TOSHIBA

Toshiba Corporation
Mobile Communication Company
Digital Media Network Company
Personal Computer & Network Company

Toshiba TEC Corporation

Guidelines for Green Procurement
Ver.07

Toshiba Group's Basic Policy for the Environment

Recognizing the Earth is an irreplaceable asset and it is humankind's duty to hand it on to future generations in a sound state, Toshiba Group contributes to the development of a sustainable society by pursuing creation of new values and symbiosis with the Earth, in accordance with Toshiba Group's Environmental Vision.

Promotion of environmental management

1. Toshiba considers environmental stewardship to be one of management's primary responsibilities and promotes environmental activities in harmony with economic activities.
2. Toshiba assesses the environmental aspects of its business activities, products and services, and specifies objectives and targets with respect to the reduction of environmental impacts and prevention of pollution.
3. Toshiba strives to continuously improve environmental management through internal audits and reviews of activities.
4. Toshiba complies with all laws and regulations, industry guidelines it has endorsed, and its own standards concerning the environment.
5. Toshiba strives to enhance the awareness of all its employees with respect to the environment and requires that they make a practical contribution to the environment through their work.
6. Toshiba operates globally, and accordingly, promotes environmental activities throughout Toshiba Group.

Development and provision of environmentally conscious products and services, and reduction of environmental impacts of business activities

1. Toshiba recognizes that natural resources are finite and implements vigorous environmental measures to promote their effective and practical use in terms of both products and business processes.
2. Toshiba develops and provides environmentally conscious products and services which contribute to the reduction of environmental impacts throughout their life cycles.
3. Toshiba strives to reduce the environmental impacts of all business processes, encompassing design, manufacturing, logistics, sale, and disposal, with a particular focus on the prevention of global warming, efficient utilization of resources and control of chemical substances.

Responsibility as a member of the global community

1. Toshiba contributes to society through its environmental activities, which include the development and provision of excellent, environmentally conscious technologies and products and cooperation with society at large and with local communities.
2. Toshiba is committed to maximizing disclosure and transparency in communication with stakeholders and society at large in order to facilitate mutual understanding.

Contents

I. Green procurement

1. Objective

Toshiba Corporation's Mobile Communications Company, Digital Media Network Company, Personal Computer & Network Company and Toshiba TEC Corporation (hereafter, we) promote procurement from suppliers that aggressively promote activities for environmental conservation. The objective of these Guidelines are to procure articles with a lower environmental impact, in respect of procurement of parts, materials, units, products and sub-materials (hereafter, articles to be supplied) for products produced by.us.

2. Requirements to suppliers

2.1 Suppliers' activities for environmental conservation

We request every supplier to undertake proactive activities for environmental conservation.
We prioritize suppliers who perform such proactive activities in our procurement.
Suppliers are expected to perform such environmental activities as

1) Formulating environmental policy
2) Establishing and maintaining a system for environmental conservation
3) Training and monitoring of system performance

Suppliers are also expected to promote activities for energy saving, 3R (reduce, reuse and recycle), tree planting and preservation of biodiversity.

In order to understand suppliers' activities for environmental conservation, we want to investigate the points below, and ask for your understanding and support.

1) Document-based inquiry into supplier's environmental activities
2) On-site investigation of supplier's environmental activities

2.2 Control of environment-related substances for articles to be supplied

Suppliers are required to comply with Chapter II. "Environment-related substances control criteria" of these Guidelines and supply articles with a lower environmental impact.
In order to ensure this, suppliers should carry out the following items.

1) Make every supporting organization and your suppliers understand the requirements stated in these Guidelines.
2) Realize the requirements described in our purchase specifications and drawings.
3) Reply to our inquiries about control of environment-related substances.
   Although inquiries depend on types of articles to be supplied and necessity, the major ones are:
   i) Confirmation of no inclusion of prohibited substances, using "Use/Non-use Declaration of Environment-related Substances".
   ii) Inquiries about content values of specified substances, using such as the JGPSSI (Japan Green Procurement Survey Standardization Initiative) form.
   iii) Requests to provide sample test result.
   iv) Other necessary inquiries to confirm supplier's performance
4) Obtain necessary information from your suppliers as base data for your reply.
5) Perform sample tests or obtain sample test result from your suppliers if these are an effective means to realize our requirements.
6) Investigate your suppliers' control systems (including supplier audit).

II. Environment-related substances control criteria

1. Scope

The scope is environment-related substances in the articles to be supplied to us for production of our products.

"Our products" include products supplied by ODM or OEM vendors, resale products of other company's brand, spare parts and repaired articles.

"Our products" also include products made by or sold by Toshiba Group companies that have a capital relationship with us and to which you directly supply articles.

2. Definitions

(1) Environment-related substances

Substances considered to have an environmental impact and specified in these Guidelines.

(2) Substances whose use is prohibited

Environment-related substances whose use in articles to be supplied is prohibited by law, regulation or these Guidelines.

(3) Substances whose use is to be reduced or substituted

Environment-related substances specified in these Guidelines whose use in the articles to be supplied should be reduced or substituted.

(4) Intentional inclusion

Inclusion that cannot appropriately be regarded as impurities, as defined in (5). For example, use of a substance as a necessary ingredient in order to obtain functionality or performance.

(5) Not intended inclusion (impurities)

Inclusion which can be regarded as resulting from the natural environment or that is the result of a chemical reaction and that can not be removed by a refining process with existing technology.

(6) Homogenous material

The term "homogeneous material" means a material that cannot be mechanically disjointed into different materials.

The term "homogeneous" means "of uniform composition throughout", so examples of "homogeneous materials" are plastics, ceramics, glass, metals, alloys, paper, board, resins and coatings.

The term "mechanically disjointed" means that the materials can be, in principle, separated by mechanical actions such as unscrewing, cutting, crushing, grinding and abrasive processes.

Example:

- A plastic cover is homogenous material if it consisted exclusively of one type of plastic that was not coated with or had attached to it (or inside it) any other kinds of materials.
- An electric cable that consisted of material wires surrounded by non-metallic insulation materials is not homogenous material because mechanical processes could separate the different materials.
- A semi-conductor package contains many homogenous materials, which include the plastic molding material, the tin-electroplating coatings on the lead frame, the lead frame alloy and the gold-bonding wires.

Note: In case of chromate treatment, homogeneous material of the coating is defined as only chromate conversion coating, not including any base metal.

3. Requirements for environment-related substances control for articles to be supplied

3.1 Substances whose inclusion in articles to be supplied is prohibited

For substances listed in Table 1 following inclusion is prohibited.

1) Intentional inclusion

2) Inclusion exceeding the maximum tolerance concentration

The maximum tolerance concentration for each substance is defined on Table 3.

Regarding substances for which maximum tolerance densities are not defined, impurities must be well controlled.

However, for uses listed in Table 2, neither inclusion 1) nor inclusion 2) is prohibited (exempted uses).

Moreover, in some cases such as use for spare parts, we might procure parts, unit or materials which include the prohibited substances. In these cases, please follow the instructions of the person in charge.

Please be aware that some uses of the substances whose use is to be reduced or substituted, as described in section 3.2, are prohibited. Please refer notes of Table 6.

Table 1 Substances whose inclusion in articles to be supplied is prohibited

Ref. No.	Substance
1	Cadmium and its compounds
2	Hexavalent chromium and its compounds
3	Lead and its compounds
4	Mercury and its compounds
5	Polybrominated biphenyls (PBBs)
6	Polybrominated diphenyl ethers (PBDEs)
7	Bis(tributyltin)=oxide (TBTO)
8	Polychlorinatedbiphenyls (PCBs) / Polychlorinated terphenyls (PCTs)
9	Polychloronaphtalenes (with 3 or more chlorine atoms)
10	Short Chain Chlorinated Paraffins (with carbon length 10 through 13)
11	Asbestos
12	Azo pigments and dyes (only those able to form certain amines and are directly and continuously applied to the human body)
13	Ozone depleting substances (ODS)
14	Tributyltins (TBTs) & Tripheniltins (TPTs)
15	Radioactive Substances
16	Aldrin
17	Endrin
18	Yellow Phosphorus
19	Chlordanes
20	N,N'-ditolyl-p-phenylenediamin, N-tolyl-N'-xyly l-p-phenylenediamine or N,N'-dixylyl-p-phenylene diamine
21	Dioxins
22	DDT
23	Dieldrin
24	Toxaphene
25	2,4,6-Tri-t-Butylphenol
26	4-Nitrobiphenyl and its salt
27	Bis(chloromethyl)ether
28	Hexachlorobenzene
29	Benzene
30	Mirex
31	2,2,2-trichloro-1,1-bis(4-chlorophenyl)ethanol (synonyms: Kelthane, Dicofol)
32	Hexachlorobutadiene (synonyms: Hexachloro-1,3-butadiene, Hexachlorobuta-1,3-diene)
33	2-benzotriazol-2-yl-4,6-ditert-butyl-phenol
34	Perfluorooctane Sulfonate(PFOS) and its Salts (chemical formula: $C_8F_{17}SO_2X$, X is OH group, metal salts, halide, amide and other derivatives including polymers)
35	Dimethylfumarate(DMF)

(*) Ref. No.: Reference number to the attached table “Details of substances (Typical examples)”.Please refer the attached

table for details.

Table 2 Exempted uses (Allowable uses)

Substance	Exempted uses (Allowable uses)
Cadmium and its compounds	(a) Cadmium in plating of electrical contact that requires high reliability used when no substitute material is available. (b) Cadmium in optical and filter glass. (c) Cadmium in printing inks for the application of enamels on borosilicate glass.
Lead and its compounds	(a) Lead in glass of cathode ray tubes, electronic components and fluorescent tubes. (b) Lead as an alloying element in steel containing up to 0,35 % lead by weight, aluminium containing up to 0,4 % lead by weight and as a copper alloy containing up to 4 % lead by weight. (c) Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead). (d) Lead in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signalling, transmission as well as network management for telecommunications. (e) Lead in electronic ceramic parts (e.g. piezoelectronic devices). (f) Lead in lead-bronze bearing shells and bushes (g) Lead used in compliant pin connector systems. (h) Lead as a coating material for the thermal conduction module c-ring. (i) Lead in optical and filter glass. (j) Lead in solders consisting of more than two elements for the connection between the pins and the package of microprocessors with a lead content of more than 80 % and less than 85 % by weight. (k) Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit Flip Chip packages. (l) Lead in linear incandescent lamps with silicate coated tubes. (m) Lead halide as radiant agent in High Intensity Discharge (HID) lamps used for professional reprography applications. (n) 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) as well as 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). (o) Lead with PbBiSn-Hg and PbInSn-Hg in specific compositions as main amalgam and with PbSn-Hg as auxiliary amalgam in very compact Energy Saving Lamps (ESL). (p) Lead oxide in glass used for bonding front and rear substrates of flat fluorescent lamps used for Liquid Crystal Displays (LCD). (q) Lead and cadmium in printing inks for the application of enamels on borosilicate glass. (r) Lead as impurity in RIG (rare earth iron garnet) Faraday rotators used for fibre optic communications systems. (s) Lead in finishes of fine pitch components other than connectors with a pitch of 0.65 mm or less with NiFe lead frames and lead in finishes of fine pitch components other than connectors with a pitch of 0.65 mm or less with copper lead frames. (t) Lead in solders for the soldering to machined through hole discoidal and planar array ceramic multilayer capacitors. (u) Lead oxide in plasma display panels (PDP) and surface conduction electron emitter displays (SED) used in structural elements; notably in the front and rear glass dielectric layer, the bus electrode, the black stripe, the address electrode, the barrier ribs, the seal frit and frit ring as well as in print pastes. (v) Lead oxide in the glass envelope of Black Light Blue (BLB) lamps. (w) Lead alloys as solder for transducers used in high-powered (designated to operate for several hours at acoustic power levels of 125 dB SPL and above) loudspeakers. (x) 29. Lead bound in crystal glass as defined in Annex I (Categories 1, 2, 3 and 4) of Council Directive 69/493/EEC.
Mercury and its compounds	(a) Mercury in compact fluorescent lamps not exceeding 5 mg per lamp. (b) Mercury in straight fluorescent lamps for general purposes not exceeding: - halophosphate 10mg - triphosphate with normal lifetime 5mg - triphosphate with long lifetime 8mg (c) Mercury in straight fluorescent lamps for special purposes. (d) Mercury in other lamps not specifically mentioned in this column.
PFOS and its salts	(a) Photoresists or anti reflective coatings for photolithography processes, (b) Photographic coatings applied to films, papers, or printing plates, (c) Mist suppressants for non-decorative hard chromium (VI) plating and wetting agents for use in controlled electroplating systems where the amount of PFOS released into the environment is minimized, by fully applying relevant best available techniques.

(*) Deca-BDE is not exempted in the Guidelines. Its use is prohibited.

Table 3 Maximum tolerance concentration as impurities

Substance	Uses and regal requirements	Maximum tolerance concentration (*1)(*2)
Cadmium and its compounds	Use other than described bellow. Under the EU RoHS Directive.	0.01wt% (100ppm)
	Use restricted by EU chemical substances restriction (EU Directive 76/769/EEC and its amendments.) - Resin, paint, ink, etc	0.0075wt% (75ppm)
Hexavalent chromium compounds	All uses. Under the RoHS Directive.	0.1wt% (1000ppm)
Lead and its compounds	All uses. Under the RoHS Directive.	0.1wt% (1000ppm)
Mercury and its compounds	All uses. Under the RoHS Directive.	0.1wt% (1000ppm)
PBB	All uses. Under the RoHS Directive.	0.1wt% (1000ppm)
PBDE	All uses. Under the RoHS Directive.	0.1wt% (1000ppm) (*3)
PFOS and its salts	Coated materials (use restricted by EU chemical substances restriction (EU Directive 76/769/EEC and its amendments.))	less than 1 ug/m^2
	Others (same as above)	less than 0.1wt% (1000ppm)

(*1) Maximum tolerance concentration as impurities of each substance is defined as the weight percentage in homogeneous materials.

(*2) Maximum tolerance concentration of heavy metal compounds is defined as the weight percentage of metal element in homogeneous materials.
e.g.) In the case of cadmium and its compound the concentration relates to the cadmium element.

(*3) Maximum tolerance concentration of PBDE is defined as the accumulated concentration of all PBDEs, including Deca-BDE, in the homogenous materials.

Table 4 List of specific amines (generated by the decomposition of one or more azo group)

Substance	Chemical formula	CAS No.
4-amino azobenzene	$C_{12}H_{11}N_3$	60-09-3
o-anisidine	C_7H_9NO	90-04-0
2-naphthylamine	$C_{10}H_9N$	91-59-8
3, 3'-dichlorobensidine	$C_{12}H_{10}Cl_2N_2$	91-94-1
Biphenyl-4-ylamine	$C_{12}H_{11}N$	92-67-1
Benzidine	$C_{12}H_{12}N_2$	92-87-5
o-toluidine	C_7H_9N	95-53-4
4-chloro- o-toluidine	C_7H_8ClN	95-69-2
2, 4-toluenediamine	$C_7H_{10}N_2$	95-80-7
o-aminoazotoluene	$C_{14}H_{15}N_3$	97-56-3
5- nitro-o-toluidine	$C_7H_8N_2O_2$	99-55-8
3, 3'-dichloro-4, 4'-diaminodiphenylmethane	$C_{13}H_{12}Cl_2N_2$	101-14-4
4, 4'-methylenedianiline	$C_{13}H_{14}N_2$	101-77-9
4, 4'-diaminodiphenylether	$C_{12}H_{12}N_2O$	101-80-4
p-chloroaniline	C_6H_6ClN	106-47-8
3, 3'-dimethoxybenzidine	$C_{14}H_{16}N_2O_2$	119-90-4
3, 3'-dimethylbenzidine	$C_{14}H_{16}N_2$	119-93-7
2-methoxy-5-methylaniline	$C_8H_{11}NO$	120-71-8
2, 4, 5-trimethylaniline	$C_9H_{13}N$	137-17-7
4,4'-Thiodianiline	$C_{12}H_{12}N_2S$	139-65-1
2,4'-methoxy-m-Phenylenediamine	$C_7H_{10}N_2O$	615-05-4
4, 4'-methylenedi- o -toluidine	$C_{15}H_{18}N_2$	838-88-0

Table 5 Ozone depleting substances (ODS)

CFC	(Defined in Appendix A group I of Montreal Protocol)
Halon	(Defined in Appendix A group II of Montreal Protocol)
CFC other than above	(Defined in Appendix B group I of Montreal Protocol)
Carbon tetrachloride	(Defined in Appendix B group II of Montreal Protocol)
1, 1, 1-Trichroloethane	(Defined in Appendix B group III of Montreal Protocol)
HCFC	(Defined in Appendix C group I of Montreal Protocol))

HBFC	(Defined in Appendix C group II of Montreal Protocol))
Bromochloromethane	(Defined in Appendix C group III of Montreal Protocol)
Methylbromide	(Defined in Appendix E of Montreal Protocol)

3.2 Substances whose inclusion in articles to be supplied is subject to reduction and substitution

The volume of substances listed in Table 6 should be reduced in articles to be supplied, or should be replaced with other substances. We give priority to articles that do not include these substances, if commercially available.

Please be aware that some of these substances used for specified application are prohibited. Refer to the notes of Table 6.

Table 6 Substances whose inclusion in articles to be supplied is subject to reduction and substitution

Ref. No.	Substance
36	Polyvinyl chloride (PVC)
37	Tetrabromo-bisphenol A (TBBPA)
38	Brominated flame retardant (except PBBs(Ref. No.5), PBDEs(No.6) and TBBPA(No.37))
39	Antimony and its compounds
40	Arsenic and its compounds
41	Beryllium and its compounds
42	Bismuth and its compounds
43	Nickel and its compounds (*1)
44	Some Phthalic Esters
45	Selenium and its compounds
46	Zinc and its compounds
47	Chlorinated paraffin (except some short chain chlorinated paraffins (Ref. No.10))
48	Chromium compounds (III)
49	Cyanogen compounds
50	Perfluorocarbon (PFC)
51	Hydrogenerated fluorocarbon (HFC)
52	Hydrogenerated organic compounds (except those listed in Table1 (No.5, No.6, etc.)
53	Manganese and its compounds
54	Organic Tin Compounds (except TBTO (Ref. No.7) and TBT/TPT (Ref. No.14))
55	Sulfur hexafluoride (SF6)
56	Anthracene
57	4,4'- Diaminodiphenylmethane
58	Cobalt dichloride
59	5-tert-butyl-2,4,6-trinitro-m-xylene(synonym: musk xylene)

(*1) The use of nickel and its compounds for the area expected for direct and prolonged skin contact is prohibited.

(*2) Ref. No.: Reference number to the attached table “Details of substances (typical examples) referred in these Guidelines”. Please refer the attached table for details.

4. Requirements for packaging materials

All packaging materials to be supplied, not limited to individual packaging, must fulfill the requirements of section 3. "Requirements for environment-related substances control for articles to be supplied", and also must not include substances listed in Table 7. For substance where a maximum tolerance concentration is defined, any inclusion exceeding that concentration is prohibited. For substances that do not define a maximum tolerance concentration, intentional inclusion is prohibited.

Table 7 Substances whose inclusion in the packaging to be supplied is prohibited

Ref. No.	Substance	Restriction	Maximum tolerance concentration (*1)(*2)
1-4	Lead, cadmium, mercury, hexavalent chromium and their compounds	Inclusion of cadmium, hexavalent chromium, lead, mercury and their compounds in the packaging when the accumulated concentration of these substances at any portion of the packaging exceeds the maximum tolerance concentration.	0.01wt% (100ppm)
35	Polyvinyl chloride (PVC)	Intentional inclusion of PVC in the packaging	- (Intentional inclusion)

(*1) Maximum tolerance concentration is defined as the weight percentage in homogeneous materials.

(*2) Maximum tolerance concentration of metal compounds is defined as the weight percentage of metal element in homogeneous materials.

5. Requirements for batteries

Any type of batteries or accumulators, whether stand-alone or installed in units or products, must comply with the EU Battery Directives (2006/66/EC and 91/157/EEC). The requirements of 2006/66/EEC include prohibition of inclusion exceeding the maximum tolerance concentration described on Table 8.

The area other than cells of the battery device, such as battery pack, must fulfill not only requirements described in this section but also those described in section 3. "Requirements for environment-related substances control for articles to be supplied".

Table 8 Substances whose inclusion in the battery is prohibited

Ref. No.	Substance	Restriction	Maximum tolerance concentration (*1)
1	Cadmium and its compounds	Portable batteries or accumulators that contain cadmium and its compounds exceeding the maximum tolerance concentration.	0.002wt% (20ppm)
4	Mercury and its compounds	All batteries or accumulators, except button batteries, that contain mercury and its compounds exceeding the maximum tolerance concentration.	0.0005wt% (5ppm)
		Button batteries that contain mercury and its compounds exceeding the maximum tolerance concentration.	2wt%(20000ppm)

(*1) Maximum tolerance concentration is defined as the weight percentage of metal element in the battery.

6. Additional requirements relating to specified products

This section describes additional requirements relating to specified products of our companies. If a supplier knows that an article to be supplied is for use in one of these specified products, the suppler must meet requirements described in this section in addition to those described in section 3. - 5.

6.1 Articles for personal computers

For any article supplied to Personal Computer & Network Company intentional inclusion described on Table 9 is prohibited.

Table 9 Restrictions regarding articles for personal computers

Ref. No.	Substance	Restriction	Maximum tolerance concentration
41	Beryllium and its compounds	Inclusion in any article to be supplied except followings 1) Additives in the gold bonding wire of semi-conductors 2) Inclusion not more than 2.0wt% in copper-beryllium alloys used as spring parts.	- (Intentional inclusion)
60	Carcinogenic substances (Group1 and Group2A: evaluated by IARC)	Inclusion in the plastic parts not less than 25g of case and housing	- (Intentional inclusion)
-	Certain flame retardants	Inclusion of more than 0.1wt% of following flame retardants in the plastic parts more than 25g: Flame retardants that are classified under EU 67/548/EEC and 2009/2/EC as R40, R45, R46, R48, R50, R51, R52, R53, R60, R61 and any combination of these.	0.1wt%(1000ppm)
-	Halogen compounds	Halogen compounds use in the plastic of packaging : fluorine (F), chlorine (Cl), bromine (Br), iodine (I) and astatine (At)	- (Intentional inclusion)

6.2 Articles for hard disk drives (HDD)

For any article supplied to Digital Media Network Company, if it is used in hard disk drives (HDD), the maximum tolerance concentration described on Table 10 and Table 11 must be fulfilled. These requirements do not apply to articles used only for external hard disk drive units,

Table 10 Restrictions regarding articles for HDD

Ref. No.	Substance	Restriction	Maximum tolerance concentration (*1)(*2)
1	Cadmium and its compounds	Inclusion in any article to be supplied except followings	0.005wt% (50ppm)
		1) Plastic (all materials including resin ingredient), paint and ink	0.0005wt% (5ppm)(*3)
		2) Solder	0.002wt% (20ppm)
		3) Packaging materials except 1) and 2) above used for our products	0.007wt% (70ppm) (*3)
2	Hexavalent chromium and its compounds	Inclusion in any article to be supplied	0.01wt% (100ppm) (*3)
3	Lead and its compounds	Inclusion in any article to be supplied except followings (*4)	0.02wt% (200ppm) (*3)
		1) Plastic (all materials including resin ingredient), paint and ink	0.01wt% (100ppm) (*3)
		2) Solder (*4)	0.07wt% (700ppm)
		3) Metal except solder (*4)	0.05wt% (500ppm) (*3)
4	Mercury and its compounds	Inclusion in any article to be supplied	0.01wt% (100ppm) (*3)
5	Polybrominated biphenyls (PBBs)	Inclusion in any article to be supplied	0.01wt% (100ppm) (*5)
6	Polybrominated diphenyl ethers (PBDEs)	Inclusion in any article to be supplied	0.01wt% (100ppm) (*5)
41	Beryllium and its compounds	Inclusion in any article to be supplied except following 1) Additives in the gold bonding wire of semi-conductors	- (Intentional inclusion)

(*1) Maximum tolerance concentration is defined as the weight percentage in homogeneous materials.

(*2) Maximum tolerance concentration of metal compounds is defined as the weight percentage of metal element in homogeneous materials.
e.g.) In the case of cadmium and its compound the concentration relates to the cadmium element.

(*3) Maximum tolerance concentration is defined as accumulated concentration of cadmium, hexavalent chromium, lead, mercury and their compounds in the packaging is 0.007wt% (70ppm).

(*4) Except exempted uses described on Table 2.

(*5) Maximum tolerance concentration is defined as accumulated concentration of bromine element or its detective limits. Every PBB or PBDE the number of bromine element of which is 1 to 10 must be covered.

Table 11 Restrictions regarding articles for HDD

Ref. No.	Substance	Restriction	Maximum tolerance concentration (*1)(*2)
39	Antimony and its compounds	Inclusion in any article to be supplied except following 1) Glass of magnetic storage media (until replacement with antimony free glass is completed)	0.1wt% (1000ppm)
61	Bromine and its compounds	Inclusion in any article to be supplied	0.09wt% (900ppm) (*3)
62	Chlorine and its compounds	Inclusion in any article to be supplied	0.09wt% (900ppm) (*3)
63	Red phosphorus	Inclusion in any article to be supplied	0.1wt% (1000ppm) (*4)

(*1) Maximum tolerance concentration is defined as the weight percentage in homogeneous materials.

(*2) Maximum tolerance concentration of compounds is defined as the weight percentage of element in homogeneous materials.
e.g.) In the case of cadmium and its compound the concentration relates to the cadmium element.

(*3) Maximum tolerance concentration defined as accumulated concentration of bromine and chlorine is 0.15wt% (1500ppm).

(*4) Maximum tolerance concentration is defined as concentration of phosphorus element when red phosphorus is intentionally included.

6.3 Articles for cellular phones

For any article supplied to Mobile Communications Company, if it is used in cellular phones, inclusion above maximum tolerance concentration described on Table 12 will be prohibited from January 1, 2010. Exempted uses described on Table 12 also apply to the article.

Table 12 Restrictions regarding articles for cellular phones

Ref. No.	Substance	Restriction	Maximum tolerance concentration (*1)(*2)	Time limit
61	Bromine and its compounds	Inclusion in any article to be supplied (*3)	0.09wt% (900ppm) (*4)	December 31, 2009
62	Chlorine and its compounds	Inclusion in any article to be supplied except following (*3) 1) Resin binder containing PVC-vinyl acetate copolymer (paint, ink, etc.) 2) Pigment (paint, ink, etc.)	0.09wt% (900ppm) (*4)	December 31, 2009

(*1) Maximum tolerance concentration is defined as the weight percentage in homogeneous materials.

(*2) Maximum tolerance concentration of compounds is defined as the weight percentage of element in homogeneous materials.
e.g.) In the case of cadmium and its compound the concentration relates to the cadmium element.

(*3) If it is difficult to substitute in the specific industry, the restriction is not applied.

(*4) Maximum tolerance concentration defined as accumulated concentration of bromine and chlorine is 0.15wt% (1500ppm).

6.4 Articles for digital copiers (MFP)

For any article supplied to Toshiba TEC Corporation, if it is used in digital copiers, intentional inclusion described on Table 13 is prohibited.

Table 1 Restrictions regarding articles for digital copiers

Ref. No.	Substance	Restriction	Maximum tolerance concentration
64	Substances classified by the EC Council Directive 67/548/EEC as Category 1-3 of Carcinogenic, Mutagenic or Reprotoxic ones.	Inclusion in the plastic parts not less than 25g of case and housing	- (Intentional inclusion)

Attached Table:
Details of substances (typical examples) referred in these Guidelines

Attached Table: Details of substances (typical examples) referred in these guidelines

No.	CAS	Chemical substance name	Chemical formula
1		**Cadmium and its compounds**	
	7440-43-9	Cadmium	Cd
	1306-19-0	Cadmium oxide	CdO
	1306-23-6	Cadmium sulfide	CdS
	10108-64-2	Cadmium chloride	$CdCl_2$
	10124-36-4	Cadmium sulfate	$CdSO_4$
	-	Other cadmium compounds	-
2		**Hexavalent chromium and its compounds**	
	7789-12-0 10588-01-9	Sodium dichromate	$Na_2Cr_2O_7$
	1333-82-0	Chromium(VI) oxide	CrO_3
	13765-19-0	Calcium chromate	$CaCrO_4$
	7758-97-6	Lead (II) chromate	$PbCrO_4$
	7778-50-9	Potassium dichromate	$K_2Cr_2O_7$
	7789-00-6	Potassium chromate	K_2CrO_4
	-	Other hexavalent chromium compounds	
3		**Lead and its compounds**	
	7439-92-1	Lead	Pb
	598-63-0	Lead(II) carbonate	$PbCO_3$
	1309-60-0	Lead(IV) oxide	PbO_2
	1314-41-6	Lead(II,IV) oxide	Pb_3O_4
	1314-87-0	Lead(II) sulfide	PbS
	1317-36-8	Lead(II) oxide	PbO
	1319-46-6	Lead(II) carbonate basic	$2PbCO_3.Pb(OH)_2$
	1344-36-1	Lead Hydroxidcarbonate	$2PbCO_3.Pb(OH)_2$
	7446-14-2	Lead(II) sulfate	$PbSO_4$
	7446-27-7	Lead(II) phosphate	$Pb_3(PO_4)_2$
	7758-97-6	Lead(II) chromate	$PbCrO_4$
	12060-00-3	Lead(II) titanate	$PbTiO_3$
	15739-80-7	Lead sulfate,sulphuric acid,lead salt	$PbSO_4$
	12202-17-4	Lead sulfate,tribasic	$PbSO_4 \cdot H_2O$
	1072-35-1	Lead stearate	$Pb(C_{17}H_{35}COO)_2$
	56189-09-4	Lead stearate,dibasic	$2PbO \cdot Pb(C_{17}H_{35}COO)_2$
	-	Other lead compounds	-
4		**Mercury and its compounds.**	
	7439-97-6	Mercury	Hg
	7487-94-7	Mercury(II) chloride	$HgCl_2$
	21908-53-2	Mercury(II) oxide	HgO
	-	Other mercury compounds	-
5		**Polybrominated biphenyls (PBBs)**	
	59536-65-1	Polybrominated biphenyls	$C_{12}HxBr_{(10-x)}$
	-	Other polybrominated biphenyls	-
6		**Polybrominated diphenyl ethers (PBDEs)**	
	1163-19-5	Polybrominated diphenyl ethers	$C_{12}HxBr_{(10-x)}O$
	-	Other Polybrominated diphenyl ethers	-
7		**Bis(tributyltin)oxide**	
	56-35-9	Bis(Tri-n-butyltin)oxide	$O(Sn(C_4H_9)_3)_2$
8		**Polychlorinatedbiphenyls (PCBs)/ Polychlorinated terphenyls (PCTs)**	
	1336-36-3	PCB(Polychlorinated biphenyls)	$C_{12}HnCl_{(10}$-n) (n: 0-9)
	61788-33-8	PCT(Polychlorinated terphenyls)	$C_{18}HnCl_{(14-n)}$ (n: 0-13)-
	-	Other PCBs	-
9		**Polychlorinated naphthalene(Cl≥3)**	
	70776-03-3	Polychlorinated naphthalene(Cl≥3)	-
	-	Other Polychlorinated naphthalene(Cl≥3)	-
10		**Short chain chlorinated paraffins**	
	85535-84-8	Short chain chlorinated paraffins(C10-13)	CnH_2n+_2-xClx (n:10-13)
11		**Asbestos**	
	77536-66-4	Actinolite	$Ca_2(Mg,Fe)_5(Si_8O_{22})(OH)_2$
	12172-73-5	Amosite	$Fe_5Mg_2(Si_8O_{22})(OH)_2$

	77536-67-5	Anthophylite	$(Mg, Fe)_7Si_8O_{22}(OH)_2$
	12001-29-5	Chrysotile	$Mg_3(Si_2O_5)(OH)_4$
	12001-28-4	Crocidolite	$Na_2Fe^{2+}{}_3Fe^{3+}{}_2Si_8O_{22}(OH)_2$
	77536-68-6	Tremolite	$Ca_2Mg_5Si_8O_{22}(OH)_2$
	-	Other asbestos	-
12		**Azo pigments and dyes.（those able to form certain amines）**	
	60-09-3	4-Aminoazobenzene	$C_{12}H_{11}N_3$
	90-04-0	*o*-Anisidine	C_7H_9NO
	91-59-8	2-Naphthylamine	$C_{10}H_9N$
	91-94-1	3,3'-Dichlorobenzidine	$C_{12}H_{10}C_{l2}N_2$
	92-67-1	4-Biphenylamine	$C_{12}H_{11}N$
	92-87-5	Benzidine	$C_{12}H_{12}N_2$
	95-53-4	*o*-Toluidine	C_7H_9N
	95-69-2	4-Chloro-*o*-toluidine	C_7H_8ClN
	95-80-7	2,4-Toluendiamine	$C_7H_{10}N_2$
	97-56-3	*o*-Aminoazotoluene	$C_{14}H_{15}N_3$
	99-55-8	5-Nitro-*o*-toluidine	$C_7H_8N_2O_2$
	101-14-4	3,3'-Dichloro-4,4'-diaminodiphenylmethan	$C_{13}H_{12}C_{l2}N_2$
	101-77-9	4,4'-Methylenedianiline	$C_{13}H_{14}N_2$
	101-80-4	4,4'-Diaminodiphenylether	$C_{12}H_{12}N_2O$
	106-47-8	p-Chloroaniline	C_6H_6ClN
	119-90-4	3.3’-Dimethoxybenzidine	$C_{14}H_{16}N_2O_2$
	119-93-7	3,3'-Dimethylbenzidine	$C_{14}H_{16}N_2$
	120-71-8	2-Methoxy-5-methylaniline	$C_8H_{11}NO$
	137-17-7	2,4,5-Trimethylaniline	$C_9H_{13}N$
	139-65-1	4,4'-Thiodianiline	$C_{12}H_{12}N_2S$
	615-05-4	4-Methoxy-m-phenylenediamine	$C_7H_{10}N_2O$
	838-88-0	4,4'-Diamino-3,3'-dimethyldiphenylmethane	$C_{15}H_{18}N_2$
13		**Ozone Depleting Substances**	
	75-69-4	CFC-11	$CFCl_3$
	75-71-8	CFC-12	CF_2Cl_2
	76-13-1	CFC-113	$C_2F_3Cl_3$
	76-14-2	CFC-114	$C_2F_4Cl_2$
	76-15-3	CFC-115	C_2F_5Cl
	353-59-3	Halon1211	CF_2BrCl
	75-63-8	Halon1301	CF_3Br
	124-73-2	Halon2402	$C_2F_4Br_2$
	75-72-9	CFC-13	CF_3Cl
	354-56-3	CFC-111	C_2FCl_5
	28605-74-5	CFC-112	$C_2F_2Cl_4$
	422-78-6	CFC-211	C_3FCl_7
	3182-26-1	CFC-212	$C_3F_2Cl_6$
	2354-06-5	CFC-213	$C_3F_3Cl_5$
	2268-46-4	CFC-214	$C_3F_4Cl_4$
	76-17-5	CFC-215	$C_3F_5Cl_3$
	661-97-2	CFC-216	$C_3F_6Cl_2$
	422-86-6	CFC-217	C_3F_7Cl
	56-23-5	Carbon tetrachloride	CCl_4
	71-55-6	1,1,1-Trichloroethane	$C_2H_3Cl_3$
	1868-53-7	Dibromofluoromethane	$CHFBr_2$
	1511-62-2	Bromodifluoromethane	CHF_2Br
	373-52-4	Bromofluoromethane	CH_2FBr
	306-80-9	Tetrabromofluoroethane	C_2HFBr_4
	-	Tribromodifluoroethane	$C_2HF_2Br_3$
	354-04-1	Dibromotrifluoroethane	$C_2HF_3Br_2$
	124-72-1	Bromotetrafluoroethane	C_2HF_4Br
	-	Tribromofluoroethane	$C_2H_2FBr_3$
	75-62-1	Dibromodifluoroethane	$C_2H_2F_2Br_2$
	421-06-7	Bromotrifluoroethane	$C_2H_2F_3Br_3$
	358-97-4	Dibromofluoroethane	$C_2H_3FBr_2$

	359-07-9	Bromodifluoroethane	$C_2H_3F_2Br$
	762-49-2	Bromofluoroethane	C_2H_4FBr
	-	Hexabromofluoropropane	C_3HFBr_6
	-	Pentabromodifluoropropane	$C_3HF_2Br_5$
	-	Tetrabromotrifluoropropane	$C_3HF_3Br_4$
	-	Tribromotetrafluoropropane	$C_3HF_4Br_3$
	431-78-7	Dibromopentafluoropropane	$C_3HF_5Br_2$
	2252-79-1	Bromohexafluoropropane	C_3HF_8Br
	-	Pentabromofluoropropane	$C_3H_2FBr_5$
	-	Tetrabromodifluoropropane	$C_3H_2F_2Br_4$
	-	Tribromotrifluoropropane	$C_3H_2F_3Br_3$
	-	Dibromotetrafluoropropane	$C_3H_2F_4Br_2$
	480-88-8	Bromopentafluoropropane	$C_3H_2F_5Br$
	-	Tetrabromofluoropropane	$C_3H_3FBr_4$
	70192-80-2	Tribromodifluoropropane	$C_3H_3F_2Br_3$
	70192-83-5	Dibromotrifluoropropane	$C_3H_3F_3Br_2$
	679-84-5	Bromotetrafluoropropane	$C_3H_3F_4Br$
	75372-14-4	Tribromofluoropropane	$C_3H_4FBr_3$
	460-25-3	Dibromodifluoropropane	$C_3H_4F_2Br_2$
	421-46-5	Bromotrifluoropropane	$C_3H_4F_3Br$
	51584-26-0	Dibromofluoropropane	$C_3H_5FBr_2$
	-	Bromodifluoropropane	$C_3H_5F_2Br$
	352-91-0	Bromofluoropropane	C_3H_6FBr
	74-97-5	Chlorobromomethane	CH_2BrCl
	74-83-9	Methylbromide	CH_3Br
	75-43-4	HCFC-21	$CHFCl_2$
	75-45-6	HCFC-22	CHF_2Cl
	593-70-4	HCFC-31	CH_2FCl
	134237-32-4	HCFC121	C_2HFCl_4
	41834-16-6	HCFC-122	$C_2HF_2Cl_3$
	34077-87-7	HCFC-123	$C_2HF_3Cl_2$
	306-83-2	HCFC-123	$CHCl_2CF_3$
	63938-10-3	HCFC-124	C_2HF_4Cl
	2837-89-0	HCFC-124	$CHFClCF_3$
	134237-34-6	HCFC-131	$C_2H_2FCl_3$
	25915-78-0	HCFC-132	$C_2H_2F_2Cl_2$
	75-88-7	HCFC-133	$C_2H_2F_3Cl$
	25167-88-8	HCFC-141	$C_2H_3FCl_2$
	1717-00-6	HCFC-141(b)	$C_2H_3FCl_2$
	25497-29-4	HCFC-142	$C_2H_3F_2Cl$
	75-68-3	HCFC-142(b)	CH_3CF_2Cl
	1615-75-4	HCFC-151	C_2H_4FCl
	134237-35-7	HCFC-221	C_3HFCl_6
	134237-36-8	HCFC-222	$C_3HF_2Cl_5$
	134237-37-9	HCFC-223	$C_3HF_3Cl_4$
	134237-38-0	HCFC-224	$C_2HF_4Cl_3$
	127564-92-5	HCFC-225	$C_3HF_5Cl_2$
	422-56-0	HCFC-225 ca	$CF_3CF_2CHCl_2$
	507-55-1	HCFC-225 cb	CF_2ClCF_2CHClF
	134308-72-8	HCFC-226	C_3HF_6Cl
	134190-48-0	HCFC-231	$C_3H_2FCl_5$
	134237-39-1	HCFC-232	$C_3H_2F_2Cl_4$
	134237-40-4	HCFC-233	$C_3H_2F_3Cl_3$
	127564-83-4	HCFC-234	$C_3H_2F_4Cl_2$
	134237-41-5	HCFC-235	$C_3H_2F_5Cl$
	134190-49-1	HCFC-241	$C_3H_3FCl_4$
	134237-42-6	HCFC-242	$C_3H_3F_2Cl_3$
	134237-43-7	HCFC-243	$C_3H_3F_3Cl_2$
	134190-50-4	HCFC-244	$C_3H_3F_4Cl$
	134190-51-5	HCFC-251	$C_3H_4FCl_3$
	134190-52-6	HCFC-252	$C_3H_4F_2Cl_2$
	134237-44-8	HCFC-253	$C_3H_4F_3Cl$

	134237-45-9	HCFC-261	$C_3H_5FCl_2$
	134190-53-7	HCFC-262	$C_3H_5F_2Cl$
	134190-54-8	HCFC-271	C_3H_6FCl
14		**Tributyltin, Triphenyltin**	
	1803-12-9	Triphenyltin N,N'-dimethyldithiocarbamate	$(C_6H_5)_3Sn(CH_3)_2NCS_2$
	379-52-2	Triphenyltin fuloride	$(C_6H_5)_3SnF$
	900-95-8	Triphenyltin acetate	$(C_6H_5)_3SnOCOCH_3$
	639-58-7	Triphenyltin chloride	$(C_6H_5)_3SnCl$
	76-87-9	Triphenyltin hydroxide	$(C_6H_5)_3SnOH$
	47672-31-1	Triphenyltin fatty acid salts(C=9-11)	-
	7094-94-2	Triphenyltin chloroacetate	$(C_6H_5)_3SnOCOCH_2Cl$
	2155-70-6	Triphenyltin methacrylate	$(C_4H_9)_3SnC_4H_5O_2$
	6454-35-9	Bis(tributyltin)2,3-dibromosuccinate	$C_2H_2(COO)_2((C_4H_9)_3Sn)_2$
	1983-10-4	Tributyltin fluoride	$(C_4H_9)_3SnF$
	31732-71-5	Bis(tributyltin) 2,3-dibromosuccinate	$((C_4H_9)_3Sn)_2\ C_2H_2(Br)_2(COO)_2$
	56-36-0	Tributyltin acetate	$(C_4H_9)_3SnOCOCH_3$
	3090-36-6	Tributyltin laurate	$(C_4H_9)_3SnC_{12}H_{23}\ O_2$
	4782-29-0	Bis(tributyltin)phthalate	$(C_6H_4)(COO)_2((C_4H_9)_3Sn)_2$
	-	Copolymer of alkyl acrylate,methyl methacrylate and tributyltin methacrylate (alkyl;C=8)	-
	6517-25-5	Tributyltin sulfamate	$(C_4H_9)_3SnSO_3NH_2$
	14275-57-1	Bis(tributyltin)maleate	$C_2H_2(COO)_2((C_4H_9)_3Sn)_2$
	1461-22-9	tributyltin chloride	$(C_4H_9)_3SnCl$
	-	Mixture of tributyltin cyclopentane carboxylate and its analogs	-
	-	Mixture of tributyltin-1,2,3,4,4,a,5,6,10,10a-decahydro-7-iso propyl-1,4a-dimethyl-1-phenanthren carboxylate and its analogs	-
	-	Other tributyltins & triphenyltins	-
15		**Radioactive substances**	
	7440-61-1	Uranium	U
	7440-07-5	Plutonium	Pu
	10043-92-2	Radon	Rn
	7440-35-9	Americium	Am
	7440-29-1	Thorium	Th
	7440-46-2	Cesium	Cs
	7440-24-6	Strontium	Sr
	-	Other radioactive substances	-
16		**Aldrin**	
	309-00-2	Aldrin	$C_{12}H_8Cl_6$
17		**Endrin**	
	72-20-8	Endrin	$C_{12}H_8Cl_6O$
18		**Yellow Phosphorus**	
	12185-10-3	Yellow Phosphorus	P_4
19		**Chlordanes**	
	5566-34-7	Gamma-chlordane	$C_{10}H_6Cl_8$
	5103-74-2	Trans- chlordane	$C_{10}H_6Cl_8$
	5103-71-9	Cis- chlordane	$C_{10}H_6Cl_8$
	76-44-8	Heptachlor	$C_{10}H_5Cl_7$
	27304-13-8	Oxychlordane	$C_{10}H_4C_{l8}O$
	39765-80-5	Trans-nonachlor	$C_{10}H_5Cl_9$
	5103-73-1	Cis-nonachlor	$C_{10}H_5Cl_9$
20		**N,N'-ditolyl-p-phenylenediamin, N-tolyl-N'-xyly l-p-phenylenediamine and N,N'-dixylyl-p-phenylenediamine**	
	27417-40-9	N,N'-ditolyl-p-phenylenediamin	-
	28726-30-9	N-Tolyl-N'-Xylyl-p-phenylenediamine	-
	70290-05-0	N,N'-dixylyl-p- phenylenediamine	-
21		**Dioxins**	
	-	Polychlorinated dibenzo-*p*-dioxin	-
	-	Polychlorinated dibenzofuran	-

	-	Co- PCBs	-
22		**DDT**	
	50-29-3	DDT	$C_{14}H_9Cl_5$
23		**Dieldrin**	
	60-57-1	Dieldrin	$C_{12}H_8Cl_6O$
24		**Toxaphene**	
	8001-35-2	Toxaphene	$C_{10}H_{10}Cl_8$
25		**2,4,6-Tri-t-butylphenol**	
	732-26-3	2,4,6-Tri-t-butylphenol	$C_{18}H_{30}O$
26		**4-Nitrodiphenyl and its salt**	
	92-93-3	4-Nitrodiphenyl	$C_{12}H_9NO_2$
27		**Bis(chloromethyl)ether**	
	542-88-1	Bis(Chloromethyl)ether	$C_2H_4Cl_2O$
28		**Hexachlorobenzene**	
	118-74-1	Hexachlorobenzene	C_6Cl_6
29		**Benzene**	
	71-43-2	Benzene	C_6H_6
30		**Mirex**	
	2385-85-5	Mirex	$C_{10}Cl_{12}$
31		**2,2,2-trichloro-1,1-bis(4-chlorophenyl)ethanol**	
	115-32-2	2,2,2-trichloro-1,1-bis(4-chlorophenyl)ethanol	$C_{14}H_9C_{15}O$
32		**Hexachlorobutadiene**	
	87-68-3	Hexachlorobutadiene (Hexachloro-1,3-butadiene, Hexachlorobuta-1,3-diene)	C_4Cl_6
33		**2-benzotriazol-2-yl-4,6-di-tert-butyl-phenol**	
	3846-71-7	2-benzotriazol-2-yl-4,6-di-tert-butyl-phenol	$C_{20}H_{25}N_3O$
34		**Perfluorooctane Sulfonate(PFOS) and its salts**	$C_8F_{17}SO_2X$
	1763-23-1	Perfluorooctanesulfonic acid	$C_8HF_{17}O_3S$
	29081-56-9	Perfluorooctanesulfonate amine	$C_8F_{17}S\ O_3\ NH_4$
	70225-14-8	Bis(2-hydroxyethyl) ammonium perfluorooctanesulfonate	$C_{12}H_{12}F_{17}NO_5S$
	2795-39-3	Potassium perfluorooctanesulfonate	$C_8F_{17}KO_3S$
	29457-72-5	Lithium perfluorooctanesulfonate	$C_8F_{17}LIO_3S$
	-	Other perfluorooctane Sulfonate and its Salts	
35		**Dimethylfumarate(DMF)**	
	624-49-7	Dimethylfumarate(DMF)	$C_6H_8O_4$
36		**Polyvinylchloride(PVC)**	
	9002-86-2	Polyvinyl chloride	$(CH_2CHCl)_n$
37		**Tetrabromo-bisphenol A(TBBPA,TBBA)**	
	79-94-7	Tetrabromo-bisphenol A	$C_{15}H_{12}Br_4O_2$
	30496-13-0	TBBA, unspecified	-
	40039-93-8	TBBA-epichlorhydrin oligomer	$(C_{15}H_{12}Br_4O_2.C_3H_5ClO)x$
	70682-74-5	TBBA-diglycidyl-ether oligomer	-
	28906-13-0	TBBA carbonate oligomer	$(C_{15}H_{12}Br_4O_2.CCl_2O)x$
	94334-64-2	TBBA carbonate oligomer,phenoxy end capped	$(C_7H_5O2)(C_{16}H_{10}Br_4O_3)x(C_6H_5O)$
	71342-77-3	TBBA carbonate oligomer,2,4,6-tribromo-phenolterminated	$(C_7H_2Br_3O_3)(C_{16}H_{10}Br_4O_3)n(C_6H_2Br_3)$
	32844-27-2	TBBA-bisphenol A-phosgene polymer	$(C_{15}H_{16}O_2.C_{15}H_{12}Br_4O_2.CCl_2O)x$
	21850-44-2	TBBA-(2,3-dibromo-propyl-ether)	$C_{21}H_{20}Br_8O_2$
	4162-45-2	TBBA bis-(2-hydroxy-ethyl-ether)	$C_{19}H_{20}Br_4O_4$
	25327-89-3	TBBA-bis-(allyl-ether)	$C_{21}H_{20}Br_4O_2$
	37853-61-5	TBBA-dimethyl-ether	$C_{17}H_{16}Br_4O_2$
38		**Brominated flame retardant (except: PBB,PBDE,TBBPA)**	
		Brominated flame retardant which comes under notation of ISO 1043-4 code number FR(14) [Aliphatic/alicyclic brominated compounds]	ISO code 1043-4
		Brominated flame retardant which comes under notation of ISO 1043-4 code number FR(15) [Aliphatic/alicyclic brominated compounds in combination with antimony compounds]	ISO code 1043-4
		Brominated flame retardant which comes under	ISO code 1043-4

		notation of ISO 1043-4 code number FR(16) [Aromatic brominated compounds(excluding brominated diphenyl ether and biphenyls)]	
		Brominated flame retardant which comes under notation of ISO 1043-4 code number FR(17) [Aromatic brominated compounds(excluding brominated diphenyl ether and biphenyls)in combination with antimony compounds]	ISO code 1043-4
		Brominated flame retardant which comes under notation of ISO 1043-4 code number FR(22) [Aliphatic/alicyclic chlorinated and brominated compounds]	ISO code 1043-4
		Brominated flame retardant which comes under notation of ISO 1043-4 code number FR(42) [Brominated organic phosphorus compounds]	ISO code 1043-4
	69882-11-7	Poly(2,6-dibromo-phenylene oxide)	$(C_6H_2Br_2O)x$
	58965-66-5	Tetra-decabromo-diphenoxy-benzene	$C_{18}Br_{14}O_2$
	37853-59-1	1,2-Bis(2,4,6-tribromo-phenoxy)ethane	$C_{14}H_8Br_6O_2$
	139638-58-7	Brominated epoxy resin end-capped with tribromophenol	-
	135229-48-0	Brominated epoxy resin end-capped with tribromophenol	-
	39635-79-5	Tetrabromo-bisphenol S	$C_{12}H_6Br_4O_4S$
	42757-55-1	TBBS-bis-(2,3-dibromo-propyl-ether)	$C_{18}H_{14}Br_8O_4S$
	615-58-7	2,4-Dibromo-phenol	$C_6H_4Br_2O$
	118-79-6	2,4,6-tribromo-phenol	$C_6H_3Br_3O$
	608-71-9	Pentabromo-phenol	C_6HBr_5O
	3278-89-5	2,4,6-Tribromo-phenyl-allyl-ether	$C_9H_7Br_3O$
	-	Phthalic acid, 3,4,5,6-tetrabromo-, dialkyl ester (C=6～23)	-
	25637-99-4 , 3194-55-6 (134237-51-7, 134237-50-6, 134237-52-8)	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (α – HBCDD, β-HBCDD, γ-HBCDD)	$C_{12}H_{18}Br_6$
	31454-48-5	Tetrabromo-chyclo-octane	$C_8H_{12}Br_4$
	3322-93-8	1,2-Dibromo-4-(1,2dibromo-methyl)-cyclo-hexane	$C_8H_{12}Br_4$
	25357-79-3	TBPA Na salt	$C_8Br_4O_4Na_2$
	632-79-1	Tetrabromo phthalic anhydride	$C_8Br_4O_3$
	55481-60-2	Bis(methyl)tetrabromo-phtalate	$C_{10}H_6Br_4O_4$
	26040-51-7	Bis(2-ethlhexyl)tetrabromo-phtalate	$C_{24}H_{34}Br_4O_4$
	20566-35-2	2-Hydroxy-propyl-2-(2-hydroxy-ethoxy)-ethyl-TBP	$C_{15}H_{16}Br_4O_7$
	75790-69-1	TBPA, glycol-and propylene-oxide esters	-
	32588-76-4	N,N'-Ethylene–bis (tetrabromo-phthalimide)	$C_{18}H_4Br_8N_2O_4$
	52907-07-0	Ethylene-bis(5,6-dibromo-norbornane-2,3-dicarboximide)	$C_{20}H_{20}Br_4N_2O_4$
	3234-02-4	2,3-Dibromo-2-butene-1,4-diol	$C_4H_6Br_2O_2$
	3296-90-0	Dibromo-neopentyl-glycol	$C_5H_{10}Br_2O_2$
	96-13-9	2,3-Dibromo-propanol	$C_3H_6Br_2O$
	36483-57-5	Tribromo-neopentyl-alcohol	$C_5H_9Br_3O$
	57137-10-7	Poly tribromo-styrene	-
	61368-34-1	Tribromo-styrene	$C_8H_5Br_3$
	171091-06-8	Dibromo-styrene grafted PP	-
	31780-26-4	Poly-dibromo-styrene	$C_8H_6Br_2$
	68955-41-9	Bromo-/Chloro-paraffins	-
	82600-56-4	Bromo-/Chloro-alpha-olefin	-
	593-60-2	Vinylbromide	C_2H_3Br
	52434-90-9	Tris-(2,3-dibromo-propyl)-isocyanurate	$C_{12}H_{15}Br_6N_3O_3$
	49690-63-3	Tris(2,4-Dibromo-phenyl) phosphate	$C_{18}H_9Br_6O_4P$
	19186-97-1	Tris(tribromo-neopentyl) phosphate	$C_{15}H_{24}Br_9O_4P$

	125997-20-8	Chlorinated and brominated phosphate esther	-
	87-83-2	Pentabromo-toluene	$C_7H_3Br_5$
	38521-51-6	Pentabromo-benzyl bromide	$C_7H_2Br_6$
	68441-46-3	1,3-Butadiene homopolymer,brominated	-
	59447-55-1	Pentabromo-benzyl-acrylate, monomer	$C_{10}H_5Br_5O_2$
	59447-57-3	Pentabromo-benzyl-acrylate, polymer	$(C_{10}H_5Br_5O_2)x$
	61262-53-1	Decabromo-diphenyl-ethane	$C_{14}H_4Br_{10}O_2$
	59789-51-4	Tribromo-bisphenyl-maleinimide	$C_{10}H_4Br_3NO_2$
	59789-51-4	Brominated trimethylphenyl-lindane	$C_{18}H_{13}Br_n$ (n=7,8)
	-	Other Brominated flame retardants	-
39		**Antimony and its compounds**	
	7440-36-0	Antimony	Sb
	10025-91-9	Antimony trichloride	$SbCl_3$
	1309-64-4	Antimony trioxide	Sb_2O_3
	1314-60-9	Antimony pentoxide	Sb_2O_5
	15432-85-6	Sodium antimony	Na_3O_4Sb
	-	Other antimony compounds	
40		**Arsenic and its compounds**	
	7440-38-2	Arsenic	As
	1303-00-0	Gallium arsenide	GaAs
	1303-28-2	Diaresenic pentoxide	As_2O_5
	1327-53-3	Diaresenic trioxide	As_2O_3
	7784-40-9	Lead hydrogen arsenate	$AsHO_4Pb$
	15606-95-8	Triethyl aresenate	$C_6H_{15}AsO_4$
	-	Other arsenic compounds	-
41		**Beryllium and its compounds**	
	7440-41-7	Beryllium	Be
	1304-56-9	Beryllium oxide	BeO
	-	Other Beryllium compounds	
42		**Bismuth and its compounds.**	
	7440-69-9	Bismuth	Bi
43		**Nickel and its compounds.**	
	1313-99-1	Nickel(II) oxide	NiO
	3333-67-3	Nickel(II) carbonate	$NiCO_3$
	7786-81-4	Nickel(II) sulfate	$NiSO_4$
	7440-02-0	Nickel	Ni
	-	Other nickel compounds	
44		**Some Phthalic Esters**	
	117-81-7	Bis(2-ethyl(hexyl)phthalate) (DEHP)	$C_{24}H_{38}O_4$
	84-74-2	Dibutyl phthalate (DBP)	$C_{16}H_{22}O_4$
	85-68-7	Benzyl butyl phthatate	$C_{19}H_{20}O_4$
	117-82-8	bis(2-ethylhexyl) phthalate (DEP)	$C_{14}H_{18}O_6$
45		**Selenium and its compounds**	
	7782-49-2	Selenium	Se
	7783-00-8	Selenous acid	H_2SeO_3
	-	Other selenium compounds	
46		**Zinc and its compounds**	
	10025-64-6	Zinc perchlorate hexahydrate	$Zn(ClO_4)_2{\cdot}6H_2O$
	10139-47-6	Zinc Iodide	ZnI_2
	10196-18-6	Zinc nitrate hexahydrate	$Zn(NO_3)_2{\cdot}6H_2O$
	10361-95-2	Zinc chlorate	$Zn(ClO_3)_2$
	1313-49-1	Zinc nitride	Zn_3N_2
	1314-13-2	Zinc oxide	ZnO
	1314-84-7	Zinc phosphide	Zn_3P_2
	1314-98-3	Zinc sulfide	ZnS
	1315-11-3	Zinc telluride	ZnTe
	13530-65-9	Zinc chromate	CrO_4Zn
	13637-61-1	Zinc perchlorate	$Zn(ClO_4)_2$
	13814-87-4	Ammonium zinc sulfate	$(NH_4)_2Zn(SO_4)_2$
	13932-17-7	Potassium zinc sulfate	$K_2Zn(SO_4)_2$
	14485-28-0	Zinc phosphate,monobasic	$Zn(H_2PO_4)_2$
	14639-97-5	Zinc ammonium chloride	$(NH_4)_2[ZnCl_4]$

	15060-64-7	Zinc hypophoshite	$Zn(PH_2O_2)_2$
	16871-71-9	Zinc fluorosilicate	$Zn[SiF_6]$
	544-97-8	Dimethyl zinc	$Zn(CH_3)_2$
	557-20-0	Diethyl zinc	$Zn(C_2H_5)_2$
	557-21-1	Zinc cyanide	$Zn(CN)_2$
	557-34-6	Zinc acetate	$Zn(CH_3COO)_2$
	557-42-6	Zinc thiocyanate	$Zn(SCN)_2$
	5970-45-6	Zinc acetate dihydrate	$Zn(CH_3COO)_2{\cdot}2H_2O$
	73640-07-0	Zinc fluoride tetrahydrate	$ZnF_2{\cdot}4H_2O$
	7446-20-0	Sulfuric acid, zinc salt(1:1), Heptahydrate	$ZnSO_4{\cdot}7H_2O$
	7646-85-7	Zinc chloride	$ZnCl_2$
	7699-45-8	Zinc bromide	$ZnBr_2$
	7733-02-0	Zinc sulfate	$ZnSO_4$
	7779-86-4	Zinc hydrosulfite	ZnS_2O_4
	7779-88-6	Zinc nitrate	$Zn(NO_3)_2$
	7783-49-5	Zinc fluoride	ZnF_2
	77998-33-5	Ammonium zinc sulfate hydrateE	$(NH_4)_2Zn(SO_4)_2{\cdot}6H_2O$
47		**Chlorinated paraffine (except short chain chlorinated paraffins (No.10))**	
		Medium chain chlorinated paraffins (C14-17)	$CnH_{2\,n+2}$-xClx (n : 14-17)
		Long chain chlorinated paraffins (C18-30)	$CnH_{2\,n+2}$-xClx (n : 18-30)
		Chromium(III) and its compounds	
	10022-47-6	Ammonium chromium(III) sulfate dodecahydrate	$Cr(NH_4)(SO_4)_2{\cdot}2H_2O$
	10025-73-7	Chromic chloride	$CrCl_3$
	10031-25-1	Chromium(III) bromide	$CrBr_3$
	10060-12-5	Chromium Trichloride Hexahydrate	$CrCl_3{\cdot}6H_2O$
	10101-53-8	Chromic Sulfate	$Cr_2(SO_4)_3$
	10141-00-1	Chromium Potassium Sulfate	$CrK(SO_4)_2$
	1066-30-4	Chromic Acetate	$Cr(CH_3COO)_3$
	12018-22-3	Chromium(III) sulfide	Cr_2S_3
	1308-38-9	Chromium oxide	Cr_2O_3
	13475-98-4	Chromium(III) phosphate hexahydrate	$CrPO_4{\cdot}6H_2O$
	13478-06-3	Chromium(III) bromide hexahydrate	$CrBr_3{\cdot}6H_2O$
	13537-21-8	Chromic perchlorate	$Cr(ClO_4)_3$
	13548-38-4	Chromium nitrate	$Cr(NO_3)_3$
	13548-43-1	Ammonium chromic sulfate	$Cr(NH_4)(SO_4)_2$
	13569-75-0	Chromium(III) iodide	CrI_3
48	13573-16-5	Chromate(1-),Diamine tetrakis(Thiocyanate-N)-, Ammonium,(OC-6-11)	trans-$NH_4[Cr(NCS)_4(NH_3)_2]$
	13573-17-6	Reinecke salt monohydrate;Ammonium Tetra thiocyanate diammine chromate	trans-$NH_4[Cr(NCS)_4(NH_3)_2]\cdot H_2O$
	13601-11-1	Potassium hexacyano chromate(III)	$K_3[Cr(CN)_6]$
	15244-38-9	Chromium(III) sulfate N-hydrate	$Cr_2(SO_4)_3{\cdot}18H_2O$
	16165-32-5	Tris(ethylene diamine)chromium(III) Chloride hydrate	$[Cr(C_2H_8N_2)_3]Cl_3{\cdot}3H_2O$
	21679-31-2	Chromiumu(III) acetyl acetonate	$Cr(C_5H_7O_2)_3$
	24094-93-7	Chromium(III) nitride	CrN
	25013-82-5	Chromium(III) acetate monohydrate	$Cr(CH_3COO)_3{\cdot}H_2O$
	26342-61-0	Chromium phosphide	CrP
	30737-19-0	Chromium(III) oxalate	$Cr_2(C_2O_4)_3$
	55147-94-9	Chromium(III) perchlorate hexahydrate	$Cr(ClO_4)_3{\cdot}6H_2O$
	64093-79-4	Neochromium	$Cr(OH)SO_4{\cdot}Na_2SO_4{\cdot}H_2O$
	7440-47-3	Chromium	Cr
	7788-97-8	Chromium(III) fluoride	CrF_3
	7788-99-0	Chromium potassium sulfate dodeca hydrate	$CrK(SO_4)_2{\cdot}12H_2O$
	7789-02-8	Chromium nitrate, Nona hydrate	$Cr(NO_3)_3{\cdot}9H_2O$
	7789-04-0	Chromium(III) phosphate	$CrPO_4$
49		**Cyanogen compounds.**	
	100-47-0	Benzonitrile	C_7H_5N
	107-13-1	Acrylonitrile	C_3H_3N
	109-78-4	Ethylene cyanohydrin	C_3H_5NO
	1194-65-6	2,6-Dichloro benzonitrile	$C_7H_3Cl_2N$

	13453-34-4	Thallium(I) cyanide	TlCN
	140-29-4	Phenyl acetonitrile	C_8H_7N
	143-33-9	Sodiumu cyanide	NaCN
	14763-77-0	Copper cyanide	$Cu(CN)_2$
	151-50-8	Potassium cyanide	KCN
	156-62-7	Calcium cyanamide	$CCaN_2$
	2035-66-7	Palladium(II) cyanide	$Pd(CN)_2$
	21159-32-0	Cesium cyanide	CsCN
	21725-46-2	Cyanazine	$C_9H_{13}ClN_6$
	420-04-2	Cyanamide	$NCNH_2$
	460-19-5	Cyanogen	$(CN)_2$
	506-64-9	Silvber cyanide	AgCN
	506-65-0	Gold(I) cyanide	AuCN
	506-68-3	Cyanogen bromide	CNBr
	506-77-4	Cyanogen chloride	CNCl
	506-78-5	Cyanogen iodide	CNI
	535-37-5	Gold(I)cyanide trihydrate	$Au(CN)_3 \cdot 3H_2O$
	535-37-5	Gold(I) cyanide	$Au(CN)_3$
	542-62-1	Barium cyanide	$Ba(CN)_2$
	542-83-6	Cadmium cyanide	$Cd(CN)_2$
	542-84-7	Cobalt(II) cyanide	$Co(CN)_2$
	544-92-3	Cuprous cyanide	CuCN
	557-19-7	Nickel cyanide	$Ni(CN)_2$
	557-21-1	Zinc cyanide	$Zn(CN)_2$
	592-01-8	Calcium cyanide	$Ca(CN)_2$
	592-04-1	Mercuric cyanide	$Hg(CN)_2$
	592-05-2	Lead cyanide	$Pb(CN)_2$
	592-06-3	Platinam(II) cyanide	$Pt(CN)_2$
	74-90-8	Hydrogen cyanide	HCN
	7677-24-9	Trimethylsilyl cyanide	$Si(CN)(CH_3)_3$
	917-61-3	Sodium cyanide	CNNaO
		Perfluorocarbon (PFC)	
	115-25-3	Octafluorocyclobutane	C_4F_8
	307-34-6	Octadecafluorooctane, Perfluorooctane	C_8F_{18}
	335-57-9	PFC72,PFC-51-14	C_7F_{16}
50	355-25-9	PFC218	C_4F_{10}
	355-42-0	Tetradecafluorohexane, Perfluorohexane	C_6F_{14}
	678-26-2	PFC410	C_5F_{12}
	75-73-0	Tetrafluoromethane	CF_4
	76-16-4	PFC14	C_2F_6
	76-19-7	PFC116	C_3F_8
51		**Hydrogenerated fluorocarbon (HFC)**	
	811-97-2	HFC-134a	CH_2FCF_3
	138495-42-8	HFC-43-10mee	$C_5H_2F_{10}$
	354-33-6	HFC-125	CHF_2CF_3,C_2HF_5
	407-59-0	HFC-356mff,HFC-356ffa	$C_4H_4F_6$
	420-46-2	HFC-143a	CH_3CF_3
	430-66-0	HFC-143	CHF_2CH_2F
	431-89-0	HFC-227ea	CF_3CHFCF_3,C_3HF_7
	679-86-7	HFC-245ca	$C_3H_3F_5$
	690-39-1	HFC-236fa	$C_3H_2F_6$
	75-10-5	HFC-32	CH_2F_2
	75-37-6	HFC-152a	CH_3CHF_2
	75-46-7	HFC-23	CHF_3
	593-53-3	HFC-41	CH_3F
	359-35-3	HFC-134	CHF_2CHF_2
	-	HFC-245fa	-
	-	HFC-125/143a/134a=44/52/4	-
	-	HFC-32/125/134a=20/40/40	-
	-	HFC-32/125/134a=23/25/52	-
	-	HFC-32/125=50/50	-
	-	HFC-32/125=45/55	-

	-	HFC-32/143a=50/50	-
	-	HFC-23/FC-116=39/61	-
	-	HFC-23/FC-116=46/54	-
52		**Halogenated additives**	
	115-96-8	Tris (2-chloroethyl)phosphate	$C_6H_{12}Cl_3PO_4$
	21850-44-2	TBBA-(2,3-dibromo-propyl-ether)	$C_{21}H_{20}Br_8O_2$
	3194-55-6	1,2,5,6,9,10-Hexabromocyclodecane	$C_{12}H_{18}Br_6$
	79-27-6	1,1,2,2-Tetrabromoethane	$C_2H_2Br_4$
	79-94-7	Tetrabromo-bisphenol A(TBBA)	$C_{15}H_{12}Br_4O_2$
	87-82-1	Hexabromobenzene	C_6Br_6
	9002-84-0	Polytetrafuluoroethylene	$(C_2F_4)_n$
	75-25-2	Tribromomethane	$CHBr_3$
	118-79-6	2,4,6-Tribromo-Phenol	$C_6H_3Br_3O$
	4162-45-2	TBBA-bis(2-Hydroxy-ethyl-ether)	$C_{19}H_{20}Br_4O_4$
53		**Maganese and its compounds**	
	7439-96-5	Manganese	Mn
	10031-20-6	Manganese(II) bromide tetrahydrate	$Mn\ Br_2{\cdot}4H_2O$
	10034-96-5	Manganese(II) sulfate heptahydrate	$Mn(C_2O_4)\cdot 2H_2O$
	10043-84-2	Manganese hypophosphite	$Mn(PH_2O_2)_2$
	10101-50-5	Sodium permanganate	$NaMnO_4$
	10124-54-6	Manganese(III) phosphate hydrate	$MnPO_4{\cdot}H_2O$
	10170-69-1	Dimanganese decacarbonyl	$Mn_2(CO)_{10}$
	10377-66-9	Manganese(II) nitrate	$Mn(NO_3)_2$
	12005-95-7	Manganese arsenide	MnAs
	12032-78-9	Manganese phosphide	MnP
	12032-86-9	Manganese silicide	MnSi
	12032-88-1	Manganese telluride	MnTe
	12427-38-2	Maneb	$C_4H_6MnN_2S_4$
	12777-96-7	Manganese carbide	Mn_3C
	1313-13-9	Manganese(IV) oxide	MnO_2
	1313-22-0	Manganese monoselenide	MnSe
	1317-34-6	Manganese(III) oxide, 98%(assay); manganese trioxide	Mn_2O_3
	1317-35-7	Manganomanganic oxide; manganese tetra oxide; trimanganese tetraoxide; manganese(II,III) oxide; manganese oxide(II,III)	Mn_3O_4
	13224-08-3	Manganese(II) sulfate	$MnSO_4$
	1344-43-0	Manganese(II) oxide	MnO
	13446-03-2	Manganese(II) bromide	$MnBr_2$
	13446-34-9	Manganese(II) chloride tetrahydrate	$MnCl_2{\cdot}4H_2O$
	13566-22-8	Ammonium manganese sulfate	$Mn(NH_4)_2(SO_4)$
	13568-71-3	Manganese(II) sulfite	$MnSO_3$
	14154-9-7	Manganese(II) phosphate	$Mn_3(PO_4)_2$
	14284-89-0	Acetylacetone manganese(III) salt; Tris(2,4-pentanedionate)manganese;	$Mn(C_5H_7O_2)_3$
	15364-94-0	Manganese(II) perchlorate	$Mn(ClO_4)_2$
	17141-63-8	Manganese(II) nitrate hexahydrate	$Mn(NO_3)_2{\cdot}6H_2O$
	18820-29-6	Manganese sulfide	MnS
	598-62-9	Manganese(II) carbonate	$MnCO_3$
	6156-78-1	Manganese(II) acetate tetrahydrate	$Mn(CH_3COO)_2{\cdot}4H_2O$
	638-38-0	Manganese(II) acetate	$Mn(CH_3COO)_2$
	640-67-5	Manganese oxalate	$Mn(C_2O_4)$
	6556-16-7	Manganese(II) oxalate dihydrate	$Mn(C_2O_4)\cdot 2H_2O$
	7439-96-5	Manganese	Mn
	7722-64-7	Potassium permanganate	$KMnO_4$
	7773-01-5	Manganese(II) chloride; Manganesedichloride	$MnCl_2$
	7782-64-1	Manganese difluoride	MnF_2
	7782-76-5	Manganese phosphate, dibasic	$MnHPO_4$
	7783-16-6	Manganese(II) hypophosphite monohydrate	$Mn(PH_2O_2)_2{\cdot}H_2O$
	7783-53-1	Manganese(III) fluoride	MnF_3
	7790-33-2	Manganese(II) iodide	MnI_2

	993-2-2	Manganese(III) acetate	$Mn(CH_3COO)_3$
	-	Other manganese compounds	$Mn(CH_3COO)_3$
54	-	**Organic Tin Compounds (except TBTO (No.7) and TBT/TPT (No.14))**	-
55		**Sulfur hexafluoride(SF6)**	
	2551-62-4	Sulfur hexafluoride	F_6S
56		**Anthracene**	
	120-12-7	Anthracene	$C_{14}H_{10}$
57		**4,4'- Diaminodiphenylmethane**	
	101-77-9	4,4'- Diaminodiphenylmethane	$C_{13}H_{14}N_2$
58		**Cobalt dichloride**	
	7646-79-9	Cobalt dichloride	C_oCl_2
59		**5-tert-butyl-2,4,6-trinitro-m-xylene(musk xylene)**	
	81-15-2	5-tert-butyl-2,4,6-trinitro-m-xylene(musk xylene)	$C_{12}H_{15}N_3O_6$
60		**Carcinogenic substances (Group1 and group2A: evaluated by IARC)**	
61		**Bromine and its compounds**	
	-	Polybrominated biphenyls (PBBs)（No.5）, Polybrominated diphenyl ethers (PBDEs), (No.6), Tetrabromo-bisphenol A(TBBPA,TBBA) (No.34), other Brominated flame retardants (No.35), and other Bromine compounds	-
62		**Chlorine and its compounds**	
	-	Polychlorinatedbiphenyls (PCBs) (No.8), Polychlorinated naphthalene(Cl≥3) (No.9), Short chain chlorinated paraffins (No.10), Polyvinylchloride(PVC) (No.33), Chlorinated paraffine (except short chain chlorinated paraffins (No.10)) (No.44), and other Chlorine compounds	-
63		**Red Phosphorus**	
	7723-14-0	Red Phosphorus	Pn
64	-	**Substances classified by the EC Council Directive 67/548/EEC as Category 1-3 of Carcinogenic, Mutagenic or Reprotoxic ones**	

Guidelines for Green Procurement

TOSHIBA

Toshiba Corporation

Mobile Communication Company
Digital Media Network Company
Personal Computer & Network Company

TOSHIBA TEC CORPORATION

Issue Date: October 2009
Document No.: 360045308 Ver.07