management system.**
- 3. abide by all laws and regulations related to the environment.**
- 4. provide environmental training for all employees.**
- 5. promote afforestation and clean-up campaigns.**
- 6. reduce environmentally hazardous substances through the:**
 - (1) development and design of energy-efficient products and products to deal with environment-related controlled substances.
 - (2) reduction of the amount industrial waste produced.
 - (3) activities to conserve resources and energy.
 - (4) implementation of waste recycling activities.
 - (5) Promotion of green procurement (Control of the substances of environmental concern)

Established	04/01/2005	Created by:	Hoshino	Date of release	04/01/2005	Released by:	Kaminishi
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1. Purpose

Kaga Components Co., Ltd. (hereinafter: "the company") shall contribute to environmental conservation through the development, design, manufacture and sales of environmentally-friendly products, based upon its environmental policy. To achieve this goal, the company shall implement a Green Procurement program and actively procure environmentally-friendly materials, parts and products from environmentally-aware companies.

2. Scope

These guidelines apply to all of the company's products listed below (including those manufactured overseas):

- Products; their components and materials (including packaging materials and packaging components)
- Finished subcontracted products that are sold under the company's brand.
(packaging and packing used when delivering finished goods is not included)

3. Terms and definitions

(1) Environment-related substances

"Environment-related substances" are classified as any of the following:

- Substances contained within a product that can directly or indirectly cause harm to the body.
- Substances contained within a product that cause pollution when dispersed in the environment.
- Substances contained within a product that should be managed, recovered and reused in order to conserve natural resources

(2) Controlled substances

Substances that are contained in products, parts or materials (including packaging and parts) that the company deems to be hazardous to the environment and the human body.
(See 5.4 - Controlled substances and management standards)

(3) Management standards for controlled substances

Controlled substances shall be managed according to the following three standards:

1. Level 1

Substances and their uses that are currently prohibited.

If the concentration of a substance is lower than the allowed limit, the substance will be considered a component. It must not, however, exceed the concentration permitted for impurities.

2. Level 2

Substances and their uses that are scheduled to be prohibited after a certain date.

After the date specified in the chart, products and materials that contain more than the permitted concentration shall be designated as Level 1 (prohibited) substances.

3. Level 3

Substances and their uses that currently have no scheduled prohibition date or reduction target but are still designated as substances requiring management.

We will eliminate use of Level 3 substances by replacing them with Level 2 substances that are considered feasible owing to development of alternative components and materials and establishment of alternative technologies.

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Exemption

Substances, applications, and parts specifically exempted by regulations or without available alternative technologies as a solution.

(4) Component

A substance that is contained in parts or devices of a product, intentionally or unintentionally, or a substance that is added, used as filler, mixed with or affixed to materials used to manufacture a product (Including instances when the substance is unintentionally mixed or affixed to a product or its parts during processing.).

(5) Impurities

Substances that are contained within natural raw materials (natural impurities) which cannot be removed by refining the materials for use in manufacturing, and substances created during a synthetic reaction that cannot be removed and are not considered components. To distinguish them from raw materials, substances considered to be "impurities" are designated as "components" when used to change the characteristics of raw materials. In the case of Level 1 controlled substances that have maximum permitted level of concentration, the concentration of the substance must not exceed the limit, even if it is designated as an impurity.

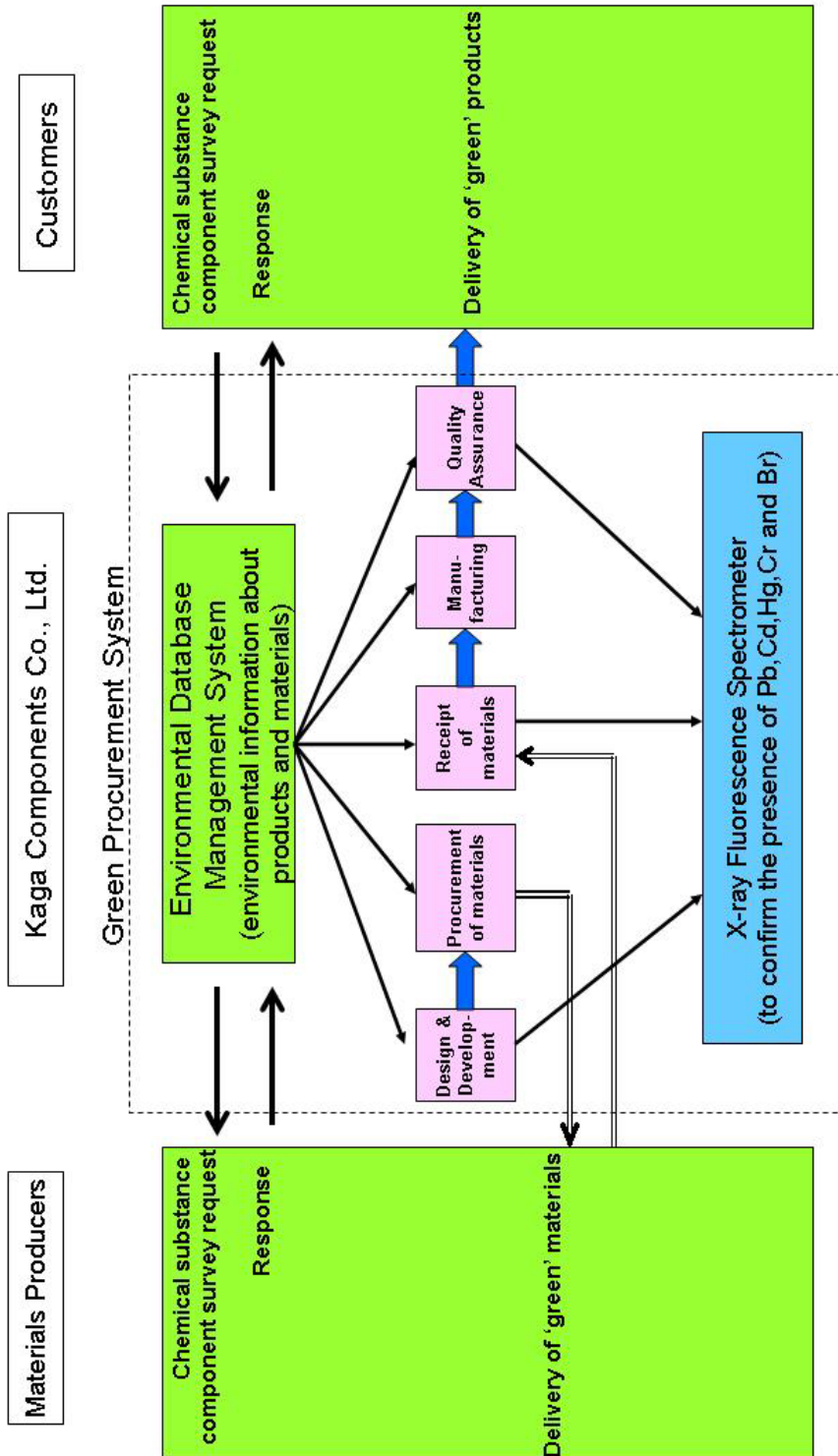
(6) Definition of 'plastic'

Plastic is defined as "a material or raw material that is composed of a synthetic polymer".
E.g. fibers, film, adhesive tape, molded products, synthetic rubber products, plant-based plastics, and adhesives made from polymers.

(7) Ban on delivery

Period during which delivery of parts and components to Kaga Components is banned.

4. Green Procurement System at Kaga Components Co., Ltd.



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5. Management Standards for Environment-related Controlled Substances at Kaga Components Co., Ltd.

5.1 Purpose of implementation

To clarify management standards related to environmentally hazardous substances contained within the parts and materials used in the company's products. Detailed information will be made available within the company and to suppliers of parts and materials in order to maintain and further improve the environmental standards of the company's products.

5.2 Controlled substances and management standards

5.2.(1) Controlled substances

Names of controlled substances subject to these standards.

Table 5. List of controlled substances

Substance Name	
Heavy metals	Cadmium and cadmium compounds
	Lead and lead compounds
	Mercury and mercury compounds
	Hexavalent chromium compounds
Chlorinated organic compounds	Polychlorinated biphenyls (PCB)
	Polychlorinated naphthalenes (PCN)
	Polychlorinated terphenyls (PCT)
	Short chain chlorinated paraffins (SCCP)
	Other chlorinated organic compounds
Brominated organic compounds	Polybrominated biphenyls (PBB)
	Polybrominated diphenylethers (PBDE) containing decabromodiphenyl ether (DecaBDE)
	Other brominated organic compounds
Tri-substituted organotin compounds (including tributyltin (TBT) compounds and triphenyltin (TPT) compounds)	
Dibutyltin (DBT) compounds	
Diocetyl tin (DOT) compounds	
Asbestos	
Specific azo compounds	
Formaldehyde	
Polyvinyl chloride (PVC) and PVC blends	
Beryllium oxide	
Beryllium copper	
Specific phthalate esters (DEHP, DBP, BBP, DINP, DIDP, DNOP, DNHP)	
Hydrofluorocarbon (HFC), Perfluorocarbon (PFC)	
Perfluorooctanesulfonic acid (including salt) (PFOS)	
Specific benzotriazoles	
Cobalt chloride	
Ozone depleting substances (ODS)	
Dimethyl fumarate (DMF) compounds	

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5.2.(2) Management standards for controlled substances
1. Cadmium and cadmium compounds

Substances: Cadmium and cadmium compounds		
All substances that contain cadmium such as metals, alloys, inorganic compounds, organic compounds, inorganic salts and organic salts.		
Related items		Date of ban
	<ul style="list-style-type: none"> * Packaging components and materials (see 5.2. (3)) * Stabilizers, pigments, or dyes used for plastic (including rubber) materials (e.g. labels, cabinets, phonograph records, binding bands, keys of remote controllers, outer plastic resins of electrical parts, and insulators of electrical wiring) * Paints, inks * Surface treatments (e.g. electroplating, electroless plating, etc.) exempted.. * Photographic films * Fluorescent lamps (small sized lamps, straight-tube lamps) 	Currently in force
Level 1	Level 2, All purposes excluding exemptions. Typical examples are given below: <ul style="list-style-type: none"> * Switches, relays, breakers, DC motors, and other electrical contact points * Fuse elements of temperature fuses * Glass and pigments as well as dyes for glass paints (paints for glass, pigments and dyes used for glass) * Solder (with a cadmium concentration of more than 20 ppm) * CdS-photocells and the phosphors contained in fluorescent display devices * Resistor elements (glass frit) 	Currently in force (From January 1, 2005)
	* Parts composed of metals containing zinc (e.g. brass, zinc hot dip galvanizing) with a cadmium concentration of more than 100ppm	Currently in force (From October 1,
Level 2	· Optical glass	From June 1, 2010
Exemptions	<ul style="list-style-type: none"> · Plating for electric contacts where high reliability is required and for which no alternative materials are available. · Filter glass 	

Allowable concentration: Less than 5 ppm for plastics (including rubber), paints and inks

Standards for measurement:

(1) Pre-conditioning

Typical pre-conditioning: Ex. IEC 62321:2008, EPA 3052:1996

- Enclosed system acid decomposition method (Ex. Microwave decomposition)
- Acid decomposition method
- Dry ashing method

(Note) Precipitates (insoluble matter) must be totally dissolved by certain means (e.g. alkali fusion).

Elution methods prescribed in EN71-3:1994, ASTM F963-96a, ASTM F963-03, ASTM D 5517, and ISO 8124-3:1997 are not applied as pre-conditioning.

(2) Measurement methods

Typical measuring methods: IEC62321:2008

- Inductively Coupled-Plasma-Atomic (Optical) Emission Spectroscopy (ICP-OES (ICP-AES))
- Atomic Absorption Spectroscopy (AAS)
- Inductively Coupled-Plasma Mass Spectroscopy (ICP-MS)

(Note) Any methods that can ensure the minimum limit of determination of 5 ppm for cadmium by combining pre-conditioning and measuring are acceptable.

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2. Lead and lead compounds

Substances: Lead and lead compounds		
All substances that contain lead such as metals, alloys, inorganic compounds, organic compounds, inorganic salts and organic salts.		
	Related items	Date of ban
Level 1	* Packaging components and materials (see 5.2. (3)) * Paints, pigments and inks containing lead used for printed wiring boards (PWBs)	Currently in force
	* Surface coatings (plating) for external electrodes, lead wires and other parts. (e.g. electrical parts, semiconductor devices and heat sinks) * Stabilizers, pigments and dyes contained in the plastic (including rubber) materials that are used for outer and exposed areas of the following articles: AC adaptors, power supply cords, connection cords, remote controllers, computer mice and devices. * Paints and inks used for outer and exposed areas of devices	Currently in force from April 1, 2004
	Level 2, Lead and lead compounds used for purposes other than those included in level 3 and exemptions. * Surface coatings for external electrodes, lead wires, etc. of parts contained in AC adaptors, remote controllers, power units, modules and semiconductor devices, etc. * Leaded solder that contains less than 85 wt% of lead; and Leaded solder with a lead concentration of more than 1000 ppm * All kinds of alloys (including solder materials) with a lead/lead compound concentration that exceeds the regulated allowable concentration (*1). * Stabilizers, pigments and dyes contained in the plastic (including rubber) materials that are used for outer and exposed areas of the following articles: AC adaptors, power supply cords, connection cords, remote controllers, computer mice and devices. * Materials such as paints and inks used in internal, unexposed areas of equipment. And so on.	Currently in force from January 1, 2005
	* Electroless plating film such as electroless nickel plating and electroless gold plating that contains over 1000 ppm lead.	Currently in force from February 1, 2006
Level 2	* Glass used for applications other than those listed in the Exemptions. * Solder used for joining the terminals and the packages of the microprocessors that consists of two or more elements and contains more than 80 wt% but less than 85 wt% of lead.	From June 1, 2010
Level 2	* Dielectric ceramics used for capacitors rated under 125V AC or 250V DC.	From January 1, 2012
Level 3	* Electroless plating film such as electroless nickel plating and electroless gold plating that contains not more than 1000 ppm lead.	

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Substances: Lead and lead compounds

Related items	Date of ban
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Exemptions	<ul style="list-style-type: none"> • High melting point solders for joining components and devices. (Lead 85 wt% or more). • Optical glass and filter glass • Glass used in CRTs. • Glass used in the fluorescent lamps containing lead not exceeding 0.2 wt% • Glass or ceramics used in electric and electronic components or matrix compounds (e.g. piezoelectric element) <li style="padding-left: 20px;">Dielectric ceramics of capacitors are excluded. • Dielectric ceramics used in capacitors rated at 125V AC or 250V DC or more. • Solders used for joining semiconductor chips and connection substrates in the flip chip package of ICs <li style="padding-left: 20px;">(including solder paste under C4 bumps) • Crystal glass defined under Annex I of EU Directive 69/493/EEC (Categories 1, 2, 3 and 4). <p>* Allowable concentration of lead in the following alloys (*1):</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding-left: 20px;">Type of alloy</td> <td style="padding-left: 20px;">Allowable lead content</td> </tr> <tr> <td style="padding-left: 40px;">Steel</td> <td style="padding-left: 40px;">less than 0.35 wt%</td> </tr> <tr> <td style="padding-left: 40px;">Aluminum alloys</td> <td style="padding-left: 40px;">less than 0.4 wt%</td> </tr> <tr> <td style="padding-left: 40px;">Copper alloys</td> <td></td> </tr> <tr> <td style="padding-left: 40px;">(incl. brass & phosphor bronze)</td> <td style="padding-left: 40px;">less than 4 wt%</td> </tr> <tr> <td style="padding-left: 40px;">Solder</td> <td style="padding-left: 40px;">less than 1000 ppm</td> </tr> </table> <p>When solder is used for Anisotropic Conductive Film (ACF) and Anisotropic Conductive Paste (ACP), the following solder (*2) of which the lead content is equal to or less than the permissible level shall be used as a dielectric substance.</p>	Type of alloy	Allowable lead content	Steel	less than 0.35 wt%	Aluminum alloys	less than 0.4 wt%	Copper alloys		(incl. brass & phosphor bronze)	less than 4 wt%	Solder	less than 1000 ppm	
Type of alloy	Allowable lead content													
Steel	less than 0.35 wt%													
Aluminum alloys	less than 0.4 wt%													
Copper alloys														
(incl. brass & phosphor bronze)	less than 4 wt%													
Solder	less than 1000 ppm													

Allowable concentration: Less than 100 ppm for plastics (including rubber), paints and inks.

Standards for measurement

(1) Pre-conditioning

Principal pre-conditioning methods: Ex. IEC 62321:2008, EPA 3052:1996

- Enclosed system acid decomposition method (Ex. Microwave decomposition)
- Acid decomposition method
- Dry ashing method

(Note) Precipitates (insoluble matter) must totally dissolve by certain means (e.g. alkali fusion).

Elution methods prescribed in EN71-3:1994, ASTM F963-96a, ASTM F963-03, ASTM D 5517, and ISO 8124-3:1997 are not applied as pre-conditioning. EN 1122:2001 is not applied as a pre-conditioning method for lead.

(2) Measurement methods

Typical measuring methods: e.g. IEC62321:2008

- Inductively Coupled-Plasma-Atomic (Optical) Emission Spectroscopy (ICP-OES [ICP-AES])
- Atomic Absorption Spectroscopy (AAS)
- Inductively Coupled-Plasma Mass Spectroscopy (ICP-MS)

(Note) Any methods that can ensure the minimum limit of determination of 30 ppm for lead by combining pre-conditioning and measuring are acceptable.

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3. Mercury and mercury compounds

Substances: Mercury and mercury compounds		
All substances that contain mercury such as metals, alloys, inorganic compounds, organic compounds, inorganic salts and organic salts.		
Related items		Date of ban
Level 1	* Packaging materials (Refer to page 17) * Paints and inks * Hour meters * Relays, switches or sensors with contacts that contain mercury * Mercury or its compounds mixed in plastics	Currently in force
	· Level 2, All applications other than those exempted	Currently in force from January 1, 2005
Level 2	· Cold cathode fluorescent lamp (CCFL) and External electrode fluorescent lamp (EEFL): With a length of 500 mm or less. Mercury content is 3.5 mg or more but less than 5 mg per unit.	From January 1, 2011
Exemptions	· Cold cathode fluorescent lamp (CCFL) and external electrode fluorescent lamp (EEFL): Length not exceeding 500 mm. Mercury content less than 3.5 mg per unit. Length exceeding 500 mm but not exceeding 1500 mm. Mercury content less than 5 mg per unit. Length exceeding 1,500 mm. Mercury content less than 13 mg per unit. · High pressure discharge lamp (projector lamp etc.)	

4. Hexavalent chromium compounds

Substances: Hexavalent chromium compounds		
All substances that contain hexavalent chromium such as inorganic compounds, organic compounds, inorganic salts, organic salts.		
Related items		Date of ban
Level 1	· Packaging components and materials (see 5.2.(3))	Currently in force
	* Purposes for which compounds are components or ingredients in paints, inks and other additives. * Cases in which compounds remain on treated surfaces (screws, steel plates, etc.) as a result of plating, conversion treatment, etc.	Currently in force from January 1, 2005

5. Polychlorinated biphenyls (PCB), Polychlorinated naphthalene (PCN), and Polychlorinated terphenyl (PCT)

Substances: Polychlorinated biphenyls (PCB), polychlorinated naphthalenes (PCN), polychlorinated terphenyls (PCT)		
Related items		Date of ban
Level 1	* Substances used for all purposes (e.g. used for transformers containing oil, capacitors, insulating oils, lubricants and used as flame retardants in plastics)	Currently in force

6. Short-chain chlorinated paraffins (SCCP)

Substances: Short-chain Chlorinated Paraffins (SCCP)		
Short-chain chlorinated paraffins with the following characteristics: carbon chain length C10-13.		
Related items		Date of ban
Level 1	* Cabinets and PWB components of products (including accessories)	Currently in force
	* All applications other than the above	Currently in force (from February 1, 2006)

7. Other chlorinated organic compounds

Substances: Other chlorinated organic compounds		
Related items		Date of ban
Level 3	* Plasticizers or flame retardants contained in plastics and flame retardants used for PWBs	

8. Brominated organic compounds, Polybrominated biphenyls (PBB)

Substances: Brominated organic compounds, polybrominated biphenyls (PBB)		
Related items		Date of ban
Level 1	* Substances used for all purposes (e.g. used as flame retardants contained in plastics)	Currently in force

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9. Brominated organic compounds: Polybrominated diphenylethers (PBDE) containing decabromodiphenyl ether (DecaBDE)

Substances: Brominated organic compounds: Polybrominated diphenylethers (PBDE) containing decabromodiphenyl ether (DecaBDE)		
Related items		Date of ban
Level 1	* Substances used for all purposes (e.g. used as flame retardants contained in plastics)	Currently in force
	* Parts made by dies that were made during December 2002 or earlier. (Applicable only to bodies of displays and TV sets shipped to countries outside Europe) From January 2003, this substance is not permitted to be used in new die parts.	Currently in force from January 1, 2005

10. Other brominated organic compounds

Substances: Other brominated organic compounds		
Related items		Date of ban
Level 3	* Substances used as flame retardants contained in plastics or used for printed circuit boards.	

11) Tri-substituted organotin compounds (including Tributyltin (TBT) compounds and Triphenyltin (TPT) compounds)

Substances: Tri-substituted organotin compounds (including Tributyltin (TBT) compounds and Triphenyltin (TPT) compounds)		
Related items		Date of ban
Level 1	Substances used for all purposes (e.g. paints, inks, preservatives and fungicides)	Currently in force
Note: Metallic tin, tin alloys, tin plating and inorganic tin compounds are not included.		

12) Dibutyltin (DBT) compounds

Substance name: Dibutyltin (DBT) compounds		
Related items		Date of ban
Level 2	· All applications such as plastic additives . Those for which tin content does not exceed 0.1 wt% for materials used in the components.	From July 1, 2011
Note: Metallic tin, tin alloys, tin plating and inorganic tin compounds are not included.		

13) Dioctyltin (DOT) compounds

Substance name: Dioctyltin (DOT) compounds		
Related items		Date of ban
Level 2	· Those for which tin content does not exceeding 0.1 wt% in fibers and fabrics.	From July 1, 2011
Note: Metallic tin, tin alloys, tin plating and inorganic tin compounds are not included.		

14) Asbestos

Substances: Asbestos		
Related items		Date of ban
Level 1	* Substances used for all purposes (e.g. insulators and fillers)	Currently in force

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15) Specific azo compounds

Substances: Specific azo compounds	
Azo compounds that produce amines in Table 5.2a when decomposed according to the test methods referred to in the Annex XVII of REACH Regulation (EC) No 1907/2006 and the amines in Table 5.2a.	
Related items	
Level 1	* Products that use pigments that may come into direct and prolonged contact with the human skin (earphones, headphones, shoulder pads for bags, belts straps, etc.)
Level 3	* Items that do not come into continuous contact with the human skin. (e.g. remote commanders, cushions, carry bags, carry pouches and computer mice.)
Date of ban	
Currently in force	
Test methods (reference)	
The following methods are available as the methods for decomposing azo compounds and then extracting amines.	
1) EN 14362-1:2003	
2) GEN ISO/TS 17234:2003	
3) EN 14362-2:2003	

Table 5.2a

List of specific amine compounds

CAS No.	Amines
92-67-1	4-aminodiphenyl
92-87-5	Benzidine
95-69-2	4-chloro-o-toluidine; 4-chloro-2-methylaniline
91-59-8	2-naphthylamine
97-56-3	o-aminoazotoluene
99-55-8	2-amino-4-nitrotoluene; 5-nitro-o-toluidine
106-47-8	p-chloroaniline
615-05-4	2,4-diaminoanisole
101-77-9	4,4'-diaminodiphenylmethane; 4'-methylenedianiline
91-94-1	3,3'-dichlorobenzidine
119-90-4	3,3'-dimethoxybenzidine
119-93-7	3,3'-dimethylbenzidine
838-88-0	3,3'-dimethyl-4,4'-diaminodiphenylmethane; 4,4''-diamino-3,3-dimethyldiphenylmethane
120-71-8	p-cresidine; 5-methoxy-m-toluidine
101-14-4	4,4'-methylene-bis-(2-chloroaniline)
101-80-4	4,4'-oxideaniline
139-65-1	4,4'-thiodianiline; 4,4'-diamino-diphenylsulphide
95-53-4	o-toluidine
95-80-7	2,4-toluylenediamine; 4-methyl-m-phenylenediamine
137-17-7	2,4,5-trimethylaniline
90-04-0	o-anisidine
60-09-3	4-aminoazobenzene

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16) Formaldehyde			
Substances: Formaldehyde			
Related items			Date of ban
Level 1	* Wooden products made from fiberboard, particleboard, or plywood, which are used in products designated for import into Europe (e.g. speakers and racks)	Currently in force	
	* Wooden products made from fiberboard, particleboard, or plywood, which are employed in products for countries outside Europe (e.g. speakers and racks)	Currently in force (from January 1, 2005)	
<p>Reference value (emission content): Obtain the value by any one of the following methods.</p> <p>1) [With the chamber method] Concentration in the air: Equal to or less than 0.1 ppm (or 0.124 mg/m³) in an air-tight test chamber with a volume of 12 m³, 1 m³ or 0.0225 m³</p> <p>2) [With the perforator method] - Equal to or less than 6.5 mg in 100 g of a particleboard without a surface treatment (the average value during six months) - Equal to or less than 7.0 mg in 100 g of a fiberboard without a surface treatment (the average value during six months) - Equal to or less than 8.0 mg in 100 g of a particleboard/fiberboard without a surface treatment (the value derived from the one-time measurement based on EN120)</p> <p>3) [With the desiccator method] - Average content: 0.5 mg/l or less - Maximum content: 0.7 mg/l or less (Use N=2 to check the average and maximum values.)</p>			
<p>Measurement methods:</p> <ul style="list-style-type: none"> - Chamber method specified in EN-717-1: 2004 - Perforator method specified in EN 120: 1992 - Desiccator method specified in JIS A 5905 (Fiberboards) and JIS A 5908 (Particleboards) 			
17) Polyvinyl chloride (PVC) and PVC blends			
Substances: Polyvinyl chloride (PVC) and PVC blends			
Related items			Date of ban
Level 1	* Contactless IC card (FeliCa) base materials	Currently in force (not originally used)	
	* Fabric and coatings for carry bags, carrying cases and carrying pouches for personal computers, digital cameras, video cameras and portable audio devices (excluding those for business use)	Currently in force	
	* Cable ties used to bundle accessories and connecting cables	Currently in force (from July 1, 2002)	
	* Packaging (bags, tape, cartons, blister packs, etc.) for products and associated accessories	Currently in force (from January 1, 2005)	
	* Heat shrink tubes	Currently in force (from April 1, 2005)	
	* Sheets and laminates used for the exterior of wooden speakers * Insulating veneer, decorative veneer, labels, sheets, laminates * Flexible flat cables (FFC)	Currently in force (from April 1, 2007)	
	* Suction cups for fitting automotive equipment	Currently in force (From April 1, 2010)	

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Substances: Polyvinyl chloride (PVC) and PVC blends		
	Related items	Date of ban
Level 3	<ul style="list-style-type: none"> * Connection cords (1): Cords for wearable devices (earphones, headphones, earphone microphone cables, etc.) * Insulating and protective cords used in the interior and exterior of appliances, insulating tubes, carrying belts, spacers, holders, covers, ducts, etc. * Power cords (including plugs, connectors, cord bushes) for Japan, the USA and Canada: [2P, 3P] * Internal wiring materials including parts and motor leads using wiring such as connectors with cords attached * Connection cords (2): USB cables, i.LINK cables, video cables, AC adaptor secondary leads, flat electrical cables, multi-filament cables, speaker cables, etc. * Harnesses and processed wire rods (coaxial cable, flat electrical wires, double insulated electrical wires, shielded wires, etc.) * Fabric and coatings for carry bags, carrying cases and carrying pouches for electronic business products * Photographic paper * Insulator caps for condensers, power switches and fuses * Trays, magazine sticks, reels, embossed carrier tape, etc. used as parts packaging by the supplier * Wire holders to be used inside equipment (metal holders with PVC coating) Parts other than those included in level 1 and exemptions 	
Exemptions	<ul style="list-style-type: none"> * Binders for resin * Polyvinyl electrical wires for high voltage * Insulating tapes * Speaker grilles * Power cords for import into countries other than those in level 3 * Parts which are not classified into levels 1~3 and use blends made from vinyl chloride copolymers or polyvinyl chloride and other polymers. * Transformer leads (impregnated with varnish) * Curl cords * Extra fine electrical wires that are AWG (American Wire Gauge) 36 or more * Application of professional-use cables, where general-purpose products cannot be used (e.g. cables for broadcast cameras and microphones) 	

18) Beryllium Oxide

Substance Name: Beryllium Oxide		
	Related items	Date of ban
Level 1	* All applications	Effective immediately (From April 1, 2008)

19) Beryllium Copper

Substance Name: Beryllium Copper		
	Related items	Date of ban
Level 3	* Substances used for all purposes	

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20) Specific Phthalate Esters (DEHP, DBP, BBP, DINP, DIDP, DNOP, DNHP)
Related items are shown in Table 5.2b

Substance Name: Specific Phthalate Esters (DEHP, DBP, BBP, DINP, DIDP, DNOP, DNHP)		
Related items		Date of ban
Level 3	* Plasticizers contained in PVC plastics used for cable and cord coating and their plugs and connectors	

Table 5.2b List of Specific Phthalate Esters (Phthalates)

Abbrev.	CAS No.	Name
DEHP	117-81-7	Bis (2-ethylhexyl) phthalate
DBP	84-74-2	Di-n-butyl phthalate
BBP	85-68-7	n-butyl benzyl phthalate
DINP	28553-12-0 68515-48-0	Di-iso-nonyl phthalate
DIDP	26761-40-0 68515-49-1	Di-iso-decyl phthalate
DNOP	117-84-0	Di-n-octyl phthalate
DNHP	84-75-3	Di-n-hexyl phthalate

21) Hydrofluorocarbon (HFC), Perfluorocarbon (PFC)

Substance Names: Hydrofluorocarbon (HFC), Perfluorocarbon (PFC)		
Related items		Date of ban
Level 1	* Substances useful for all applications such as refrigerant and thermal insulation	Effective immediately (From April 1, 2008)

22) Perfluorooctane sulfonic acid (including its salt) (PFOS)

Substance name: Perfluorooctanesulfonic acid (including its salt) (PFOS)		
Related items		Date of ban
Level 1	· All applications other than those specified in Exemptions.	Currently in force
Exemption	· Photographic film for professional use · Semiconductor photoresist	

23) Specified benzotriazoles

Substance name: Specified benzotriazoles		
Applied to 2- (2H-1, 2, 3-benzotriazole-2-yl) -4, 6-di-tert-butylphenol (CAS No. 3846-71-7)		
Related items		Date of ban
Level 1	Anti-ultraviolet agent or ultraviolet absorber used in the following applications * Decorative panels * Photographic paper * Molded plastic products	Effective immediately (From April 1, 2008)

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24) Cobalt chloride

Substance name: Cobalt chloride		
Related items		Date of ban
Level 1	* Humidity indicator used in desiccant (silica gel etc.)	Effective immediately (From April 1, 2009)
Level 2	* Humidity indicator (Note) Humidity indicator such as the type where cobalt chloride is impregnated in paper	From April 1, 2011

25) Ozone depleting substances (ODS)

Substance name: Ozone depleting substances (ODS)		
Related items		Date of ban
Level 1	· All applications in products such as refrigerants and heat insulation · Parts or materials that undergo a washing and foaming processes using ODS	Effective immediately

Table 5.2c List of Ozone Depleting Substances (ODS)

CAS No.	Name
75-69-4	CFC-11; Trichlorofluoromethane
75-71-8	CFC-12; Dichlorofluoromethane
76-13-1	CFC-113; Trichlorofluoroethane
76-14-2	CFC-114; Dichlorotetrafluoroethane
76-15-3	CFC-115; Chloropentafluoroethane
353-59-3	Halon-1211; Bromochlorofluoromethane
75-63-8	Halon-1301; Bromotrifluoromethane
124-73-2	Halon-2402; Dibromo tetrafluoroethane
75-72-9	CFC-13; Chlorofluoromethane
354-56-3	CFC-111; Pentachlorofluoroethane
76-12-0	CFC-112; Tetrachlorodifluoroethane
422-78-6	CFC-211; Heptachlorofluoropropane
3182-26-1	CFC-212; Hexachlorodifluoropropane
2354-06-5	CFC-213; Pentachlorotrifluoropropane
29255-31-0	CFC-214; Tetrachlorotetrafluoropropane
4259-43-2	CFC-215; Trichloropentafluoropropane
661-97-2	CFC-216; Dichlorohexafluoropropane
422-86-6	CFC-217; Chloroheptafluoropropane
56-23-5	Carbon tetrachloride; Tetrachloromethane
71-55-6	1,1,1-Trichloroethane; Methylchloroform

26) Dimethyl fumarate (DMF)

Substance Name: Dimethyl fumarate (DMF)		
Substances under CAS No. 624-49-7 are affected.		
Related items		Date of Ban
Level 1	· All applications such as fungicide and desiccants.	Currently in force (From April 1, 2010)

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5.2.(3) Rules related with packaging components and materials

Substances: Heavy metals (cadmium, lead, hexavalent chromium and mercury)	
Items that satisfy both the regulations specified in 5.2 (2) Management standards for controlled substances and regulations of relevant laws.	
Related items	
Level 1	* Packaging components and materials listed in Table 5.3
Exemptions	* Returnable cases owned by the carriers or the suppliers.
<p>Allowable concentrations</p> <p>- A total heavy metal concentration of less than 100 ppm (including mercury, cadmium, hexavalent chromium and lead) contained in each part, ink, or paint that constitutes a package.</p> <p>Allowable concentrations of cadmium and lead contained in plastics (including rubber), paints and inks, however, must also fulfill the regulations for "Cadmium and cadmium compounds" and "Lead and lead compounds" (Typical plastic parts: handles, plastic bags, cushionings, films, trays, reels, tapes, magazine sticks [including stoppers] and binding band.)</p> <p>(1) Hexavalent chromium must be first analyzed as total chromium and it must be confirmed that the total concentration of the four elements is less than 100 ppm. For this analysis, the same pre-conditioning methods as those used for cadmium and lead are applicable.</p> <p>(2) If this analysis finds that the total concentration of the four elements is 100 ppm or more, first confirm that the total concentration of cadmium, lead and mercury is less than 100 ppm.</p> <p>(3) After this, determine whether or not hexavalent chromium has been detected and finally confirm that hexavalent chromium is not present.</p> <p>Standards for measurement</p> <p>(1) Pre-conditioning For cadmium and lead, follow the methods specified on pages 7 and 8 respectively. For total chromium, follow the methods specified on page 7. For mercury, typical test methods are as follows: (1) A pressurized acid decomposition method done in a sealed container (a microwave decomposition method [e.g. EPA 3052:1996 or IEC 62321: 2008]); (2) A heating evaporation-cold-vapor mercury-atomic-absorption method (e.g. IEC 62321: 2008); and (3) A wet decomposition method (e.g. Kjeldahl method) in which a decomposition flask with a reflux condenser is used to decompose mercury by sulfuric acid or nitric acid. Note: In the process of pre-conditioning, caution must be taken to avoid emerging mercury sublimation. Precipitates (insoluble matter) must be totally dissolved by some means.</p> <p>(2) Measurement devices Measurement of cadmium and lead should be carried out according to methods for cadmium (pg. 7) and lead (pg. 8) in plastic. The method for mercury is the same as that for cadmium in plastic (pg. 7), (pg. 8). If a low concentration is anticipated, analysis using the vapor-atomic absorption method or ICP-AES (ICP-OES), ICP-MS methods (with a hydride generator apparatus) is considered acceptable.</p> <p>Standard detection methods for hexavalent chromium (* Verification method for packaging materials in the case that the total concentration of four elements (cadmium, lead, mercury, total chromium) exceeds 100 ppm)</p> <p>Detection methods</p> <p>(1) Pre-conditioning Elution methods such as the boiling water sampling process and alkali fusion (e.g. EPA 3060A or IEC 62321: 2008 Annex C)</p> <p>(2) Measurement method Ultraviolet-Visible (UV/VIS) Spectroscopy (e.g. EPA 7196A or IEC 62321: 2008 Annex C)</p> <p>If a combination of a pre-conditioning method and a measurement method can guarantee that amounts do not exceed the detection limits below, combinations are permitted.</p> <p>(1) Mercury: less than 5 ppm (2) Cadmium: less than 5 ppm (3) Total chromium: less than 5 ppm (4) Lead: less than 30 ppm</p> <p>Any one of the measurement methods (except AAS) enables the simultaneous analysis of concentrations of cadmium, lead and total chromium.</p>	

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Table 5.3 Specific examples of packaging components and material and their identification

Packaging materials used for Kaga Components products and for packaging of supplier parts		
PACKAGING		
1.	Cartons (boxes)	Item packaging, sub-master cartons, and master cartons made from any material
2.	Cushioning	
3.	Protective bags (sheets)	Materials made from foamed plastic or non-woven fabric
4.	Plastic bags	
5.	Envelopes	Envelopes containing warranty certificates, etc.
6.	Blister packs	
7.	Film	Including protective films used for LCD displays
8.	Partitions/spacers	
9.	Printing Ink	Inks used in the printing of packaging materials
10.	Adhesive tape	Tape used to seal cartons and plastic bags or for fixing or protection of movable components
11.	Labels	Product information labels and barcode labels, etc. that are affixed to packaging materials
12.	Binding band	PP bands, etc.
13.	Outer boxes	
14.	Magazine sticks	Used for transportation of products
15.	Trays	
16.	Reels	

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5.2.(4) Rules for batteries (applicable to all batteries in commercial distribution)

Rules for batteries

Substances: Heavy metals (cadmium, lead, mercury)			
All substances that contain cadmium, lead, and mercury such as metals, alloys, inorganic compounds, organic compounds, inorganic salts and organic salts.			
Related items			Date of ban
Level 1	Cd	* All NiCd batteries	Currently in force (from January 1, 2007)
		· Batteries with cadmium content that is 0.002% or more of the battery weight. · Battery packs with cadmium content that is 0.002% or more of the battery weight.	Effective immediately (From April 1, 2008)
		· Manganese, alkaline, and nickel metal hydride (Ni-MH) rechargeable batteries with cadmium content that is 0.001% or more of the battery weight.	Currently in force (from April 1, 2010)
		· Batteries or battery packs permanently incorporated in equipment, with cadmium content that is 0.0005% or more of the battery weight.	Currently in force (from April 1, 2010)
	Pb	· Batteries with lead content that is 0.4% or more of the battery weight. · Battery packs with lead content that is 0.4% or more of the battery weight.	Currently in force (From April 1, 2005)
		· Manganese or alkaline manganese dry cells with lead content that is 0.2 % or more of the battery weight.	Effective immediately (From April 1, 2008)
		· Batteries or battery packs permanently incorporated in equipment, with lead content that is 0.1% or more of the battery weight.	Currently in force (from April 1, 2010)
	Hg	· Button cell batteries with a mercury content 2% or more of the battery weight · Batteries other than button cell batteries with mercury content 0.0005% or more of the battery weight. · Battery packs with mercury content that is 0.0005 % or more of the battery weight.	Currently in force
		· Manganese or alkaline manganese dry cells with mercury content that is 0.0001 % or more of the battery weight.	Effective immediately (From April 1, 2008)

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5.3 List of excepted substances

No.	JGPSSI Substance Group No.	Category	Chemical Substance Group	Related items, scope of regulations										
1	A05	Metals and metal compounds	Cadmium and cadmium compounds	* Electrical contacts for which a high level of reliability is required and for which no alternative substances are available · Filter glass										
2	A07		Hexavalent chromium compounds	* Use as an anti-corrosive for carbon steel cooling systems in absorption refrigerators										
3	A09		Lead and lead compounds	<ul style="list-style-type: none"> · High temperature solder for connecting parts and devices (Leaded solder containing lead 85 wt% or more)* · Optical glass and filter glass · Glass used in cathode ray tubes. · Glass used in fluorescent lamps lead content of which does not exceed 0.2 wt%. · Glass, ceramics or their matrix compounds (e.g. piezoelectric elements) used in electric and electronic components, but excluding dielectric ceramics used in capacitors. · Dielectric ceramics used in capacitors rated at 125V AC or 250V DC or more. · Solder used in connections between semiconductor chips in flip chip packages of ICs and the substrate (including soldering paste under C4 bump) · Crystal glass specified in Annex I (Categories 1, 2, 3, and 4) of EU Directive 69/493/EEC. · Allowable concentration of lead in various alloys <table style="margin-left: 20px; border: none;"> <tr> <td>(Type of alloy)</td> <td>(Allowable concentration of lead)</td> </tr> <tr> <td>Steel</td> <td>0.35 wt% or less</td> </tr> <tr> <td>Aluminum alloy</td> <td>0.4 wt% or less</td> </tr> <tr> <td>Copper alloy (incl. brass & phosphor bronze)</td> <td>4 wt% or less</td> </tr> <tr> <td>Solder</td> <td>1000 ppm or less</td> </tr> </table> 	(Type of alloy)	(Allowable concentration of lead)	Steel	0.35 wt% or less	Aluminum alloy	0.4 wt% or less	Copper alloy (incl. brass & phosphor bronze)	4 wt% or less	Solder	1000 ppm or less
(Type of alloy)	(Allowable concentration of lead)													
Steel	0.35 wt% or less													
Aluminum alloy	0.4 wt% or less													
Copper alloy (incl. brass & phosphor bronze)	4 wt% or less													
Solder	1000 ppm or less													
4	A10	Mercury and mercury compounds	<ul style="list-style-type: none"> · Cold cathode fluorescent lamps (CCFL) and external electrode fluorescent lamps (EEFL): <li style="padding-left: 20px;">Length not exceeding 500 mm: Mercury content less than 3.5 mg per unit. <li style="padding-left: 20px;">Length exceeding 500 mm but not exceeding 1500mm: Mercury content less than 5 mg per unit. <li style="padding-left: 20px;">Length exceeding 1500 mm: Mercury content less than 13 mg per unit. · High pressure discharge lamp (projector lamp etc.) 											
5	B07	Halogenated organic compounds	Polyvinyl chloride (PVC) and mixtures of PVC	<ul style="list-style-type: none"> * Binders for plastics * High voltage PVC coated cable * Insulation tape * Speaker grilles * Power cables (for applications other than level 3) * Parts other than those specified in levels 1 through 3 using co-polymers of PVC or blended materials * Lead wire for transformers (impregnated with varnish) * Spiral cord * Ultra thin cables AWG36 or up * Cables for business use where consumer products cannot be used (camera cables for broadcasting, microphone cables, etc.), 										
6	-	Organic fluorine compounds	Perfluorooctane sulfonic acid Perfluorooctane sulfonic acid (PFOS)	<ul style="list-style-type: none"> · Photographic films for professional use · Semiconductor photoresist 										

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5.4 Common uses for specific substances (reference)

Substance Component	Purposes
Mercury and mercury compounds	Batteries, fluorescent lamps, electrodes, balancers, mercury batteries, preservatives, dry batteries, pigments, agricultural chemicals, mercury lamps, metal etching, felt, catalysts, anti-fungal agents, disinfectant.
Lead and lead compounds	Sheets for protective X-ray shields, sulfuric acid-resistant materials, free-cutting steel, brass, bronze, solder, solder plating, fuses, pigments, coloring agents, vulcanized rubber accelerant, glass, rubber hardening agents, paint, infrared ray detectors, semiconductors, anti-rust pigments, PVC stabilizers, rubber coupling agents, plastic stabilizers, soldering materials, electrical connections, solid lubricants, lead storage batteries, printing, photography, corrosion-resistant surface treatments, plating, lead refining, batteries, dyes, matches, hardeners, paint drying agents, ceramics, glass coloring, oxidizing agents.
Cadmium and cadmium compounds	Ag/Cd contact materials, plating, low temperature type solder, fuses, pigments (yellow), alkaline batteries, PVC stabilizers, paints, semiconductors, ink, nickel-cadmium batteries.
Hexavalent Chromium	Pigments, plating, chemical conversion treatments, anti-rust agents, ink, surface treatment agents, ceramic coloring agents, catalysts, leather tanning, photography, mordants, corrosion prevention, paints, corrosion-resistant agents
Polyvinyl chloride (PVC)	Wire coating resin, shrinking tubes, PVC-coated steel sheets, PVC resin
Formaldehyde	Preservatives, monomers, (phenol resin, melamine resin, etc.)
Perfluorooctane sulfonic acid (including salt) (PFOS)	<ul style="list-style-type: none"> * Liquid Ex: Detergent, cleaner, etching reagents, various treatments, and insulating oil * Paints and coated materials Ex: Coated steel sheets, powder coating, pigments, and dyes * Inks and printed materials Ex: Electrodes, resistors, and antennas * Surface treating agents and surface treated materials Ex: Plated materials, plating materials, antireflective materials, and protective films * Molded products and molding materials Ex: Printed circuit boards, ceramic substrates, plastics, sliding materials, and spacers. * Solder related Ex: Flux, cream solder * Indirect materials for processes Ex: Grease, releasing agents, sealer, lubricants, and adhesives
Dibutyltin (DBT) compounds	· Catalysts, stabilizers, and antioxidants
Diocetyl tin (DOT) compounds	· Catalysts, stabilizers, and antioxidants
Beryllium oxide	· Heat sink
Designated benzotriazoles	· Anti-UV agents and UV absorbers
Cobalt chloride	· Humidity indicators used in desiccants (silica gel etc.)
Dimethyl fumarate (DMF)	· Antifungal agents, desiccants, etc.

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5.5 Level 1 prohibited substances and thresholds

Level 1 prohibited substances		Standard of determination	Threshold (less than ppm)	
			Plastic materials	Non-plastic
1	Cadmium and cadmium compounds	No intentional inclusion	5	100
2	Lead and lead compounds	No intentional inclusion	100	1000
3	Mercury and mercury compounds	No intentional inclusion	1000	1000
4	Hexavalent chromium compounds	No intentional inclusion	1000	1000
5	Polychlorinated biphenyls (PCB)	No intentional inclusion	-	-
	Polychlorinated naphthalenes (PCN)	No intentional inclusion	-	-
	Polychlorinated terphenyls (PCT)	No intentional inclusion	-	-
6	Short chain chlorinated paraffins (SCCP)	No intentional inclusion	-	-
7	Specific brominated organic compounds Polybrominated biphenyls (PBB)	No intentional inclusion	1000	1000
8	Specific brominated organic compounds Polybrominated diphenylethers (PBDE)	No intentional inclusion	1000	1000
9	Tri-substituted organotin compounds (including dibutyltin (DBT) compounds and triphenyltin (TPT)	No intentional inclusion	-	-
10	Asbestos	No intentional inclusion	-	-
11	Specific azo compounds	No intentional inclusion	-	-
12	Formaldehyde	No intentional inclusion	-	-
13	Polyvinyl chloride (PVC)	No intentional inclusion	-	-
14	Beryllium oxide	No intentional inclusion	-	-
15	Hydrofluorocarbons (HFC)	No intentional inclusion	-	-
	Perfluorocarbons (PFC)	No intentional inclusion	-	-
16	Perfluorooctane sulfonic acid (PFOS)	No intentional inclusion	1000 or 1 µg/m ²	1000 or 1 µg/m ²
17	Specific benzotriazoles	No intentional inclusion	-	-
18	Heavy metals (Cadmium, lead, mercury, hexavalent chromium)	No intentional inclusion	/	100 (Product packaging only)
19	Cobalt chloride	No intentional inclusion	-	-
20	Ozone depleting substances (ODS)	No intentional inclusion	-	-
21	Dibutyltin (DBT) compounds	No intentional inclusion	-	-
22	Diocetyl tin (DOT) compounds	No intentional inclusion	-	-
23	Dimethyl fumarate (DMF)	No intentional inclusion	-	-

Note: 1. Plastic materials include rubber, paint and ink.
2. For exemptions, please refer to 5.2.(2) control level for environmentally controlled substances and 5.3 List of excepted substances

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5.6 Substances, laws and regulations in various countries

Note) The following information is accurate as of February, 2010. Where revisions of and annexes of relevant laws and regulations are available, reference to such revisions or annexes should be made. The contents of these laws and regulations may change, therefore always check the latest versions of relevant laws and regulations.

Substances	Laws and regulations
Cadmium and cadmium compounds	EU: REACH Regulation (EC) No 1907/2006
	EU: RoHS Directive (2002/95/EC)
	EU: Battery Directive (2006/66/EC)
Lead and lead compounds	EU: RoHS Directive (2002/95/EC)
	EU: Battery Directive (2006/66/EC)
	Argentina: Laws on portable electrical power sources No. 26.184 and its Implementing Resolution No. 14/2007
Mercury and mercury compounds	EU RoHS Directive (2002/95/EC) and revisions
	EU Battery Directive (2006/66/EC)
	China: Mercury Content Regulations for Battery Products
	China: Regulations for Restriction of Mercury Content Supervision and Management Regulations for Inspections of Mercury Content in Imported/Exported Battery Products, etc.
Hexavalent chromium compounds	EU: RoHS Directive (2002/95/EC)
Polychlorinated biphenyls (PCB) Polychlorinated naphthalenes (PCN) Polychlorinated terphenyls (PCT)	EU: REACH Regulation (EC) No 1907/2006
	Japan: Law Concerning the Examination and Management of Chemical Substances, Class 1 Specified Chemical Substances, etc.
Short-chain chlorinated paraffins (SCCP)	Norway: Regulations concerning use of the designated health and environmental hazardous chemicals
Polybrominated biphenyls (PBB)	EU: REACH Regulation (EC) No 1907/2006
	EU: RoHS Directive (2002/95/EC)
Polybrominated diphenylethers (PBDE)	EU: REACH Regulation (EC) No 1907/2006
	EU: RoHS Directive (2002/95/EC)
Tri-substituted organotin compounds (including dibutyltin (DBT) compounds and triphenyltin (TPT) compounds)	EU: REACH Regulation (EC) No 1907/2006
	Japan: Law Concerning the Examination and Management of Chemical Substances, Class 1/Class 2 Specified Chemical Substances, etc.
Dibutyltin (DBT) compounds	EU: REACH Regulation (EC) No 1907/2006
Diocetyl tin (DOT) compounds	EU: REACH Regulation (EC) No 1907/2006
Asbestos	Japan: Industrial Safety and Health Law
	Germany: Prohibition of Chemicals Ordinance (ChemVerbotsV)
Formaldehyde	Germany: Prohibition of Chemicals Ordinance (ChemVerbotsV)
	Denmark: Statutory Order No.289
Specific azo compounds	EU: REACH Regulation (EC) No 1907/2006

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Substances	Laws and regulations
Heavy metals (Lead, cadmium, mercury and hexavalent chromium)	EU: Directive 94/62/EC on packaging and packaging waste USA: Laws prohibit use of toxic heavy and precious metals in packaging materials in 16 states such as New York State
Beryllium oxide	EU: Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE) and EU: Directive (1999/45/EC)
Hydrofluorocarbon (HFC), Perfluorocarbon (PFC)	EU: Regulation 2006/842/EC Denmark: Directive No.552 Switzerland: Ordinance on Chemical Risk Reduction
Perfluorooctanesulfonic acid (including its salt) (PFOS)	EU: REACH Regulation (EC) No 1907/2006
Specified benzotriazoles	Japan: Law Concerning the Examination and Regulation of the Manufacture, of Chemical Substances and class 1 designated chemical substances
Cobalt chloride	EU: REACH Regulation (EC) No 1907/2006
Ozone depleting substances (ODS)	EU: EU regulation (EC) No.2037/2000 and its revisions Japan: Law Concerning the Protection of the Ozone Layer through the Control of Specified Substances etc. USA: Clean Air Act (as ammended in 1990) Indonesia: Regulation of the Minister of Industry of the Republic of Indonesia No.33/M-IND/PER/4/2007 dated April 17,2007
Dimethyl fumarate (DMF)	EU: Commission Decision (2009/251/EC)

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6. Survey procedures for environment-related substances

6.1 Purpose of implementation

In recognition of the importance of Green Procurement, these procedures shall be implemented to reduce time and working hours used to perform Green Procurement related surveys and to improve the quality of survey responses.

6.2 Scope

The scope of application for these procedures is based on that outlined in 2. Scope of Application.

6.3 Terms and definitions

The definition of terms related to these procedures is based upon that outlined in 3. Terms and Definitions.

6.4 Detailed survey methods

(1) The presence of environment-related substances shall be confirmed by a survey of all procured parts included in the company's products.

1 Survey format

- Please use "JAMP AIS" for articles.
- Please use "JAMP MSDSplus" for chemicals and preparations.

Please download the Instructions for Preparation of JAMP AIS, JAMP AIS Support Tools, and the Instruction Manual of JAMP AIS Support Tools, etc. from the website below for survey and response. If, after completion of the surveys, changes to raw materials or manufacturing processes are required, the prescribed paperwork should be submitted to the department in charge.

* Website of the Joint Article Management Promotion-consortium (JAMP)

<http://www.jamp-info.com/ais> References for AIS
<http://www.jamp-info.com/msds> References for MSDSplus

2 Depending on customer requests, we may ask for a survey via the "JGP File."

Please download the required references for survey and response.

* Website of the Japan Green Procurement Survey Standardization Initiative (JGPSSI)

<http://jgpssi.jp/>

(2) Survey of uses and component substances

If a supplier cannot provide details related to particular uses or confirm the presence of certain substances, the supplier should then contact subcontractors, companies providing raw materials or raw materials producers to acquire the necessary information.

(3) Submission of environmental management data

- * Newly adopted parts - Please submit the following data to the department in charge of surveys.
- * Other parts - Please submit data to the department in charge of surveys upon request.

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1. Please submit the data created using "JAMP AIS Entry Support Tool" (JAMP AIS) in XML format.

2. Material Component Analysis or Product Safety Data Sheets (MSDS)

Please acquire material component analysis from the manufacturer, covering all parts and materials used in a given product. Then confirm the presence of each substance and submit the component analysis of each supplied part upon request.

Please submit JAMP and MSDSplus for bulk material.

Examples of bulk material: Varnish, solder, adhesive, paint, etc.

3. ICP data

* Please submit ICP data for six substances for plastics (including rubber), paints and inks and ICP data for four substances (Cd, Pb, Hg, Cr⁺⁶) for metals.

ICP measurement substances:

Cadmium and cadmium compounds (Cd)

Lead and lead compounds (Pb)

Mercury and mercury compounds

Hexavalent chromium compounds (CR⁺⁶)

Polybrominated diphenylethers (PBDE)

Polybrominated biphenyls (PBB)

ICP data period of validity

In principle, the ICP data period of validity is for 1 year from the date of analysis.

If no changes have been made in raw materials or the manufacturing process, in lieu of the ICP data, submission of a "Certificate for RoHS prohibited substances within products" (HS-Q3-07 Form 3) is acceptable.

Changes in raw materials or the manufacturing process mean:

Changes in raw materials and any other materials

Changes in manufacturers of raw materials or of any other materials

Changes in manufacturing sites and manufacturing processes

4. Certificate of non-inclusion

Please submit the "Certificate for environment-related substances within products" (HS-Q3-07 Form 2) to certify that the product does not contain any Level 1 controlled chemical substances.

(4) Green Procurement Supplier Survey

Please fill in and submit the "Green Procurement Supplier Survey" (HS-Q3-07 Form 1)

1. This survey form should be submitted regularly on an annual basis.

2. New suppliers will be required to submit the survey form at the commencement of business dealings and subsequently on an annual basis.

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(5) Confirmation of Procured Goods

This company shall regularly check for the presence of controlled substances contained within procured goods as follows:

1. Goods shall be tested for cadmium (Cd), lead (Pb), mercury (Hg), chrome (Cr) and bromine (Br) using a fluorescent x-ray spectrometer.
2. If there is any evidence of controlled substances after fluorescent x-ray analysis, the company will ask the supplier to submit the product's ICP data.

Green Procurement Supplier Survey Form

1. Supplier details

Date	
Company	
Branch	
Department	
Filled in by	
Telephone	
Fax	
Contact Address	
E-mail	

2. Manufacturer details

Date	
Company	
Branch	
Department	
Filled in by	
Telephone	
Fax	
Contact Address	
E-mail	

3. Environmental management system certification (ISO14001)

Please circle	If 1 or 2 is circled, please provide the following details:	
1. Already acquired	Date of acquisition: / /	Registration No.:
2. Due to acquire soon	Certification agency:	
3. Not planning to acquire	Date of assessment: / /	Assessment agency:

Note 1 Third-party certification (Eco-Action 21, etc) is also included as EMS acquisition in addition to ISO14001 certification.

Note 2 If your company has answered 1. or 2., please fill in section 5: "Management of chemical substances in items supplied to Kaga Components"

Note 3 If your company has answered 3., please fill in section 4: "Environmental Conservation Measures" and section 5: "Management of chemical substances in items supplied to Kaga Components."

4. Environmental conservation measures

Item	Evaluation standard	Answer
Environment Conservation Policies	Does your company have an environmental conservation philosophy or related policies?	
	Is there an environmental conservation system or committee?	
	Are your company's employees aware of these policies and are they available in writing?	
Observance of laws and regulations	Is there a designated person/department in charge of acquiring information about laws/regulations related to your business activities?	
	Is your company aware of the laws and regulations affecting your business activities?	
	Does your company abide by these laws and regulations?	
Organization and Planning	Has your company created documents regarding environmental aims and goals?	
	Does your company have plans to achieve these aims and goals?	
	Is there a designated person/department in charge of achieving these aims and goals?	
	Does your company perform environment-related in-house audits?	
Reduction of Environmental Impact	Is your company implementing measures to reduce or eliminate the use of hazardous chemical substances?	
	Is your company implementing energy-saving measures?	
	Is your company implementing waste-reduction measures?	
Training	Do you provide employees with environment-related education and training?	

Please mark a circle for 'yes', an 'x' for 'no' and a dash (-) for N/A in the answer field.

5. Management of chemical substances in items supplied to Kaga Components

Item	Evaluation standard	Answer
Products	Any management standards for environmentally hazardous substances in your products?	
	Any measures to reduce environmentally hazardous substances in your products?	
Manufacturing	Any measures to reduce environmentally hazardous substances in manufacturing processes?	
Packaging	Any measures to reduce environmentally hazardous substances in packaging?	

Please mark a circle for 'yes', an 'x' for 'no' and a dash (-) for N/A in the answer field.

Kaga Components Co., Ltd.

Date: / /

Company name:

Department name:

Person in charge:

Seal or
Stamp

Certificate for RoHS prohibited substances within products

This is to certify that no changes have been made, after the last submission of the high-precision analysis data (ICP data), in the raw materials or the manufacturing process of the parts, materials or units supplied to your company, and products supplied do not contain RoHS prohibited substances.

RoHS Prohibited Substances

1. Cadmium and cadmium compounds
2. Lead and lead compounds
3. Mercury and mercury compounds
4. Hexavalent chromium
5. Specific brominated organic compounds: Polybrominated biphenyls (PBB)
6. Specific brominated organic compounds: Polybrominated diphenylethers (PBDE)

No changes in materials and manufacturing processes, etc.

1. Raw materials and any other materials
2. Manufacturers of raw materials and of any other materials
3. Manufacturing sites and manufacturing processes

Related Products

Name	Delivery Number (Delivery number, to Kaga Components Co., Ltd)