

CASIO GROUP Green Procurement Standard Manual

for Casio Products, Components and Materials

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CASIO COMPUTER CO., LTD.

<REVISION HISTORY>

DATE	PAGE	REASON for REVISION
2000.11.1	TAGE	1st issue
2000.11.1		Total revision due to issue of 4th edition
2004.4.26	7	8)Heavy metals contained in battery / Assessment / (reply " no " in the cell of battery)
2004.4.20	15	9 / A09 / Lead and its compounds / all uses (except battery cell
2004.4.20	10	The first four lines of the third paragraph are added.
2005.2.1	10	The reference is added for the metal conversion coefficient under the equation.
2005.2.1	10	The content of (2)Evaluation and Selection of Green Components is revised.
2005.2.1	11	The comments are revised for (3)Creating Survey Sheet 2 and 3.
2005.2.1	14-21	The classification and the scope to survey/ban of the chemical substances are revised.
2009.3.1	14 21	Threshold value for cadmium changed from 0.0075 wt% (75 ppm) to 0.01 wt% (100 ppm)
2009.3.1	16	Threshold value for shortchain chlorinated paraffins changed from 1 wt% (10000 ppm) to 0.1 wt% (1000 ppm) ppm)
2009.3.1	16	The following chemical substances changed from <restricted substances=""> to <prohibited substances=""></prohibited></restricted>
		12 Bis (tri-n-butyltin) oxide (TBTO)
		13 Tributyl Tins (TBTs) and Triphenyl Tins (TPTs)
		14 Polychlorinated naphthalenes (3 or more chlorine atoms)
		15 Shortchain chlorinated paraffins (C10-13) 16 Radioactive substances
2009.3.1	16	The following chemical substances were added as new <prohibited substances="">:</prohibited>
	-	27 PFOS and its salts
		28 2-(2H-1,2,3-Benzotriazol-2-yl)-4,6-di-tert-butylphenol
2009.3.1	18	Tables 1 and 2 provide a summary of the prohibited substances in batteries and packaging materials.
2009.3.1	29	Table 3 lists the uses that are exempted from prohibitions on the inclusion of substances, and also
2011 10 1		shows new additional information on those exempted uses.
2011.10.1	1	Replace "Casio Environmental Charter/Environmental Policies" with "Casio Environmental Vision/Casio's Environmental Declaration".
2011.10.1	8	"heavy metals included in packaging materials" is changed.
2011.10.1	16	The prohibited uses of prohibited substances, the thresholds and the relevant laws and regulations are revised.
2011.10.1	16	"Tributyl Tins (TBTs) and Triphenyl Tins (TPTs)" renamed as "Trisubstituted Organotin Compounds".
2011.10.1	17, 24	Restrictions on the amount of mercury included in batteries are added. 29. Dimethylfumarate(DMFu) 30. Dibutyltin (DBT) compounds, Dioctyltin (DOT) compound
2011.10.1	18	Restrictions on the amount of mercury included in batteries are added.
2011.10.1	19	Denominator of the threshold for prohibited substances included in packaging materials is changed.
2011.10.1	27 - 30	Exempted applications for prohibited substances are changed.
2013.4.5	12, 13, 31	E-mail address is changed.
2015.4.1	1	Casio Environmental Vision and Casio Environmental Declaration are updated to the latest versions.
2015.4.1	15	Threshold value for leather is added for "hexavalent chromium compounds". (*See "Delivery Banned Date")
2015.4.1	15	Threshold value for "Lead and its compounds" changed.
2015.4.1	17, 24	The following chemical substances are added as new <prohibited substances="">:(*See "Delivery Banned Date") 31. Hexabromocyclododecane (HBCD) 32. PFOA and individual salts and esters of PFOA 33. Polycyclic aromatic hydrocarbons (PAHs) 34. Specific phthalates (DEHP, DBP, BBP, DIBP)</prohibited>
2015.4.1	17, 27	In Substances for Reduction, "Phthalates" is changed to "Phthalates (except DEHP, DBP, BBP and DIBP)".
2019.7.15	Cover	Removed Casio Green Mark.
2025. 7. 1	1	Updated "Chapter 1: Casio Group's Approach to Environmental Conservation"
2025. 7. 1	14-29	In "Appendix 1" and "Appendix 2", updated chemical substance groups No. 6, 14, 27, 32, and 34 to reflect the latest legal and regulatory status, and added chemical substance groups No. 35, 36, 37, 38, 39, 40, 41 and 42.
2025. 7. 1	30	In "Appendix 3", updated exemptions to reflect the latest EU-RoHS status.
		luly 1, 2025 onwards are written in blue

Revisions effective from July 1, 2025 onwards are written in blue.

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Chapter 1 The Casio Group Concept of Environmental Preservation

In 2012, Casio established the Casio Environmental Vision 2050, a long-term environmental management policy that looks ahead to the year 2050, and launched a range of initiatives. In 2021, Casio undertook a complete review of the policy to ensure that it does not fall behind the drastic and rapid changes surrounding the environment, and restructured the Casio Group Environmental Principles, which comprise the following elements.

Casio Group Environmental Philosophy

Casio Group Environmental Vision	A healthy global environment is the foundation of all economic activity. Casio is reducing environmental impact across its business activities to help build a resilient, sustainable world for future generations to enjoy.		
	To achieve the Casio Group Environmental Vision, Casio is proactively focusing on three material issues and taking a defined long-term approach to each.		
Casio Group Basic Policies on the Environment	Material issues (1) Responding to climate change (2) Supporting a recycling society (3) Living in harmony with nature	 Reduce greenhouse gas emissions to zero by 2050 Minimize business waste, minimize use of newly mined resources, maximize collection of used products/packaging Preserve and sustainably use biodiversity 	
Casio Group Environmental Action Guidelines		Environmental Policy, Casio has categorized business activities into seven life-cycle fic course of action to guide efforts at each stage. Seven stages and courses of action [1] Planning/Development: Leverage design to reduce environmental impact and develop products/services utilizing environmentally friendly technologies and materials (to offer environmental value) [2] Procurement: Collaborate with suppliers to reduce environmental impact when procuring parts and raw materials [3] Manufacturing: Minimize environmental impact of Group sites and the entire supply chain [4] Distribution: Reduce environmental impact by cutting greenhouse gas emissions from product delivery, etc. [5] Marketing/Sales: Reduce environmental impact by marketing for environmental value and using online marketing [6] Product Use/Services: Reduce environmental impact from product use and after-	

Chapter 2 Promotion of Casio Group Green Procurement Activities

To aggressively procure products, components and materials with minimal environmental impact, the Casio Group will make overall decisions based on environmental load in addition to evaluations on quality, cost, delivery and service.

Environmental evaluations are based on the following two green procurement standards:

- 1. Green Suppliers: Suppliers that have established and maintain an environmental management system.
- 2. Green Components: Products, components and materials with low environmental impact (implementation of environmental assessment).

The Casio Group prioritizes the procurement of Green Components from Green Suppliers as a fundamental concept in green procurement, and will follow guidelines in this manual.

[1] Scope of Green Procurement Standard Manual

Applies to all levels of the Casio Group

This manual applies to all domestic and overseas facilities and Group companies.

Scope of Applicable Products, Components and Materials

The manual applies to all Casio products as well as components and materials (including sub-materials) that comprise products. Equipment and such office supplies such as stationary are not considered applicable in the manual. The Casio Group has established a separate set of standards for purchasing equipment and office supplies.

Administration and Object of Evaluation of Green Procurement Standards Administration :

Object of Evaluation : We ask that the green procurement standards conduct direct business with the Casio Group.

We ask that suppliers to evaluate Environment Management System as organization in "Green Factory Evaluation List" descrived later, object of evaluation is factory which produces components. Evaluated factory is that have final process and ships components. Supplier doesn't have to evaluate factory that have only previous process.

If supplier have business with plural factories, all of them are objects to evaluate.



[2] Preferential Procurement from Green Factories

The Casio Group prioritizes procurement from Green Factories that have established and maintain environmental management systems.

In the establishment and maintenance of environmental management systems, we prefer suppliers to acquire ISO 14001 certification. We request factories without planning that do not plan to acquire ISO 14001 certification, to establish and maintain environmental management systems independently through an appropriate organization in their country.

(1) Evaluation Items for Green Factories We would like to ask suppliers to evaluate the results of their independently established and maintained environmental management systems using the following conditions: (The numbers displayed to the right indicate the points attributed to either a yes or no answer.)

1) For a factorie that has acquired or is in the process of acquiring ISO 14001 certification	[YES / NO]
(a) Has acquired certification	••••[100 pt / 0 pt]
(b) Will acquire certification within one year	•••• [90 pt / 0 pt]
Note: Proceed to Evaluation and Selection of Green Factory if either (a) or (b) applies	[00 pt / 0 pt]
 2) For a supplier that has made independent efforts (c) An environmental preservation committee or similar organization exists with a clear agenda 	[10 pt / 0 pt]
(d) Top management participates in the above organization	[10 pt / 0 pt]
(e) An environmental policy and an environmental action plan is established, and efforts are underway	[10 pt / 0 pt]
(f) The environmental regulations are complied with, and reviews are held regularly	[20 pt / 0 pt]
 (g) No harmful substances as below are used in manufacturing processes that cause depletion of the ozone layer, soil pollution or global warming Note: It is exempted that harmful substances are used in closed condition, such as coolant in refregerator. If below substances are used in manufacturing process and discharge in environment, the factory cannot get point at this item. 	[10 pt / 0 pt]

Harmful substances		
CFCs	tetrachloroethylene	
1,1,1-trichloroethane	methyl chloride	
carbon tetrachloride	SF6	
halons	HFCs	
HCFCs	PFCs	
trichloroethylene		

 (h) Has not received instructions related to environment from or been penalized by relevant inspection authorities in this 5 years 	•••• [20 p t/ 0 pt]
(i) Able to disclose their environmental preservation activities outside the company	•••• [10 pt / 0 pt]
(j) Educates employees about environmental preservation	•••• [10 pt / 0 pt]

(2) Evaluation and Selection of Green Factories

Evaluation: Companies are ranked from SV to CV according to their scores in the Green Factory evaluation. Selection: Factories ranked SV and AV are given preference in procurement.

Green Factory Ranking			
Rank	Total Evaluation Points	Selection Standards	
SV	100	Preferred factory	
AV	70 - 90		
BV	30 - 60	Request for improvement	
CV	20 or less	Withhold new adoption	

Green Factory Ranking

[3] Preferential Procurement of Green Components

We request that suppliers independently conduct product assessment of their products, components and materials.

Casio continues to commercialize Eco Products by prioritizing the employment of products, components and materials (Green Components) with minimal impact on the environment.

Note: Definition of Product Assessment

Product assessment aims to reduce environmental load by evaluating the impact of products in the product development and design stages, concerning purchasing component and materials, production, distribution, use, recycling and waste management, and recycling and waste management, and changing the product design as necessary.

(1) Assessment Items of "Green Components"

The assessment items of "Green Components" are as follows.

There are various assessment items, and answers are different depending on the items.

Please confirm the assessment items in the next page and thereafter with thorough comprehension of the entire contents.

Assessment Items	Content, Method of Reply	Reply Form
(1) Materials	Reply consideration of components on	Fill survey sheet
(2) Easy of disassembly	environment by Y(Yes) / N(no)	2/3 (Refer to the "Survey Sheet Input Guide"
(3) Resource Conservation		
(4) Energy saving		provided
(5) Packaging		
(6) No use of Ozone Deplating Substances		
(7) Content of mercury	Quantitatively fill the content of mercury	
(8) Heavy metals contained in battery	Reply by Y(Yes) when the contents of mercury in batteries and packages are below regulations, and N(No) when exceeding.	
(9) Heavy metals contained in packaging compinent		
(10) Contained chemical substances	Report the content (wt%) of chemical substances for every constituting materials of components independently from assessment item (7)	Fill survey sheet 3/3 (Refer to the "Survey Sheet Input Guide" provided separately.)

Evaluate the results of product assessment on the commodities purchased by CASIO according to the following items.

(The numerical point at the right in the following items represents an assessment point of Yes/No)

The ranges of assessment of components are described in the parenthesis in each assessment items.

Reply as Y(Yes) with respect to the components out of the range of assessment.

* We request to follow the assessment items as much as possible even for the components out of the range of assessment.

1) Materials

Assessment object: articles delivered to CASIO containing plastic members with an weight of 25 g or more or an area of 200 mm2 or more (reply as Yes when not applicable)

Recycled material or materials capable of readily recycled are used for plastic members with an weight of 25 g or more or an area of 200 mm² or more as much as possible, the kinds of the materials are reduced as small as possible and standardized as much as possible, and the name of the materials are expressed.

2) Ease of disassembly

Assessment object: articles delivered to CASIO containing plastic or metal members with an weight of 25 g or more (reply as Yes when not applicable)

<u>Recycled plastic or metal materials are used for plastic or metal members with</u> <u>an weight of 25 g as much as possible, and the structures of the members are</u> <u>able to be disassembled into materials capable of recycling.</u>

3) Resource conservation

Assessment object: articles delivered to CASIO containing plastic or metal members with an weight of 25 g or more (reply as Yes when not applicable)

The products and components are made small size and light weight as much ... [10 pt / 0 pt] as possible depending on the purpose of uses.

4) Energy conservation

Assessment object: all articles delivered to CASIO

Endeavoring to develop energy saving products and components, or to reduce ... [10 pt / 0 pt] the energy in the production process.

··· [10 pt / 0 pt]

5) Packaging

Assessment object: all articles delivered to CASIO

Packaging components are constructed so as to enable repeated uses as much as possible, and are trying to be able to recycle and reuse. Restorable or recycled materials are used for saving resources, and no polyvinyl chloride is used. The name of the plastic package material is marked by a method that can be hardly erased.

6) No use of Ozone Depleting Substances (Class I)

Assessment object: all articles delivered to CASIO

No Ozone Depleting Substances (Class I) are used in the production process. ••• [10 pt / 0 pt] * Check Appendix 2 of this document for a detailed list of ozone depleting substances (class I). Materials used in a hermetic environment such as CFC in refrigerators and halons in fire extinguishers are excluded. The object of this assessment is the chemicals used in the production process of the components in concern and discharged in the environment.

7) Content of mercury

Assessment object: all articles delivered to CASIO

Report the content of mercury in weight (in mg unit) when mercury is intentionally added in the product delivered to CASIO. Fill "0 (zero)" when mercury is not intentionally added.

- * "Intentionally add" means to add mercury for controlling characteristics, appearance and quality of the components by taking advantage of chemicals. Mercury having no possibility to remain in the articles delivered to CASIO by evaporation and reaction is not considered to be "intentionally added" even when the chemicals are used in the production process.
- * We request report of the total amount (mg) of mercury as well as the concentration(wt%) for each material constituting the components.(product assessment item (10))

8) Heavy metals contained in battery

Assessment object: articles delivered to CASIO including batteries (reply "No" in the cell of "battery" when no batteries are used).

The weight of mercury should be less than the criteria below when the article delivered to CASIO contains batteries.

•••• [10 pt / 0 pt]

Criteria: batteries other than button cells 0.0005% mercury of the weight of the battery cell

Reply "Y" when the contents of lead and cadmium are less than the criteria below, and "N" when the contents exceed the proportions below.

Criteria: lead 0.4% lead of the weight of the battery cell cadmium 0.025% cadmium of the weight of the battery cell ··· [10 pt / 0 pt]

9) Heavy metal contained in packaging compoinents

Assessment object: Packaging components of articles delivered to CASIO including the packaging components themselves.

The contents of heavy metals should be below the following criteria in the packaging components of articles and package materials delivered to CASIO.

Criteria: The total weight of lead, mercury, hexavalent chromium or cadmium should be 0.01% by weight for each of the homogeneous materials (base material, ink, adhesive, etc.) that make up the packaging materials.

Inclusion rate for	Weight of the 4 substances (total value) included in homogeneous material of the packaging material
packaging materials =	Weight of homogeneous material of the packaging material
	Packaging components of the article delivered to CASIO: regulated Packaging components delivered to CASIO: regulated

10) Chemical substances contained in the article

Assessment object: all articles delivered to CASIO

Survey the chemical substances contained in the articles delivered to CASIO, and report the results.

- The chemical substances to be surveyed are listed in "List of Chemical Substances for CASIO Green Procurement" in Appendix 1 and Appendix 2. The substances are classified into the two categories shown below according to their control levels.

Bunned Substances	Delivery of components containing these chemical substances are immediately prohibited
Substances for Reduction	Confirm the present conditions of components containing these chemical substances, and try to reduce the content of these chemical substances.

- Numerical values of the concentration (unit: wt%) of the chemical substances per "homogeneous material" constituting the part delivered to CASIO should be surveyed and reported. Materials containing evenly mixed substances are named as "homogeneous material". For example, respective materials A to D are considered "homogeneous materials". Plated and coated films are considered to be independent materials.

Oxide layers and nitride layers formed on the surface of metals are considered to be the same materials as the substrate metals.



- In the case of electronic parts, we request to investigate and report the content of chemicals for each homogeneous material such as metals, plastics, ceramics and glass. Solders for internal joints, inks for surface printing and plating materials may be considered as independent materials.



- The consentration of chemical substances should be reported by significant figures in two digits.

- When the concentration of chemical substances is not uniform, as when fabrication is by multiple plants, report the guaranteed maximum value.

- When the threshold is defined as "xx wt%", report the concentration of the substances irrespective of intentionally or unintentionally added (report including unintentionally mingled impurities). Report the concentration of intentionally added chemical substances when the threshold is expressed as "intentionally added".
- * Chemical substances contained in the material include those intentionally added and impurities unintentionally added. "Intentionally added" means that the chemical substances are added for controlling characteristics, appearance and quality of the part by taking advantage of the substances. Substances not remaining in the articles delivered to CASIO by evaporation and reaction are not considered to be "intentionally added", even when the substances are used in the production process.
- Even though the concentration of the substances is with the threshold or less, report the concentration of intentionally added chemical substances if any. Report is not required when there are no intentionally added chemical substances and the concentration of the chemical substances is evidently less than the threshold.

Where none of the substances being surveyed are present in amounts that exceed the threshold values, report that none of the chemical substances are present.

* Correspondence based on a different standard from the standard of CASIO Green Procurement may be requested in specified products for management of survey of chemicals, and prohibition and abolishment.

(2) Evaluation and Selection of Green Components

Assessment and Preferential Procurement on Green Components will be determined, for the time being, in terms of content of the chemical substances as the first priority and Green Component Evaluation ranking as the second priority.

[4] Request for Suppliers

We repeatedly request the suppliers to collaborate surveillance of CASIO Green Procurement.

- Compliance with the EU REACH Regulation Under the EU REACH regulations, the provision of content information is stipulated for chemical substances on the SVHC (Substances of Very High Concern) candidates list.

ECHA (European Chemicals Agency) SVHC Candidates List https://echa.europa.eu/en/candidate-list-table

- If you are aware of chemical substances on the above list contained in the materials or components you supply, please notify Casio at the following address:

casio_green_procurement@casio.co.jp

Chapter **3** Others

- This manual shall be revised as necessary in accordance with changes in society, advancements in technology and access to new information.
- We ask for your cooperation should we request permission to disclose certain environmental information you possess in line with the aims of this manual.
- Please refer questions regarding this manual to CASIO purchasing division.

CASIO Green Procurement E-mail: <u>casio_green_procurement@casio.co.jp</u>

[List of Chemical Substances Group for CASIO Green Procurement]

This list includes chemical substances as objects of surveillance of content in CASIO products. The chemicals as the object of surveillance are classified into two groups depending on their control level.

Prohibited Substances	Delivery of components containing these substances more than the threshold are immediately prohibited
Substances for Reduction	Confirm the present conditions of components containing these substances, and try to reduce the content of these substances.

The "JGPSSI Classification No." in the following table corresponds to the classification No. defined by JGPSSI (Japan Green Procurement Survey Standardization Initiative).

Refer to the detailed list of the examples of the substances with respect to "Chemical Substances for CASIO Green Components (detailed)" in Appendix 2.

[Prohibited Substance Groups]

Delivery of components containing these chemical substances more than the threshold are prohibited.

Sub- stance group No.	Name of chemical substances group	Prohibited use	Delivery banned date	Threshold	Related legal restriction	Effect on human body, ecosystem and global environment	General use
1	Polybrominated biphenyl (PBBs)	all uses	imme- diate	0.1wt% (1000ppm)	RoHS Directive	carcinogen, reproductive toxicity, generation of dioxin upon combustion	flame retardant
2	Polybrominated diphenylether (PBDEs)	all uses	imme- diate	0.1wt% (1000ppm)	RoHS Directive REACH Reg.	generation of dioxin upon combustion	flame retardant
3	Polychlorinated Biphenyls (PCBs) and Polychlorinated Terphenyls (PCTs)	all uses	imme- diate	0.005wt% (50ppm)	REACH Reg., POPs Convention	carcinogen, oral toxicity	insulation oil of transformer and capacitor, pressure sensitive copy paper
4	Asbestos	all uses	imme- diate	Intentional addition	REACH Reg.	carcinogen, inhalation toxicity	fillers of paper/textile/rubber/plastics, pigment in paint, heat insulating material, electric insulator
5	Ozone depleting substances	all uses	imme- diate	Intentional addition	Montreal Protocol, Air Clean Law of USA	destruction of ozone layer	refrigerant foaming agent detergen tfire extinguisher
6	Pentachlorophenol and its salts and esters	Wood products, leather, natural fibers, etc.	imme- diate	0.0005% by weight (5 ppm) per delivered item	POPs Convention, EU POPs Reg, Japan Chemical Substances Control Law	Persistent, Bioaccumulativ e, Toxic	Preservatives, insect repellents, etc.
7	Cadmium and its compounds	All uses (excluding batteries, packaging materials and exempted uses (Appendix 3))	iate	0.01 wt% (100 ppm)	REACH Reg., RoHS Directive	Carcinogenicity , oral toxicity	stabilizers, thick-film resistors in potentiometers, electrical contacts (relays, switches, fuses, motors, etc.), fluorescent materials, electrodes, solder
		Batteries (including storage batteries)	See Table 1	See Table 1	See Table 1		See Table 1
		Packaging materials	See Table 2	See Table 2	See Table 2		See Table 2

8	Hexavalent chromium	All uses(excluding	Immed	0.1 wt%	RoHS Directive	Carcinogenicity	Abrasives, pigments,
0	compounds	leather and packaging materials)	iate	(1000 ppm)	KOHS Directive	, oral toxicity	photoengraving, plating, catalytic agents, paint driers
		Leather	1 Oct, 2015	0.0003 wt%(3 ppm)in leather part	REACH Reg.	oral toxicity	leather tanning agents
		Packaging materials	See Table 2	See Table 2	See Table 2		See Table 2
9	Lead and its compounds	All uses (excluding batteries, packaging materials and exempted uses (Appendix 3))	Immed iate	In rubber or plastics that touch end- users' hands: 0.03 wt%(300 ppm) Other than in rubber or plastics that touch end- users' hands: 0.1 wt%(1000 ppm)	RoHS Directive, Proposition 65	Carcinogenicity , inhalation toxicity, oral toxicity	Lead pipes. lead plate, electrical wire sheathing (PVC stabilizers), solder, rubber curing agents, rubber vulcanizing agents, high-melting- point solder inside electronic components, fuses, glass, pigments, lubricants, plastic alloy materials, X-ray shielding, ferroelectric materials, plating, resin additives
		Batteries (including storage batteries)	See Table 1	See Table 1	See Table 1		See Table 1
		Packaging materials	See Table 2	See Table 2	See Table 2		See Table 2
10	Mercury and its compounds	All uses (excluding batteries, packaging materials and exempted uses (Appendix 3))	Immed iate	0.1 wt% (1000 ppm)	RoHS Directive	Carcinogenicity , inhalation toxicity, oral toxicity	Fluorescent tubes, cold-cathode tubes, ink pigments, corrosion inhibitors, fluorescent materials, electrical contact materials
		Batteries (including storage batteries)	See Table 1	See Table 1.	See Table 1		See Table 1
		Packaging materials	See Table 2	See Table 2	See Table 2		See Table 2
11	Azo dye, pigment *The surveillance object shall be only mechanical parts, excluding toner or ink of the printer, printed papers and CD-R.	use in direct contact with skin (casing of watch, strap and case of headphone and earphone)	Immed iate	The content of specified amines formed by decomposi- tion of azo dye and pigment in the material should not exceed 0.003 wt% (30 ppm)*1		carcinogen, mutagen, inhalation toxicity, oral toxicity	dye, pigment (The toner or ink of the printer, printed papers and CD-R are excluded from the surveillance objects.)
12	Bis(tributyltin)oxide (TBTO)	All uses	imme- diate	(*1) Definition of Intentional addition	af specified amine Law concern. Ex. & Regul. Manuf. Chem. Subs.	e is based on Ab regenerative toxicity	pendix 2. ink, antiseptic, fungicide, pigment
13	Tri-substituted Organostannic Compounds	All uses	imme- diate	0.1% equivalent tin weight per supplied component	REACH Reg.	regenerative toxicity	stabilizer, antioxidant/anti-aging agent, bactericide, fungicide, decontamination agent
14	Polychlorinated naphthalene (chlorine number 1 or more)	All uses	imme- diate	Intentional addition	POPs Convention, EU POPs Reg	Persistent, Bioaccumulativ e, Toxic	Antifungals, insect repellents, lubricants, paints

15	Short chain chloribated par (carbon 10-13)	raffin	All uses	imme- diate	0.1wt% (1000 ppm)	POPs Convention	Inhalation toxicity, oral toxicity	flame retardant, plasticizer, leather greasing agent
16	Radioactive substance		All uses	imme- diate	Intentional addition	Law of Regulation of Nuclear Reactor	destruction of gene by radiation	optical glass (thorium)
27	Perfluorooctan sulfonic acid (f its salts and Pf related compo	PFOS), FOS-	All uses	imme- diate	PFOS or any of its salts : 25 ppb PFOS-related compounds : 1 ppm	POPs Convention, EU POPs Reg	Persistent, Bioaccumulativ e, Toxic	Surfactants, cleaning agents, lubricants, abrasives, metal plating, coatings, etc.
28	Benzotriazol- 2-yl)-4,6-di- tert- butylphenol (plasti board of plau and fil obstru paints ribbor		Lated for "products lass I specific chemical nces" in "Japanese cal Substances Control molding, decorative adhesives (except those s and animals), putties ers for sealing or tion, printing inks and deodorant, wax, ink , photo paper)	imme- diate	Intentional addition	Law Concerning the Examination and Regulation of Manufacture, etc., of Chemical Substances	Oral toxicity	Ultraviolet absorbing agent
29	Dimethylfumar Fu)	ate(DM	All uses	imme- diate	0.00001wt% (0.1 ppm)	REACH Reg.	Dermal toxicity	Antifungal agent (wood, natural textiles, leather, desiccant bag)
30	Dibutyltin (DBT compounds, Dioctyltin (DOT compound		DBT: All uses (excluding exempted uses (Appendix 3)) DOT: Uses involving direct contact with the skin	imme- diate	0.1% equivalent tin weight per supplied component	REACH Reg.	DBT: reproductive toxicity DOT: dermal toxicity	PVC stabilizer, curing catalyst for silicone resin and urethane resin
31	Hexabromocyc cane (HBCD)	lodode	All uses	imme- diate	Intentional addition	POPs Convention	Persistent, bioaccumulativ e	Flame retardants such as expanded polystyrene, curing accelerator of adhesive, coating of textile
32	PFOA, its salts and PFOA-related compounds		All uses	imme- diate	by weight (25 ppb) per delivered item Total of PFOA, its salts and PFOA-related substances: 0.0001% by weight (1 ppm) per delivered item	POPs Convention, EU POPs Reg		Surfactants, cleaning agents, lubricants, abrasives, metal plating, coatings, etc.
33	Polycyclic aron hydrocarbons		In rubber or plastics that touch end-users' hands	imme- diate	0.0001wt% (1 ppm)	REACH Reg.	Carcinogenic	Rubber additive, carbon black impurities
34	Specific phthal (DEHP, DBP, B DIBP)		All uses	imme- diate	Total 0.1% (1000ppm)	EU RoHS, REACH	Reproductive toxicity	PVC plasticizer resin additive, dye, pigment, adhesive, lubricant

35	C9-C14 Perfluorocarboxylic acids (PFCAs), their salts and related substances	All uses	imme- diate	Total of C9- C14 PFCAs and their salts: 0.0000025% by weight (25 ppb) per delivered item Total of C9- C14 PFCAs, their salts and PFCAs related substances: 0.000026% by weight (260 ppb) per delivered item	EU REACH Reg		Surfactants, cleaning agents, lubricants, abrasives, metal plating, coatings, etc.
36	Phenol, isopropyl phosphate (3:1) (PIP (3:1))	All uses	imme- diate	Intentionally added	US TSCA	Persistent, Bioaccumulativ e, Toxic	Flame retardants, adhesives, sealants, lubricants, greases, etc.
37	2-(2H-benzotriazol-2- yl)-4,6-di-tert- pentylphenol (UV- 328)	All uses	imme- diate	Intentionally added	POPs Convention, Japan Chemical Substances Control Law	Persistent, Bioaccumulativ e, Toxic	UV absorbers, paints, inks, etc.
38	Dechlorane Plus	All uses	imme- diate	Intentionally added	POPs Convention, Japan Chemical Substances Control Law	Persistent, Bioaccumulativ e, Toxic	Flame retardant
39	Perfluorohexane sulfonic acid (PFHxS), its salts and related compounds	All uses	imme- diate	Intentionally added	POPs Convention, EU POPs Reg	Persistent, Bioaccumulativ e, Toxic	Surfactants, cleaning agents, lubricants, abrasives, metal plating, coatings, etc.
40	Medium-chain chlorinated paraffins (MCCPs)	All uses	July 1, 2026	Intentionally added	POPs Convention	Persistent, Bioaccumulativ e, Toxic	Flame retardants, plasticizers, leather oils, metal processing oils
41	Long-chain perfluorocarboxylic acids, their salts and related compounds	All uses	July 1, 2026	Intentionally added	POPs Convention	Persistent, Bioaccumulativ e, Toxic	Surfactants, cleaning agents, lubricants, abrasives, metal plating, coatings, etc.

[Substances Groups for Reduction]

Confirm the present conditions of components containing these chemical substances,

and try to reduce the content of these substances.

Sub- stance group No.	Name of chemical substances group	Prohibited use	Delivery banned date	Threshold	Related legal restriction	Effect on human body, ecosystem and global environment	General use
17	Antimony and its compounds	-	-	Intentional addition	Law of Safety of Labor	oral toxicity	semiconductor, plating, alloy, flame retardant, solder, pigment, resin additive, catalyst, stabilizer
18	Arsenic and its compounds	-	-	Intentional addition	REACH Reg.	carcinogen, oral toxicity	high purity semiconductor, low purity alloy additive (metallic arsenic), antiseptic of wood, antiseptic of leather, dye, pigment, glass defoaming agent, fire retardant, copper foil surface treatment agent
19	Beryllium and its compounds	-	-	Intentional addition	-	carcinogen, oral toxicity	alloy base, ceramic, catalyst, spring material, solder
20	Nickel and its compounds * Except alloy (stainless steel etc.) * The surveillance objects shall be only mechanical components, excluding the nickel used in the final products, such as batteries, electronic components, PWB.		-	Intentional addition	REACH Reg.	carcinogen, oral toxicity	catalyst, mordant, coloring agent, plating, pigment, resin plasticizer electrode (Alloy and the nickel of batteries, electronic components and PWB are excluded from the surveillance objects.)
21	Selenium and its compounds	-	-	Intentional addition	-	oral toxicity	semiconductor, pigment, catalyst, resin plasticizer electrode, conductor printing paste material, magnetic thin film material
22	Brominated flame retardant (except PBB, PBDE)	-	-	Intentional addition	-	generate dioxin upon combustion	flame retardant, package sealant
23	Poly vinyl chloride (PVC)	-	-	Intentional addition	-	generate dioxin upon combustion	resin, wire material, insulating material
24	Phthalates (except DEHP, DBP, BBP and DIBP)	-	-	Intentional addition	-		PVC plasticizer resin additive, dye, pigment, adhesive, lubricant
25	Creosote * Only for wooden article.		-	Intentional addition	REACH Reg.	inhalation toxicity	preservative of wood
26	Formaldehyde * Only for wooded article		-	Intentional addition	German Chemicals Prohibition RuleDenmark formalin regulation	inhalation toxicity	adhesive of polywood and wall paper, resin
42	Perfluoroalkyl and polyfluoroalkyl substances (PFAS)	-	-	Intentionally added	EU REACH reg, US TSCA, US state laws	Persistent, Bioaccumulativ e, Toxic	Surfactants, cleaning agents, lubricants, abrasives, metal plating, coatings, etc.

Table 1 Prohibited Substances Groups in Batteries

It is prohibited to supply batteries with content levels that exceed the threshold levels for prohibited uses, or to supply products that include such batteries, except where those uses are exempted.

Sub- stance group No.	Name of chemical substances group	Prohibited use	Delivery banned date	Threshold (*Note)	Related legal restriction	General use
7	Cadmium	Alkaline batteries (including button type) and manganese batteries	iate	(10ppm)	EU battery reg, Argentina battery reg, Brazil battery reg, China GB,	(Example of restricted use) All batteries
		Batteries other than alkaline batteries (including button type) and manganese batteries		0.002wt% (20ppm)	Korea Electrical Safety Act	
9	Lead	Alkaline batteries (including button type)	Immed iate	0.004wt% (40ppm)	EU battery reg, Argentina battery reg, Brazil battery	(Example of restricted use) All batteries
		Batteries other than alkaline batteries (including button type)		0.01wt% (100ppm)	reg, China GB, Korea Electrical Safety Act	
10	Mercury	Alkaline batteries (including button type) and manganese batteries	Immed iate	0.0001wt% (1ppm)	EU battery reg, Argentina battery reg, Brazil battery reg, China GB,	(Example of restricted use) All batteries
		Batteries other than alkaline batteries (including button type) and manganese batteries		0.0005wt% (5ppm)	Korea Electrical Safety Act	

(*Note) Numeric values are set as the threshold levels (threshold value: rate of inclusion) for battery uses.

Note that the approach for inclusion rates differs from other uses.

* Battery inclusion rates are calculated taking the weight of the included substance as a proportion of the total battery weight.

Battery inclusion rate = Weight of the chemical substance included in the battery

Battery weight

Table 2 Prohibited Substances Groups in Packaging Materials

It is prohibited to supply packaging materials with content that exceeds the threshold levels for prohibited uses, or to supply products that include such packaging materials, except where those uses are exempted.

Sub- stance group No.	Name of chemical substances group		Delivery prohibited date	Threshold (*Note)	Related legal restriction	General uses including prohibited uses
7, 8, 9, 10	Cadmium, hexavalent chromium, lead, mercury	Packaging materials	immediate	4 substances as a proportion of the homogeneous	Reg, US state regulations covering heavy metals in packaging	(Examples of prohibited uses) Casio deliverables (packaging materials used by Casio), packaging for Casio deliverables and component materials used as supplementary materials during packaging (Exempted uses) Packaging materials that have been recovered or recycled under the management of the supplier

(*Note) Previously, the threshold has been calculated using the entire amount of packaging materials as the denominator, but as of edition 7, the inclusion rate for each homogeneous material is also applied to packaging material uses. The inclusion rate for packaging materials is taken as the weight of the 4 substances (total value) as a proportion of the weight of each of the homogeneous material of the packaging material (polyethylene sheet portion, ink, adhesive, etc.).

Inclusion rate for packaging materials = Weight of the 4 substances (total value) included in homogeneous material of the packaging material Weight of homogeneous material of the packaging material

[List of Chemical Substances for CASIO Green Components (Detailed)]

List of Chemical Substances for CASIO Green Components (Detailed)

This list contains only important substances belong to "List of Chemical Substances for CASIO Green Components (Detailed)" (Page8-9), and not all of them. If Component contains corresponded substance which is out of this list, it must be summed up.

Names and CAS Numbers of Chemical Substances

Please confirm the CAS number as there are multiple names for chemical substances. CAS numbers are used by the American Chemical Society's Chemical Abstracts Service (CAS) to distinguish chemical substances. While the names for chemical substances may vary, the same chemical substance can be determined if the CAS numbers are consistent.

[Prohibited Substances]

SUB- STANCE GROUP No.	Chemical Substance Name (Detailed)	CAS No	conversion coefficient
1	PBBs (polybrominated biphenyls)		
	DiBB	13029-09-9	1.000
	TeBB	40088-45-7	1.000
	HxBB	59536-65-1	1.000
	OBB	27858-07-7	1.000
	DeBB	13654-09-6	1.000
2	PBDEs (polybrominated diphenyl ethers)		
	DiBDE	2050-47-7	1.000
	TrBDE	49690-94-0	1.000
	TeBDE	40088-47-9	1.000
	PeBDE	32534-81-9	1.000
	HxBDE	36483-60-0	1.000
	OBDE	32536-52-0	1.000
	NBDE	63936-56-1	1.000
	DeBDE	1163-19-5	1.000
3	PCBs/PCTs	4000.00.0	1 000
	Polychlorinated biphenyls	1336-36-3 61788-33-8	1.000
	Polychlorinated terphenyls Other PCBs/PCTs	61788-33-8	1.000
4	Asbestos	-	1.000
4	Aktinolith	77526 66 4	1.000
	Amosit	77536-66-4 12172-73-5	1.000
	Anthophyllit	77536-67-5	1.000
	Chrysotil	12001-29-5	1.000
	Krokydolith	12001-29-3	1.000
	Tremolite	77536-68-6	1.000
	Other asbestos		-
5	Ozone depleting substances		
Ŭ	Trichlorofluoromethane	75-69-4	1.000
	Dichlorodifluoromethane (CFC 12)	75-71-8	1.000
	Chlorotrifluoromethane (CFC 13)	75-72-9	1.000
	Pentachlorofluoroethane (CFC 111)	354-56-3	1.000
	Tetrachlorodifluoroethane (CFC 112)	76-12-0	1.000
	Trichlorotrifluoroethane (CFC 113)	354-58-5	1.000
	1.1.2 Trichloro-1.2.2 trifluoroethane	76-13-1	1.000
	Dichlorotetrafluoroethane (CFC 114)	76-14-2	1.000
	Monochloropentafluoroethane (CFC 115)	76-15-3	1.000
		422-78-6	1 000
	Heptachlorofluoropropane (CFC 211)	135401-87-5	1.000
	Hexachlorodifluoropropane (CFC 212)	3182-26-1	1.000
	Pentachlorotrifluoropropane (CFC 213)	2354-06-5 134237-31-3	1.000
	Tetrachlorotetrafluoropropane (CFC 214)	29255-31-0	1.000
	Set Tetrachlorotetrafluoropropane (CFC 214)	2268-46-4	1.000
	Trichloropentafluoropropane (CFC 215)	1599-41-3	1.000
	1,1,1-Trichloropentafluoropropane	4259-43-2	1.000
	1,2,3-Trichloropentafluoropropane	76-17-5	1.000
	Dichlorohexafluoropropane (CFC 216)	661-97-2	1.000
	Monochloroheptafluoropropane (CFC 217)	422-86-6	1.000
	Bromochlorodifluoromethane (Halon 1211)	353-59-3	1.000
	Bromotrifluoromethane (Halon 1301)	75-63-8	1.000
	Dibromotetrafluoroethane (Halon 2402)	124-73-2	1.000
	Carbon Tetrachloride (Tetrachloromethane)	56-23-5	1.000
	1,1,1,-Trichloroethane (methyl chloroform) and its isomers except 1,1,2-trichloroethane	74-83-9	1.000

	Description of the second distribution of the second	74.00.0	4 000
	Bromomethane (Methyl Bromide)	74-83-9	1.000
	Dibromofluoromethane Bromodifluoromethane	1868-53-7	1.000
	Bromofluoromethane	1511-62-2 373-52-4	1.000
	Tetrabromofluoroethane	306-80-9	1.000
	Tribromodifluoroethane		1.000
	Dibromotrifluoroethane	354-04-1	1.000
	Bromotetrafluoroethane	124-72-1	1.000
	Tribromofluoroethane	-	1.000
	Dibromodifluoroethane	75-82-1	1.000
	Bromotrifluoroethane	421-06-7	1.000
	Dibromofluoroethane	358-97-4	1.000
	Bromodifluoroethane	420-47-3	1.000
	Bromofluoroethane	762-49-2	1.000
	Hexabromofluoropropane	-	1.000
	Pentabromodifluoropropane	-	1.000
	Tetrabromotrifluoropropane	-	1.000
	Tribromotetrafluoropropane	-	1.000
_	Dibromopentafluoropropane	431-78-7	1.000
class I	Bromohexafluoropropane	2252-78-0	1.000
Та;	Pentabromofluoropropane		1.000
: :	Tetrabromodifluoropropane	-	1.000
	Tribromotrifluoropropane	-	1.000
	Dibromotetrafluoropropane	-	1.000
	Bromopentafluoropropane	460-88-8	1.000
	Tetrabromofluoropropane		1.000
	Tribromodifluoropropane	70192-80-2	1.000
	Dibromotrifluoropropane	431-21-0	1.000
	Bromotetrafluoropropane	679-84-5	1.000
	Tribromofluoropropane	75372-14-4	1.000
	Dibromodifluoropropane	460-25-3	1.000
	Bromotrifluoropropane	400-25-3	1.000
	Dibromofluoropropane	51584-26-0	1.000
	Bromodifluoropropane	51504-20-0	1.000
	Bromofluoropropane	1871-72-3	1.000
	Bromochloromethane	74-97-5	1.000
	Dichlorofluoromethane (HCFC 21)	75-43-4	1.000
	Chlorodifluoromethane (HCFC 22)	75-45-6	1.000
	Chlorofluoromethane (HCFC 31)	593-70-4	1.000
	Tetrachlorofluoroethane (HCFC 121)		1.000
		12/227 22 /	1 000
		134237-32-4	1.000
	1,1,1,2-tetrachloro-2-fluoroethane (HCFC 121a)	354-11-0	1.000
	1,1,1,2-tetrachloro-2-fluoroethane (HCFC 121a) 1,1,2,2-tetracloro-1-fluoroethane	354-11-0 354-14-3	1.000 1.000
	1,1,1,2-tetrachloro-2-fluoroethane (HCFC 121a) 1,1,2,2-tetracloro-1-fluoroethane Trichlorodifluoroethane (HCFC 122)	354-11-0 354-14-3 41834-16-6	1.000 1.000 1.000
	1,1,1,2-tetrachloro-2-fluoroethane (HCFC 121a) 1,1,2,2-tetracloro-1-fluoroethane Trichlorodifluoroethane (HCFC 122) 1,2,2-trichloro-1,1-difluoroethane	354-11-0 354-14-3 41834-16-6 354-21-2	1.000 1.000 1.000 1.000
	1,1,1,2-tetrachloro-2-fluoroethane (HCFC 121a) 1,1,2,2-tetracloro-1-fluoroethane Trichlorodifluoroethane (HCFC 122) 1,2,2-trichloro-1,1-difluoroethane Dichlorotrifluoroethane(HCFC 123)	354-11-0 354-14-3 41834-16-6 354-21-2 34077-87-7	1.000 1.000 1.000 1.000 1.000
	1,1,1,2-tetrachloro-2-fluoroethane (HCFC 121a) 1,1,2,2-tetracloro-1-fluoroethane Trichlorodifluoroethane (HCFC 122) 1,2,2-trichloro-1,1-difluoroethane Dichlorotrifluoroethane(HCFC 123) Dichloro-1,1,2-trifluoroethane	354-11-0 354-14-3 41834-16-6 354-21-2 34077-87-7 90454-18-5	1.000 1.000 1.000 1.000 1.000 1.000
	1,1,1,2-tetrachloro-2-fluoroethane (HCFC 121a) 1,1,2,2-tetracloro-1-fluoroethane Trichlorodifluoroethane (HCFC 122) 1,2,2-trichloro-1,1-difluoroethane Dichlorotrifluoroethane(HCFC 123) Dichloro-1,1,2-trifluoroethane 2,2-dichloro-1,1,1-trifluoroethane	354-11-0 354-14-3 41834-16-6 354-21-2 34077-87-7 90454-18-5 306-83-2	1.000 1.000 1.000 1.000 1.000 1.000 1.000
	1,1,1,2-tetrachloro-2-fluoroethane (HCFC 121a) 1,1,2,2-tetracloro-1-fluoroethane Trichlorodifluoroethane (HCFC 122) 1,2,2-trichloro-1,1-difluoroethane Dichlorotrifluoroethane(HCFC 123) Dichloro-1,1,2-trifluoroethane 2,2-dichloro-1,1,1-trifluroethane 1,2-dichloro-1,1,2-trifluroethane (HCFC 123a)	354-11-0 354-14-3 41834-16-6 354-21-2 34077-87-7 90454-18-5 306-83-2 354-23-4	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000
	1,1,1,2-tetrachloro-2-fluoroethane (HCFC 121a) 1,1,2,2-tetracloro-1-fluoroethane Trichlorodifluoroethane (HCFC 122) 1,2,2-trichloro-1,1-difluoroethane Dichlorotrifluoroethane(HCFC 123) Dichloro-1,1,2-trifluoroethane 2,2-dichloro-1,1,1-trifluroethane 1,2-dichloro-1,1,2-trifluroethane (HCFC 123a) 1,1-dichloro-1,2,2-trifluroethane (HCFC 123b)	354-11-0 354-14-3 41834-16-6 354-21-2 34077-87-7 90454-18-5 306-83-2 354-23-4 812-04-4	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000
	1,1,1,2-tetrachloro-2-fluoroethane (HCFC 121a) 1,1,2,2-tetracloro-1-fluoroethane Trichlorodifluoroethane (HCFC 122) 1,2,2-trichloro-1,1-difluoroethane Dichlorotifluoroethane(HCFC 123) Dichloro-1,1,2-trifluoroethane 2,2-dichloro-1,1,1-trifluroethane 1,2-dichloro-1,1,2-trifluroethane (HCFC 123a) 1,1-dichloro-1,2,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b)	354-11-0 354-14-3 41834-16-6 354-21-2 34077-87-7 90454-18-5 306-83-2 354-23-4 812-04-4 812-04-4	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000
	1,1,1,2-tetrachloro-2-fluoroethane (HCFC 121a) 1,1,2,2-tetracloro-1-fluoroethane Trichlorodifluoroethane (HCFC 122) 1,2,2-trichloro-1,1-difluoroethane Dichlorotrifluoroethane(HCFC 123) Dichloro-1,1,2-trifluoroethane 2,2-dichloro-1,1,1-trifluroethane 1,2-dichloro-1,2,2-trifluroethane (HCFC 123a) 1,1-dichloro-1,2,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) Chlorotetrafluoroethane (HCFC 124)	354-11-0 354-14-3 41834-16-6 354-21-2 34077-87-7 90454-18-5 306-83-2 354-23-4 812-04-4 812-04-4 63938-10-3	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000
Π	1,1,1,2-tetrachloro-2-fluoroethane (HCFC 121a) 1,1,2,2-tetracloro-1-fluoroethane Trichlorodifluoroethane (HCFC 122) 1,2,2-trichloro-1,1-difluoroethane Dichlorotrifluoroethane(HCFC 123) Dichloro-1,1,2-trifluoroethane 2,2-dichloro-1,1,1-trifluroethane 1,2-dichloro-1,2,2-trifluoroethane (HCFC 123a) 1,1-dichloro-1,2,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 124b) 2,-chloro-1,1,1,2-tetrafluoroethane	354-11-0 354-14-3 41834-16-6 354-21-2 34077-87-7 90454-18-5 306-83-2 354-23-4 812-04-4 812-04-4 63938-10-3 2837-89-0	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000
11 0	1,1,1,2-tetrachloro-2-fluoroethane (HCFC 121a) 1,1,2,2-tetracloro-1-fluoroethane Trichlorodifluoroethane (HCFC 122) 1,2,2-trichloro-1,1-difluoroethane Dichlorotrifluoroethane(HCFC 123) Dichloro-1,1,2-trifluoroethane 2,2-dichloro-1,1,1-trifluroethane 1,2-dichloro-1,2,2-trifluroethane (HCFC 123a) 1,1-dichloro-1,2,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) Chlorotetrafluoroethane (HCFC 124)	354-11-0 354-14-3 41834-16-6 354-21-2 34077-87-7 90454-18-5 306-83-2 354-23-4 812-04-4 812-04-4 63938-10-3 2837-89-0 354-25-6	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000
1455 11	1,1,1,2-tetrachloro-2-fluoroethane (HCFC 121a) 1,1,2,2-tetracloro-1-fluoroethane Trichlorodifluoroethane (HCFC 122) 1,2,2-trichloro-1,1-difluoroethane Dichlorotrifluoroethane(HCFC 123) Dichloro-1,1,2-trifluoroethane 2,2-dichloro-1,1,1-trifluroethane 1,2-dichloro-1,2,2-trifluoroethane (HCFC 123a) 1,1-dichloro-1,2,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 124b) 2,-chloro-1,1,1,2-tetrafluoroethane	354-11-0 354-14-3 41834-16-6 354-21-2 34077-87-7 90454-18-5 306-83-2 354-23-4 812-04-4 812-04-4 63938-10-3 2837-89-0 354-25-6 27154-33-2;	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000
CIASS II	1,1,1,2-tetrachloro-2-fluoroethane (HCFC 121a) 1,1,2,2-tetracloro-1-fluoroethane Trichlorodifluoroethane (HCFC 122) 1,2,2-trichloro-1,1-difluoroethane Dichlorotrifluoroethane(HCFC 123) Dichloro-1,1,2-trifluoroethane 2,2-dichloro-1,1,1-trifluroethane 1,2-dichloro-1,1,2-trifluoroethane (HCFC 123a) 1,1-dichloro-1,2,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 124b) 2-chloro-1,1,1,2-tetrafluoroethane 1-chloro-1,1,2,2-tetrafluoroethane (HCFC 124a) Trichlorofluoroethane (HCFC 131)	354-11-0 354-14-3 41834-16-6 354-21-2 34077-87-7 90454-18-5 306-83-2 354-23-4 812-04-4 812-04-4 63938-10-3 2837-89-0 354-25-6 27154-33-2; (134237-34-6)	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000
	1,1,1,2-tetrachloro-2-fluoroethane (HCFC 121a) 1,1,2,2-tetracloro-1-fluoroethane Trichlorodifluoroethane (HCFC 122) 1,2,2-trichloro-1,1-difluoroethane Dichlorotrifluoroethane(HCFC 123) Dichloro-1,1,2-trifluoroethane 2,2-dichloro-1,1,1-trifluroethane 1,2-dichloro-1,1,2-trifluoroethane (HCFC 123a) 1,1-dichloro-1,2,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) Chlorotetrafluoroethane (HCFC 124) 2-chloro-1,1,1,2-tetrafluoroethane 1-chloro-1,1,2,2-tetrafluoroethane (HCFC 124a) Trichlorofluoroethane (HCFC 131) 1-Fluoro-1,2,2-trichloroethane	354-11-0 354-14-3 41834-16-6 354-21-2 34077-87-7 90454-18-5 306-83-2 354-23-4 812-04-4 812-04-4 63938-10-3 2837-89-0 354-25-6 27154-33-2; (134237-34-6) 359-28-4	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000
CI0255 11	1,1,1,2-tetrachloro-2-fluoroethane (HCFC 121a) 1,1,2,2-tetracloro-1-fluoroethane Trichlorodifluoroethane (HCFC 122) 1,2,2-trichloro-1,1-difluoroethane Dichlorotrifluoroethane(HCFC 123) Dichloro-1,1,2-trifluoroethane 2,2-dichloro-1,1,1-trifluroethane 1,2-dichloro-1,1,2-trifluoroethane (HCFC 123a) 1,1-dichloro-1,2,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) Chlorotetrafluoroethane (HCFC 124) 2-chloro-1,1,1,2-tetrafluoroethane 1-chloro-1,1,2,2-tetrafluoroethane (HCFC 124a) Trichlorofluoroethane (HCFC 131) 1-Fluoro-1,2,2-trichloroethane 1,1,1-trichloro-2-fluoroethane (HCFC 131b)	354-11-0 354-14-3 41834-16-6 354-21-2 34077-87-7 90454-18-5 306-83-2 354-23-4 812-04-4 812-04-4 63938-10-3 2837-89-0 354-25-6 27154-33-2; (134237-34-6) 359-28-4 811-95-0	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000
LIASS II	1,1,1,2-tetrachloro-2-fluoroethane (HCFC 121a) 1,1,2,2-tetracloro-1-fluoroethane Trichlorodifluoroethane (HCFC 122) 1,2,2-trichloro-1,1-difluoroethane Dichlorotrifluoroethane(HCFC 123) Dichloro-1,1,2-trifluoroethane 2,2-dichloro-1,1,1-trifluroethane 1,2-dichloro-1,1,2-trifluroethane 1,2-dichloro-1,1,2-trifluroethane 1,2-dichloro-1,1,2-trifluroethane (HCFC 123a) 1,1-dichloro-1,2,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2,2-trifluroethane (HCFC 124b) 2-chloro-1,1,1,2-tetrafluoroethane 1-chloro-1,1,2,2-tetrafluoroethane 1-chloro-1,1,2,2-tetrafluoroethane (HCFC 124a) Trichlorofluoroethane (HCFC 131) 1-Fluoro-1,2,2-trichloroethane 1,1,1-trichloro-2-fluoroethane (HCFC 131b) 1-Chloro-1-fluoroethane (HCFC 131b)	354-11-0 354-14-3 41834-16-6 354-21-2 34077-87-7 90454-18-5 306-83-2 354-23-4 812-04-4 812-04-4 63938-10-3 2837-89-0 354-25-6 27154-33-2; (134237-34-6) 359-28-4 811-95-0 1615-75-4	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000
11 66010	1,1,1,2-tetrachloro-2-fluoroethane (HCFC 121a) 1,1,2,2-tetracloro-1-fluoroethane Trichlorodifluoroethane (HCFC 122) 1,2,2-trichloro-1,1-difluoroethane Dichlorotrifluoroethane(HCFC 123) Dichloro-1,1,2-trifluoroethane 2,2-dichloro-1,1,1-trifluroethane 1,2-dichloro-1,1,2-trifluoroethane (HCFC 123a) 1,1-dichloro-1,2,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2,2-trifluroethane (HCFC 123b) Chlorotetrafluoroethane (HCFC 124) 2-chloro-1,1,1,2-tetrafluoroethane 1-chloro-1,1,2,2-tetrafluoroethane 1-chloro-1,2,2-trifluroethane (HCFC 124a) Trichlorofluoroethane (HCFC 131) 1-Fluoro-1,2,2-trichloroethane (HCFC 131b) 1-Chloro-1-fluoroethane (HCFC 131b) 1-Chloro-1-fluoroethane (HCFC 131b) 1-Chloro-1-fluoroethane (HCFC 131b) 1-Chloro-1-fluoroethane (HCFC 132)	354-11-0 354-14-3 41834-16-6 354-21-2 34077-87-7 90454-18-5 306-83-2 354-23-4 812-04-4 812-04-4 63938-10-3 2837-89-0 354-25-6 27154-33-2; (134237-34-6) 359-28-4 811-95-0 1615-75-4 25915-78-0	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000
TI GODI	1,1,1,2-tetrachloro-2-fluoroethane (HCFC 121a) 1,1,2,2-tetracloro-1-fluoroethane Trichlorodifluoroethane (HCFC 122) 1,2,2-trichloro-1,1-difluoroethane Dichlorotrifluoroethane(HCFC 123) Dichloro-1,1,2-trifluoroethane 2,2-dichloro-1,1,1-trifluroethane 1,2-dichloro-1,1,2-trifluoroethane 1,2-dichloro-1,1,2-trifluroethane 1,2-dichloro-1,1,2-trifluroethane (HCFC 123a) 1,1-dichloro-1,2,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) Chlorotetrafluoroethane (HCFC 124) 2-chloro-1,1,1,2-tetrafluoroethane 1-chloro-1,1,2,2-tetrafluoroethane (HCFC 124a) Trichlorofluoroethane (HCFC 131) 1-Fluoro-1,2,2-trichloroethane 1,1,1-trichloro-2-fluoroethane (HCFC 131b) 1-Chloro-1-fluoroethane (HCFC 132b) 1-Chloro-1,1-difluoroethane (HCFC 132b)	354-11-0 354-14-3 41834-16-6 354-21-2 34077-87-7 90454-18-5 306-83-2 354-23-4 812-04-4 812-04-4 63938-10-3 2837-89-0 354-25-6 27154-33-2; (134237-34-6) 359-28-4 811-95-0 1615-75-4 25915-78-0 1649-08-7	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000
11 66010	1,1,1,2-tetrachloro-2-fluoroethane (HCFC 121a) 1,1,2,2-tetracloro-1-fluoroethane Trichlorodifluoroethane (HCFC 122) 1,2,2-trichloro-1,1-difluoroethane Dichlorotrifluoroethane(HCFC 123) Dichloro-1,1,2-trifluoroethane 2,2-dichloro-1,1,1-trifluroethane 1,2-dichloro-1,1,2-trifluoroethane 2,2-dichloro-1,1,2-trifluroethane 1,2-dichloro-1,1,2-trifluroethane (HCFC 123a) 1,1-dichloro-1,2,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2,2-trifluroethane (HCFC 124b) 2-chloro-1,1,1,2-tetrafluoroethane 1-chloro-1,1,2,2-tetrafluoroethane 1-chloro-1,2,2-tetrafluoroethane (HCFC 124a) Trichlorofluoroethane (HCFC 131) 1-Fluoro-1,2,2-trichloroethane 1,1,1-trichloro-2-fluoroethane (HCFC 131b) 1-Chloro-1-fluoroethane (HCFC 132b) 1,2-dichloro-1,1-difluoroethane (HCFC 132b) 1,2-dichloro-1,2-difluoroethane (HCFC 132b) 1,1-dichloro-1,2-difluoroethane (HCFC 132c)	354-11-0 354-14-3 41834-16-6 354-21-2 34077-87-7 90454-18-5 306-83-2 354-23-4 812-04-4 812-04-4 63938-10-3 2837-89-0 354-25-6 27154-33-2; (134237-34-6) 359-28-4 811-95-0 1615-75-4 25915-78-0 1649-08-7 1842-05-3	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000
TI SCRUD	1,1,1,2-tetrachloro-2-fluoroethane (HCFC 121a) 1,1,2,2-tetracloro-1-fluoroethane Trichlorodifluoroethane (HCFC 122) 1,2,2-trichloro-1,1-difluoroethane Dichlorotrifluoroethane(HCFC 123) Dichloro-1,1,2-trifluoroethane 2,2-dichloro-1,1,1-trifluroethane 1,2-dichloro-1,1,2-trifluroethane 1,2-dichloro-1,1,2-trifluroethane (HCFC 123a) 1,1-dichloro-1,2,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2,2-trifluroethane (HCFC 124b) 2-chloro-1,1,1,2-tetrafluoroethane 1-chloro-1,1,2,2-tetrafluoroethane 1-chloro-1,2,2-trichloroethane (HCFC 124a) Trichlorofluoroethane (HCFC 131) 1-Fluoro-1,2,2-trichloroethane 1,1,1-trichloro-2-fluoroethane (HCFC 131b) 1-Chloro-1-fluoroethane (HCFC 132b) 1,2-dichloro-1,1-difluoroethane (HCFC 132b) 1,1-dichloro-1,2-difluoroethane (HCFC 132c) 1,1-dichloro-2,2-difluoroethane (HCFC 132c) 1,1-dichloro-2,2-difluoroethane 1,1-dichloro-2,2-difluoroethane	354-11-0 354-14-3 41834-16-6 354-21-2 34077-87-7 90454-18-5 306-83-2 354-23-4 812-04-4 812-04-4 63938-10-3 2837-89-0 354-25-6 27154-33-2; (134237-34-6) 359-28-4 811-95-0 1615-75-4 25915-78-0 1649-08-7 1842-05-3 471-43-2	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000
CIGOS II	1,1,1,2-tetrachloro-2-fluoroethane (HCFC 121a) 1,1,2,2-tetracloro-1-fluoroethane Trichlorodifluoroethane (HCFC 122) 1,2,2-trichloro-1,1-difluoroethane Dichlorotrifluoroethane(HCFC 123) Dichloro-1,1,2-trifluoroethane 2,2-dichloro-1,1,1-trifluroethane 1,2-dichloro-1,1,2-trifluroethane (HCFC 123a) 1,1-dichloro-1,2,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) Chlorotetrafluoroethane (HCFC 124) 2-chloro-1,1,2,2-trifluoroethane 1-chloro-1,1,2,2-tetrafluoroethane 1-chloro-1,1,2,2-tetrafluoroethane 1-chloro-1,1,2,2-tetrafluoroethane 1-chloro-1,1,2,2-tetrafluoroethane 1,1-trichloro-2,2-trichloroethane 1,1,1-trichloro-2-fluoroethane (HCFC 131b) 1-Chloro-1-fluoroethane (HCFC 132b) 1,1-dichloro-1,2-difluoroethane (HCFC 132c) 1,2-dichloro-1,2-difluoroethane (HCFC 132c) 1,1-dichloro-2,2-difluoroethane 1,2-dichloro-1,2-difluoroethane 1,2-dichloro-1,2-difluoroethane	354-11-0 354-14-3 41834-16-6 354-21-2 34077-87-7 90454-18-5 306-83-2 354-23-4 812-04-4 812-04-4 63938-10-3 2837-89-0 354-25-6 27154-33-2; (134237-34-6) 359-28-4 811-95-0 1615-75-4 25915-78-0 1649-08-7 1842-05-3 471-43-2 431-06-1	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000
CLASS II	1,1,1,2-tetrachloro-2-fluoroethane (HCFC 121a) 1,1,2,2-tetracloro-1-fluoroethane Trichlorodifluoroethane (HCFC 122) 1,2,2-trichloro-1,1-difluoroethane Dichlorotrifluoroethane(HCFC 123) Dichloro-1,1,2-trifluoroethane 2,2-dichloro-1,1,1-trifluroethane 1,2-dichloro-1,1,2-trifluroethane (HCFC 123a) 1,1-dichloro-1,2,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) Chloroettrafluoroethane (HCFC 124) 2-chloro-1,1,2,2-trifluoroethane (HCFC 124a) Trichlorofluoroethane (HCFC 131) 1-Fluoro-1,2,2-trichloroethane (HCFC 131b) 1-Fluoro-1,2,2-trichloroethane (HCFC 131b) 1-Chloro-1-fluoroethane (HCFC 132b) 1,1-trichloro-2-fluoroethane (HCFC 132b) 1,2-dichloro-1,1-difluoroethane (HCFC 132b) 1,1-dichloro-1,2-difluoroethane (HCFC 132b) 1,1-dichloro-1,2-difluoroethane (HCFC 132c) 1,1-dichloro-1,2-difluoroethane 1	354-11-0 354-14-3 41834-16-6 354-21-2 34077-87-7 90454-18-5 306-83-2 354-23-4 812-04-4 812-04-4 63938-10-3 2837-89-0 354-25-6 27154-33-2; (134237-34-6) 359-28-4 811-95-0 1615-75-4 25915-78-0 1649-08-7 1842-05-3 471-43-2 431-06-1 1330-45-6	1.000 1.000
CIASS II	1,1,1,2-tetrachloro-2-fluoroethane (HCFC 121a) 1,1,2,2-tetracloro-1-fluoroethane Trichlorodifluoroethane (HCFC 122) 1,2,2-trichloro-1,1-difluoroethane Dichlorotrifluoroethane(HCFC 123) Dichloro-1,1,2-trifluoroethane 2,2-dichloro-1,1,1-trifluroethane 1,2-dichloro-1,1,2-trifluoroethane (HCFC 123a) 1,1-dichloro-1,2,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 124b) 2-chloro-1,1,2,2-tetrafluoroethane 1-chloro-1,1,2,2-tetrafluoroethane 1,1,1-trichloro-2-fluoroethane (HCFC 131b) 1-Fluoro-1,2,2-trichloroethane (HCFC 131b) 1-Fluoro-1,1-difluoroethane (HCFC 132b) 1,1-dichloro-1,2-difluoroethane (HCFC 132b) 1,1-dichloro-1,2-difluoroethane 1,1-dichloro-2,2-difluoroethane 1,2-dichloro-1,2-difluoroethane 1,2-dichloro-1,2-difluoroethane 1,2-dichloro-1,2-difluoroethane 1,2-dichloro-1,2-difluoroethane 1,2-dichloro-1,2-difluoroethane	354-11-0 354-14-3 41834-16-6 354-21-2 34077-87-7 90454-18-5 306-83-2 354-23-4 812-04-4 812-04-4 63938-10-3 2837-89-0 354-25-6 27154-33-2; (134237-34-6) 359-28-4 811-95-0 1615-75-4 25915-78-0 1649-08-7 1842-05-3 471-43-2 431-06-1 1330-45-6 1330-45-6	1.000 1.000
CLASS II	1,1,1,2-tetrachloro-2-fluoroethane (HCFC 121a) 1,1,2,2-tetracloro-1-fluoroethane Trichlorodifluoroethane (HCFC 122) 1,2,2-trichloro-1,1-difluoroethane Dichlorotrifluoroethane(HCFC 123) Dichloro-1,1,2-trifluoroethane 2,2-dichloro-1,1,1-trifluroethane 1,2-dichloro-1,1,2-trifluroethane (HCFC 123a) 1,1-dichloro-1,2,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) Chlorotetrafluoroethane (HCFC 124) 2-chloro-1,1,2,2-trifluroethane (HCFC 124a) Trichlorofluoroethane (HCFC 131) 1-Fluoro-1,2,2-trichloroethane (HCFC 131b) 1-Chloro-1-fluoroethane (HCFC 132) 1,1-trichloro-2-fluoroethane (HCFC 132b) 1,1-dichloro-1,1-difluoroethane (HCFC 132b) 1,1-dichloro-1,2-difluoroethane (HCFC 132c) 1,1-dichloro-1,2-difluoroethane (HCFC 132c) 1,1-dichloro-1,2-difluoroethane 1,2-dichloro-1,2-difluoroethane 1,2-dichloro-1,2-difluoroethane 1,2-dichloro-1,2-difluoroethane 1,2-dichloro-1,2-difluoroethane 1,2-dichloro-1,2-difluoroethane 1,2-dichloro-1,2-difluoroethane	354-11-0 354-14-3 41834-16-6 354-21-2 34077-87-7 90454-18-5 306-83-2 354-23-4 812-04-4 812-04-4 63938-10-3 2837-89-0 354-25-6 27154-33-2; (134237-34-6) 359-28-4 811-95-0 1615-75-4 25915-78-0 1649-08-7 1842-05-3 471-43-2 431-06-1 1330-45-6 1330-45-6 75-88-7	1.000 1.000
CLASS II	1,1,1,2-tetrachloro-2-fluoroethane (HCFC 121a) 1,1,2,2-tetracloro-1-fluoroethane Trichlorodifluoroethane (HCFC 122) 1,2,2-trichloro-1,1-difluoroethane Dichlorotrifluoroethane(HCFC 123) Dichloro-1,1,2-trifluoroethane 2,2-dichloro-1,1,1-trifluroethane 1,2-dichloro-1,1,2-trifluoroethane (HCFC 123a) 1,1-dichloro-1,2,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 124b) 2-chloro-1,1,2,2-tetrafluoroethane 1-chloro-1,1,2,2-tetrafluoroethane 1,1,1-trichloro-2-fluoroethane (HCFC 131b) 1-Fluoro-1,2,2-trichloroethane (HCFC 131b) 1-Fluoro-1,1-difluoroethane (HCFC 132b) 1,1-dichloro-1,2-difluoroethane (HCFC 132b) 1,1-dichloro-1,2-difluoroethane 1,1-dichloro-2,2-difluoroethane 1,2-dichloro-1,2-difluoroethane 1,2-dichloro-1,2-difluoroethane 1,2-dichloro-1,2-difluoroethane 1,2-dichloro-1,2-difluoroethane 1,2-dichloro-1,2-difluoroethane	354-11-0 354-14-3 41834-16-6 354-21-2 34077-87-7 90454-18-5 306-83-2 354-23-4 812-04-4 812-04-4 63938-10-3 2837-89-0 354-25-6 27154-33-2; (134237-34-6) 359-28-4 811-95-0 1615-75-4 25915-78-0 1649-08-7 1842-05-3 471-43-2 431-06-1 1330-45-6 1330-45-6 75-88-7 1717-00-6;	1.000 1.000
CIASS II	1,1,1,2-tetrachloro-2-fluoroethane (HCFC 121a) 1,1,2,2-tetracloro-1-fluoroethane Trichlorodifluoroethane (HCFC 122) 1,2,2-trichloro-1,1-difluoroethane Dichlorotrifluoroethane(HCFC 123) Dichloro-1,1,2-trifluoroethane 2,2-dichloro-1,1,2-trifluroethane 1,2-dichloro-1,1,2-trifluroethane 1,2-dichloro-1,1,2-trifluroethane 1,2-dichloro-1,1,2-trifluroethane 1,2-dichloro-1,1,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 124b) 2-chloro-1,1,1,2-tetrafluoroethane (HCFC 124b) 2-chloro-1,1,2-tetrafluoroethane (HCFC 124a) Trichloroffluoroethane (HCFC 131) 1-Fluoro-1,2,2-tetrafluoroethane (HCFC 131b) 1-Chloro-1,2,2-trichloroethane (HCFC 131b) 1-Chloro-1,1,1-difluoroethane (HCFC 132b) 1,1-dichloro-2,2-difluoroethane (HCFC 132b) 1,1-dichloro-1,2-difluoroethane (HCFC 132c) 1,1-dichloro-2,2-difluoroethane 1,2-dichloro-1,2-difluoroethane 1,2-dichloro-1,2-difluoroethane 1,2-dichloro-1,2-difluoroethane 1,2-dichloro-1,2-difluoroethane 1,2-dichloro-1,2-difluoroethane 1,2-dichloro-1,2-difluoroethane 2-chl	354-11-0 354-14-3 41834-16-6 354-21-2 34077-87-7 90454-18-5 306-83-2 354-23-4 812-04-4 812-04-4 63938-10-3 2837-89-0 354-25-6 27154-33-2; (134237-34-6) 359-28-4 811-95-0 1615-75-4 25915-78-0 1649-08-7 1842-05-3 471-43-2 431-06-1 1330-45-6 1330-45-6 75-88-7 1717-00-6; (25167-88-8)	1.000 1.000
CIASS II	1,1,1,2-tetrachloro-2-fluoroethane (HCFC 121a) 1,1,2,2-tetracloro-1-fluoroethane Trichlorodifluoroethane (HCFC 122) 1,2,2-trichloro-1,1-difluoroethane Dichlorotrifluoroethane(HCFC 123) Dichloro-1,1,2-trifluoroethane 2,2-dichloro-1,1,1-trifluroethane 1,2-dichloro-1,1,2-trifluroethane (HCFC 123a) 1,1-dichloro-1,2,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) 2,2-dichloro-1,1,2-trifluroethane (HCFC 123b) Chlorotetrafluoroethane (HCFC 124) 2-chloro-1,1,2,2-trifluroethane (HCFC 124a) Trichlorofluoroethane (HCFC 131) 1-Fluoro-1,2,2-trichloroethane (HCFC 131b) 1-Chloro-1-fluoroethane (HCFC 132) 1,1-trichloro-2-fluoroethane (HCFC 132b) 1,1-dichloro-1,1-difluoroethane (HCFC 132b) 1,1-dichloro-1,2-difluoroethane (HCFC 132c) 1,1-dichloro-1,2-difluoroethane (HCFC 132c) 1,1-dichloro-1,2-difluoroethane 1,2-dichloro-1,2-difluoroethane 1,2-dichloro-1,2-difluoroethane 1,2-dichloro-1,2-difluoroethane 1,2-dichloro-1,2-difluoroethane 1,2-dichloro-1,2-difluoroethane 1,2-dichloro-1,2-difluoroethane	354-11-0 354-14-3 41834-16-6 354-21-2 34077-87-7 90454-18-5 306-83-2 354-23-4 812-04-4 812-04-4 63938-10-3 2837-89-0 354-25-6 27154-33-2; (134237-34-6) 359-28-4 811-95-0 1615-75-4 25915-78-0 1649-08-7 1842-05-3 471-43-2 431-06-1 1330-45-6 1330-45-6 75-88-7 1717-00-6;	1.000 1.000

	1-chloro-1,1-difluoroethane (HCFC 142b)	75-68-3	1.000
	1-chloro-1,2-difluoroethane (HCFC142a)	25497-29-4	1.000
	Hexachlorofluoropropane (HCFC 221)	134237-35-7	1.000
	Pentachlorodifluoropropane (HCFC 222)	134237-36-8	1.000
	Tetrachlorotrifluropropane (HCFC 223)	134237-37-9	1.000
	Trichlorotetrafluoropropane (HCFC 224)	134237-38-0	1.000
	Dichloropentafluoropropane, (Ethyne, fluoro-) (HCFC 225)	127564-92-5;	1.000
	2,2-Dichloro-1,1,1,3,3-pentafluoropropane (HCFC 225aa)	128903-21-9	1.000
	2,3-Dichloro-1,1,1,2,3-pentafluoropropane (HCFC 225ba)	422-48-0	1.000
	1,2-Dichloro-1,1,2,3,3-pentafluoropropane (HCFC 225bb)	422-44-6	1.000
	3,3-Dichloro-1,1,1,2,2-pentafluoropropane (HCFC 225ca)	422-56-0	1.000
	1,3-Dichloro-1,1,2,2,3-pentafluoropropane (HCFC 225cb)	507-55-1	1.000
	1,1-Dichloro-1,2,2,3,3-pentafluoropropane (HCFC 225cc)	13474-88-9	1.000
	1,2-Dichloro-1,1,3,3,3-pentafluoropropane (HCFC 225da)	431-86-7	1.000
	1,3-Dichloro-1,1,2,3,3-pentafluoropropane (HCFC 225ea)	136013-79-1	1.000
	1,1-Dichloro-1,2,3,3,3-pentafluoropropane (HCFC 225eb)	111512-56-2	1.000
class II	Chlorohexafluoropropane (HCFC 226)	134308-72-8	1.000
ase	Pentachlorofluoropropane (HCFC 231)	134190-48-0	1.000
cli	Tetrachlorodifluoropropane (HCFC 232)	134237-39-1	1.000
	Trichlorotrifluoropropane (HCFC 233)	134237-40-4	1.000
	1,1,1-Trichloro-3,3,3-trifluoropropane	7125-83-9	1.000
	Dichlorotetrafluoropropane (HCFC 234)	127564-83-4	1.000
	Chloropentafluoropropane (HCFC 235)	134237-41-5	1.000
	1-Chloro-1,1,3,3,3-pentafluoropropane	460-92-4	1.000
	Tetrachlorofluoropropane (HCFC 241)	134190-49-1	1.000
	Trichlorodifluoropropane (HCFC 242)	134237-42-6	1.000
I	Dichlorotrifluoropropane (HCFC 243)	134237-43-7	1.000
	1,1-dichloro-1,2,2-trifluoropropane	7125-99-7	1.000
	2,3-dichloro-1,1,1 -trifluoropropane	338-75-0	1.000
	3,3-Dichloro-1,1,1-trifluoropropane	460-69-5	1.000
	Chlorotetrafluoropropane (HCFC 244)	134190-50-4	1.000
	3-chloro-1,1,2,2-tetrafluoropropane	679-85-6	1.000
	Trichlorofluoropropane (HCFC 251)	134190-51-5	1.000
	1,1,3-trichloro-1-fluoropropane	818-99-5	1.000
	Dichlorodifluoropropane (HCFC 252)	134190-52-6	1.000
	Chlorotrifluoropropane (HCFC 253)	134237-44-8	1.000
	3-chloro-1,1,1-trifluoropropane (HCFC 253fb)	460-35-5	1.000
	Dichlorofluoropropane (HCFC 261)	134237-45-9	1.000
	1,1-dichloro-1-fluoropropane	7799-56-6	1.000
	Chlorodifluoropropane (HCFC 262)	134190-53-7	1.000
	2-chloro-1,3-difluoropropane	102738-79-4	1.000
	Chlorofluoropropane (HCFC 271)	134190-54-8	1.000
	2-chloro-2-fluoropropane	420-44-0	1.000
B Penta	chlorophenol and its salts and esters	87-86-5	
Fend	chiorophenol and its saits and esters	and others	
7 Cadm	ium and its compounds		
Cadr	nium	7440-43-9	1.000
	nium chloride	10108-64-2	0.613
	nium oxide	1306-19-0	0.875
	Ncadmium	592-02-9	0.659
	ethylcadmium	506-82-1	0.789
	nium bromide	7789-42-6	0.413
	nium nitrate	10325-94-7	0.475
	nium carbonate (1:1)	513-78-0	0.652
	nium fluoride	7790-79-6	0.747
	nium sulfide	1306-23-6	0.778
	r cadmium compounds		-
Chror	nium(VI) compounds		
	ssium chromate	7789-00-6	0.268
	ium chromate	13765-19-0	0.333
	um chromate	7775-11-3	0.321
	l chromate	7758-97-6	0.161
	romicacid	13530-68-2	0.477
	nonium dichromate	7789-09-5	0.413
	ssium dichromate	7778-50-9	0.354
	r chromium(VI) compounds		-
	and its compounds		
		7439-92-1	1.000
Lead			
Lead	(II) oxide (II) fluoro silicate	1317-36-8 25808-74-6	0.928

		201 04 2	0.637
	Lead acetate Lead(II) nitrate	301-04-2 10099-74-8	0.637
	Lead hydroxide	39345-91-0	0.924
	Lead acetate trihydrate	6080-56-4	0.99
	Lead carbonate	598-63-0	0.775
	Tetraethyl lead	78-00-2	0.64
	Tetramethyl lead	75-74-1	0.775
	Lead chloride	7758-95-4	0.745
	Lead dioxide	1309-60-0	0.866
	Lead(II) fluoride	7783-46-2	0.845
	Lead iodide	10101-63-0	0.449
	Llead oxide red Lead sulfide	1314-41-6	0.907
	Lead suilide Lead(II) sulfate(1:1)	1314-87-0 7446-14-2	0.866 0.683
	Lead(II) suitate(1.1) Lead(II) phosphate(3:2)	7446-27-7	0.766
	Lead hydroxidcarbonate	1344-36-1	0.801
	Lead chromate	7758-97-6	0.641
	Other lead compounds	-	-
10	Mercury and its compounds		
	Mercury	7439-97-6	1.000
	Mercuric chloride	7487-94-7	0.739
	Phenylmercuric chloride	100-56-1	0.641
	Mercuric asetate	1600-27-7	0.629
	Mercuric oxide	21908-53-2	0.926
	Diethyl mercury	627-44-1	0.775
	Mercury(II) bromide	7789-47-1	0.557
	Mercury(II) iodide	7774-29-0	0.441
	Mercuric sulfate	7783-35-9	0.676
11	Other mercury compounds Azo compounds (which may release the aromatic amines listed below, by reductive cleavage)	-	-
	4-Aminoazobenzene	60-09-3	1.000
	o-anisidine	90-04-0	1.000
	2-naphthylamine	91-59-8	1.000
	3.3'-dichlorobenzidine	91-94-1	1.000
	biphenyl-4-ylamine	92-67-1	1.000
	Benzidine	92-87-5	1.000
	o-toluidine	95-53-4	1.000
	4-chloro-o-toluidine	95-69-2	1.000
	2,4-toluenediamine	95-80-7	1.000
	o-aminoazotoluene	97-56-3	1.000
	5-nitro-o-toluidine	99-55-8	1.000
	2.2' dichloro 1.1' diaminodinhonylmothano		1
	3,3'-dichloro-4,4'-diaminodiphenylmethane	101-14-4	1.000
	4,4'-methylenedianiline	101-77-9	1.000
	4,4'-methylenedianiline 4,4'-diaminodiphenylether	101-77-9 101-80-4	1.000 1.000
	4,4'-methylenedianiline 4,4'-diaminodiphenylether p-chloroaniline	101-77-9 101-80-4 106-47-8	1.000 1.000 1.000
	4,4'-methylenedianiline 4,4'-diaminodiphenylether p-chloroaniline 3,3'-dimethoxybenzidine	101-77-9 101-80-4 106-47-8 119-90-4	1.000 1.000 1.000 1.000
	4,4'-methylenedianiline 4,4'-diaminodiphenylether p-chloroaniline 3,3'-dimethoxybenzidine 3,3'-dimethylbenzidine	101-77-9 101-80-4 106-47-8 119-90-4 119-93-7	1.000 1.000 1.000 1.000 1.000
	4,4'-methylenedianiline 4,4'-diaminodiphenylether p-chloroaniline 3,3'-dimethoxybenzidine 3,3'-dimethylbenzidine 2-methoxy-5-methylaniline	101-77-9 101-80-4 106-47-8 119-90-4 119-93-7 120-71-8	1.000 1.000 1.000 1.000 1.000 1.000
	4,4'-methylenedianiline 4,4'-diaminodiphenylether p-chloroaniline 3,3'-dimethoxybenzidine 3,3'-dimethylbenzidine 2-methoxy-5-methylaniline 2,4,5-trimethylaniline	101-77-9 101-80-4 106-47-8 119-90-4 119-93-7 120-71-8 137-17-7	1.000 1.000 1.000 1.000 1.000
	4,4'-methylenedianiline 4,4'-diaminodiphenylether p-chloroaniline 3,3'-dimethoxybenzidine 3,3'-dimethylbenzidine 2-methoxy-5-methylaniline 2,4,5-trimethylaniline 4,4'-thiodianiline	101-77-9 101-80-4 106-47-8 119-90-4 119-93-7 120-71-8 137-17-7 139-65-1	1.000 1.000 1.000 1.000 1.000 1.000 1.000
	4,4'-methylenedianiline 4,4'-diaminodiphenylether p-chloroaniline 3,3'-dimethoxybenzidine 3,3'-dimethylbenzidine 2-methoxy-5-methylaniline 2,4,5-trimethylaniline	101-77-9 101-80-4 106-47-8 119-90-4 119-93-7 120-71-8 137-17-7	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000
	4,4'-methylenedianiline 4,4'-diaminodiphenylether p-chloroaniline 3,3'-dimethoxybenzidine 3,3'-dimethylbenzidine 2-methoxy-5-methylaniline 2,4,5-trimethylaniline 4,4'-thiodianiline 4-methoxy-m-phenylenediamine	101-77-9 101-80-4 106-47-8 119-90-4 119-93-7 120-71-8 137-17-7 139-65-1 615-05-4	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000
	4,4'-methylenedianiline 4,4'-diaminodiphenylether p-chloroaniline 3,3'-dimethoxybenzidine 3,3'-dimethylbenzidine 2,3'-dimethylbenzidine 2,4,5-trimethylaniline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-methoxy-m-phenylenediamine 4,4'-methylenedi-o-toluidine	101-77-9 101-80-4 106-47-8 119-90-4 119-93-7 120-71-8 137-17-7 139-65-1 615-05-4	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000
	4,4'-methylenedianiline 4,4'-diaminodiphenylether p-chloroaniline 3,3'-dimethoxybenzidine 3,3'-dimethylbenzidine 2,3'-dimethylbenzidine 2,4,5-trimethylaniline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-methoxy-m-phenylenediamine 4,4'-methylenedi-o-toluidine	101-77-9 101-80-4 106-47-8 119-90-4 119-93-7 120-71-8 137-17-7 139-65-1 615-05-4 838-88-0 56-35-9	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 0.398241817
	4,4'-methylenedianiline 4,4'-diaminodiphenylether p-chloroaniline 3,3'-dimethoxybenzidine 3,3'-dimethylbenzidine 2,3'-dimethylbenzidine 2,4,5-trimethylaniline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-methoxy-m-phenylenediamine 4,4'-methylenedi-o-toluidine	101-77-9 101-80-4 106-47-8 119-90-4 119-93-7 120-71-8 137-17-7 139-65-1 615-05-4 838-88-0 56-35-9 1803-12-9	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 0.398241817 0.252
	4,4'-methylenedianiline 4,4'-diaminodiphenylether p-chloroaniline 3,3'-dimethoxybenzidine 3,3'-dimethylbenzidine 2,3'-dimethylbenzidine 2,4,5-trimethylaniline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-methoxy-m-phenylenediamine 4,4'-methylenedi-o-toluidine Bis(tri-n-butyltin) oxide Tri-substituted Organostannic Compounds Triphenyltin-N, N-dimethyldithiocarbamate Triphenyltin fluoride	101-77-9 101-80-4 106-47-8 119-90-4 119-93-7 120-71-8 137-17-7 139-65-1 615-05-4 838-88-0 56-35-9 1803-12-9 379-52-2	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 0.398241817 0.252 0.322
	4,4'-methylenedianiline 4,4'-diaminodiphenylether p-chloroaniline 3,3'-dimethoxybenzidine 3,3'-dimethylbenzidine 2,methoxy-5-methylaniline 2,4,5-trimethylaniline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-methylenedi-o-toluidine Bis(tri-n-butyltin) oxide Tri-substituted Organostannic Compounds Triphenyltin-N, N-dimethyldithiocarbamate Triphenyltin fluoride Triphenyltin acetate	101-77-9 101-80-4 106-47-8 119-90-4 119-93-7 120-71-8 137-17-7 139-65-1 615-05-4 838-88-0 56-35-9 1803-12-9 379-52-2 900-95-8	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 0.398241817 0.252 0.322 0.29
	4,4'-methylenedianiline 4,4'-diaminodiphenylether p-chloroaniline 3,3'-dimethoxybenzidine 3,3'-dimethylbenzidine 2-methoxy-5-methylaniline 2,4,5-trimethylaniline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-methoxy-m-phenylenediamine 4,4'-methylenedi-o-toluidine Bis(tri-n-butyltin) oxide Tri-substituted Organostannic Compounds Triphenyltin-N, N-dimethyldithiocarbamate Triphenyltin fluoride Triphenyltin cetate Triphenyltin chloride	101-77-9 101-80-4 106-47-8 119-90-4 119-93-7 120-71-8 137-17-7 139-65-1 615-05-4 838-88-0 56-35-9 1803-12-9 379-52-2 900-95-8 639-58-7	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 0.398241817 0.252 0.3982 0.398 0.308
	4,4'-methylenedianiline 4,4'-diaminodiphenylether p-chloroaniline 3,3'-dimethoxybenzidine 3,3'-dimethylbenzidine 2.methoxy-5-methylaniline 2,4,5-trimethylaniline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-methylenedi-o-toluidine Bis(tri-n-butyltin) oxide Tri-substituted Organostannic Compounds Triphenyltin-N, N-dimethyldithiocarbamate Triphenyltin fluoride Triphenyltin fluoride Triphenyltin chloride Triphenyltin chloride Triphenyltin hydroxide	101-77-9 101-80-4 106-47-8 119-90-4 119-93-7 120-71-8 137-17-7 139-65-1 615-05-4 838-88-0 56-35-9 56-35-9 1803-12-9 379-52-2 900-95-8 639-58-7 76-87-9	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 0.398241817 0.252 0.398 0.322 0.29 0.308 0.323
	4,4'-methylenedianiline 4,4'-diaminodiphenylether p-chloroaniline 3,3'-dimethoxybenzidine 2,3'-dimethylbenzidine 2,methoxy-5-methylaniline 2,4,5-trimethylaniline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-methoxy-m-phenylenediamine 4,4'-methylenedi-o-toluidine Bis(tri-n-butyltin) oxide Tri-substituted Organostannic Compounds Triphenyltin-N, N-dimethyldithiocarbamate Triphenyltin fluoride Triphenyltin fluoride Triphenyltin fluoride Triphenyltin chloride Triphenyltin hydroxide Triphenyltin fluoride	101-77-9 101-80-4 106-47-8 119-90-4 119-93-7 120-71-8 137-17-7 139-65-1 615-05-4 838-88-0 56-35-9 56-35-9 1803-12-9 379-52-2 900-95-8 639-58-7 76-87-9 18380-71-7	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 0.398241817 0.252 0.398 0.322 0.29 0.308 0.323 0.235
	4,4'-methylenedianiline 4,4'-diaminodiphenylether p-chloroaniline 3,3'-dimethoxybenzidine 2,3'-dimethylbenzidine 2-methoxy-5-methylaniline 2,4,5-trimethylaniline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-methylenedi-o-toluidine Bis(tri-n-butyltin) oxide Tri-substituted Organostannic Compounds Triphenyltin-N, N-dimethyldithiocarbamate Triphenyltin fluoride Triphenyltin fluoride Triphenyltin chloride Triphenyltin hydroxide Triphenyltin fattyacid((9-11)salt) Triphenyltin fattyacid((9-11)salt)	101-77-9 101-80-4 106-47-8 119-90-4 119-93-7 120-71-8 137-17-7 139-65-1 615-05-4 838-88-0 56-35-9 56-35-9 1803-12-9 379-52-2 900-95-8 639-58-7 76-87-9 18380-71-7 18380-72-8	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 0.398241817 0.252 0.322 0.29 0.308 0.323 0.235 0.235
	4,4'-methylenedianiline 4,4'-diaminodiphenylether p-chloroaniline 3,3'-dimethoxybenzidine 3,3'-dimethylbenzidine 2,-methoxy-5-methylaniline 2,4,5-trimethylaniline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-methoxy-m-phenylenediamine 4,4'-methylenedi-o-toluidine Bis(tri-n-butyltin) oxide Tri-substituted Organostannic Compounds Triphenyltin-N, N-dimethyldithiocarbamate Triphenyltin fluoride Triphenyltin fluoride Triphenyltin chloride Triphenyltin chloride Triphenyltin fattyacid((9-11)salt) Triphenyltin fattyacid((9-11)salt) Triphenyltin fattyacid((9-11)salt)	101-77-9 101-80-4 106-47-8 119-90-4 119-93-7 120-71-8 137-17-7 139-65-1 615-05-4 838-88-0 56-35-9 56-35-9 1803-12-9 379-52-2 900-95-8 639-58-7 76-87-9 18380-71-7 18380-72-8 47672-31-1	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 0.398241817 0.252 0.398 0.322 0.29 0.308 0.323 0.235 0.235 0.229
	4,4'-methylenedianiline 4,4'-diaminodiphenylether p-chloroaniline 3,3'-dimethoxybenzidine 3,3'-dimethylbenzidine 2-methoxy-5-methylaniline 2,4,5-trimethylaniline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-methoxy-m-phenylenediamine 4,4'-methoxy-m-phenylenediamine 4,4'-methylenedi-o-toluidine Bis(tri-n-butyltin) oxide Trisubstituted Organostannic Compounds Triphenyltin-N, N-dimethyldithiocarbamate Triphenyltin fluoride Triphenyltin fluoride Triphenyltin catate Triphenyltin hydroxide Triphenyltin fattyacid((9-11)salt) Triphenyltin fattyacid((9-11)salt) Triphenyltin fattyacid((9-11)salt) Triphenyltin fattyacid((9-11)salt)	101-77-9 101-80-4 106-47-8 119-90-4 119-93-7 120-71-8 137-17-7 139-65-1 615-05-4 838-88-0 56-35-9 56-35-9 56-35-9 1803-12-9 379-52-2 900-95-8 639-58-7 76-87-9 18380-71-7 18380-72-8 47672-31-1 94850-90-5	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 0.398241817 0.252 0.322 0.322 0.29 0.308 0.323 0.235 0.235 0.225 0.229 0.223
	4,4'-methylenedianiline 4,4'-diaminodiphenylether p-chloroaniline 3,3'-dimethylybenzidine 3,3'-dimethylbenzidine 2,-methoxy-5-methylaniline 2,4,5-trimethylaniline 4,4'-thiodianiline 5,5trimethylaniline 4,4'-thiodianiline 4,4'-thiodianiline 5,5trimethylaniline 4,4'-thiodianiline 5,5trimethylaniline 5,5trimethylaniline 4,4'-thiodianiline 4,4'-thiodianiline 5,5trimethylaniline 5,5trimethylaniline 5,5trimethylaniline 6,5trimethylaniline 7triphenyltin fulvoide 7triphenyltin chloride 7triphen	101-77-9 101-80-4 106-47-8 119-90-4 119-93-7 120-71-8 137-17-7 139-65-1 615-05-4 838-88-0 56-35-9 56-35-9 56-35-9 1803-12-9 379-52-2 900-95-8 639-58-7 76-87-9 18380-71-7 18380-72-8 47672-31-1 94850-90-5 7094-94-2	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 0.398241817 0.252 0.398 0.323 0.29 0.308 0.323 0.235 0.235 0.229 0.223 0.225 0.223 0.225 0.223 0.225 0.255 0.25
<u>12</u> 13	4,4'-methylenedianiline 4,4'-diaminodiphenylether p-chloroaniline 3,3'-dimethylbenzidine 3,3'-dimethylbenzidine 2,a,5-trimethylaniline 2,4,5-trimethylaniline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-thiodianiline 4,4'-methylenedi-o-toluidine Bis(tri-n-butyltin) oxide Tri-substituted Organostannic Compounds Triphenyltin N, N-dimethyldithiocarbamate Triphenyltin fluoride Triphenyltin fluoride Triphenyltin chloride Triphenyltin fluoride Triphenyltin fluoride Triphenyltin fattyacid((9-11)salt) Triphenyltin fattyacid((9-11)salt) Triphenyltin fattyacid((9-11)salt) Triphenyltin chloroacetate Triphenyltin chloroacetate Triphenyltin chloroacetate Triphenyltin chloroacetate Triphenyltin methacrylate	101-77-9 101-80-4 106-47-8 119-90-4 119-93-7 120-71-8 137-17-7 139-65-1 615-05-4 838-88-0 56-35-9 56-35-9 56-35-9 1803-12-9 379-52-2 900-95-8 639-58-7 76-87-9 18380-71-7 18380-72-8 47672-31-1 94850-90-5 7094-94-2 2155-70-6	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 0.398241817 0.252 0.398 0.323 0.29 0.308 0.323 0.235 0.235 0.235 0.229 0.223 0.2268 0.316
	4,4'-methylenedianiline 4,4'-diaminodiphenylether p-chloroaniline 3,3'-dimethylybenzidine 3,3'-dimethylbenzidine 2,-methoxy-5-methylaniline 2,4,5-trimethylaniline 4,4'-thiodianiline 5,5trimethylaniline 4,4'-thiodianiline 4,4'-thiodianiline 5,5trimethylaniline 4,4'-thiodianiline 5,5trimethylaniline 5,5trimethylaniline 4,4'-thiodianiline 4,4'-thiodianiline 5,5trimethylaniline 5,5trimethylaniline 5,5trimethylaniline 6,5trimethylaniline 7triphenyltin fulvoide 7triphenyltin chloride 7triphen	101-77-9 101-80-4 106-47-8 119-90-4 119-93-7 120-71-8 137-17-7 139-65-1 615-05-4 838-88-0 56-35-9 56-35-9 56-35-9 1803-12-9 379-52-2 900-95-8 639-58-7 76-87-9 18380-71-7 18380-72-8 47672-31-1 94850-90-5 7094-94-2	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 0.398241817 0.252 0.398 0.323 0.235 0.235 0.235 0.229 0.223 0.223 0.223 0.223

	TributyItin acetate	56-36-0	0.34
	Tributyltin laurate	3090-36-6	0.243
	Bis(tributyltin) phthalate	4782-29-0	0.319
	Coplymer of alkyl (c=8) acrylate, methyl methacrylate and tributyltin methacrylate	67772-01-4	0.18
	Tributyltin sulfamate	6517-25-5	0.307
	Bis(tributyltin) maleate	14275-57-1	0.341
	Tributyltin chloride (A)	1461-22-9	0.365
	Tributyltin chloride (A)	7342-38-3	0.365
			0.303
	Tributyltin cyclopentane carbonate = mixture	85409-17-2	
	Tributyltin-1,2,3,4,4a,4b,5,6,10,10a-decahydro-7-isoplopyl-1,4a-dimethyl-1-phenanthrencarboxylatem	26239-64-5	0.201
4	Other tri-substituted organostannic compounds Polychlorinated Naphthalenes (chlorine number 1 or more)	-	-
-		70776-03-3,	
	Polychlorinated Naphthalenes (chlorine number 1 or more)	and others	1.000
5	Chlorinated Paraffins		
	Chlorinated Paraffins (C10-13)	85535-84-8	1.000
6	Radioactive substances		
	Uranium	-	1.000
	Plutonium	-	1.000
	Radon	-	1.000
	Americium	-	1.000
	Thorium	-	1.000
	Other radioactive substances	-	1.000
7	Perfluorooctane sulfonic acid (PFOS), its salts and PFOS-related compounds		
· .	C ₈ F ₁₇ SO ₂ X	1762 02 4	
		1763-23-1, and others	1.000
	$(X = OH, Metal salt (O-M^{+}), halide, amide, and other related compounds including polymers)$		
8	2-(2'-Hydroxy-3',5'-di-tert-butylphenyl)benzotriazole	3846-71-7	1.000
9	Dimethylfumarate(DMFu)	624-49-7	1.000
0	Dibutyltin (DBT) compounds, Dioctyltin (DOT) compound		
	DibutyItin oxide	818-08-6	0.477
	DibutyItin diacetate	1067-33-0	0.338
	Dibutyltin dilaurate	77-58-7	0.188
	Dibutyltin maleate	78-04-6	0.342
	Dioctyl Tin Oxide	870-08-6	0.329
	Dioctyltin dilaurate	3648-18-8	0.16
	Other Dibutyltin compounds or Dioctyltin compounds	-	1.000
1	Hexabromocyclododecane (HBCD)		
	Hexabromocyclododecane	25637-99-4	1.000
	1,2,5,6,9,10-Hexabromocyclododecane	3194-55-6	1.000
	rel-(1R,2S,5R,6S,9R,10S)-1,2,5,6,9,10-Hexabromocyclododecane	4736-49-6	1.000
	rel-(1R,2S,5R,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane	65701-47-5	1.000
	α-Hexabromocyclododecane	134237-50-6	1.000
	β-Hexabromocyclododecane	134237-51-7	1.000
	y-Hexabromocyclododecane	134237-52-8	1.000
	(1R,2R,5R,6S,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane	138257-17-7	1.000
	(1R,2R,5R,6S,9R,10S)-1,2,5,6,9,10-Hexabromocyclododecane	138257-18-8	1.000
	(1R,2S,5S,6R,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane	138257-19-9	1.000
	(1R,2S,5S,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane	169102-57-2	1.000
			1 ()()()
	(1R,2R,5S,6R,9R,10S)-1,2,5,6,9,10-Hexabromocyclododecane	678970-15-5	
	(1R,2S,5R,6S,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane	678970-16-6	1.000
_	(1R,2S,5R,6S,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane (1R,2R,5R,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane		
2	(1R,2S,5R,6S,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane (1R,2R,5R,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane PFOA and individual salts and esters of PFOA	678970-16-6	1.000 1.000
	(1R,2S,5R,6S,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane (1R,2R,5R,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane PFOA and individual salts and esters of PFOA Scope of chemical substance group: Based on EU POPs regulation	678970-16-6	1.000
	(1R,2S,5R,6S,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane (1R,2R,5R,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane PFOA and individual salts and esters of PFOA Scope of chemical substance group: Based on EU POPs regulation Polycyclic aromatic hydrocarbons (PAHs)	678970-16-6 678970-17-7 -	1.000 1.000 1.000
	(1R,2S,5R,6S,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane (1R,2R,5R,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane PFOA and individual salts and esters of PFOA Scope of chemical substance group: Based on EU POPs regulation Polycyclic aromatic hydrocarbons (PAHs) Benzo[a]pyrene (BaP)	678970-16-6 678970-17-7 - 50-32-8	1.000 1.000 1.000 1.000
	(1R,2S,5R,6S,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane (1R,2R,5R,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane PFOA and individual salts and esters of PFOA Scope of chemical substance group: Based on EU POPs regulation Polycyclic aromatic hydrocarbons (PAHs) Benzo[a]pyrene (BaP) Benzo[e]pyrene (BeP)	678970-16-6 678970-17-7 - 50-32-8 192-97-2	1.000 1.000 1.000 1.000 1.000
	(1R,2S,5R,6S,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane (1R,2R,5R,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane PFOA and individual salts and esters of PFOA Scope of chemical substance group: Based on EU POPs regulation Polycyclic aromatic hydrocarbons (PAHs) Benzo[a]pyrene (BaP) Benzo[e]pyrene (BeP) Benzo[a]anthracene (BaA)	678970-16-6 678970-17-7 - 50-32-8 192-97-2 56-55-3	1.000 1.000 1.000 1.000 1.000 1.000
	(1R,2S,5R,6S,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane (1R,2R,5R,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane PFOA and individual salts and esters of PFOA Scope of chemical substance group: Based on EU POPs regulation Polycyclic aromatic hydrocarbons (PAHs) Benzo[a]pyrene (BaP) Benzo[a]pyrene (BeP) Benzo[a]anthracene (BaA) Chrycene (CHR)	678970-16-6 678970-17-7 - 50-32-8 192-97-2	1.000 1.000 1.000 1.000 1.000 1.000
	(1R,2S,5R,6S,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane (1R,2R,5R,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane PFOA and individual salts and esters of PFOA Scope of chemical substance group: Based on EU POPs regulation Polycyclic aromatic hydrocarbons (PAHs) Benzo[a]pyrene (BaP) Benzo[e]pyrene (BeP) Benzo[a]anthracene (BaA)	678970-16-6 678970-17-7 - 50-32-8 192-97-2 56-55-3	1.000 1.000 1.000 1.000 1.000 1.000 1.000
	(1R,2S,5R,6S,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane (1R,2R,5R,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane PFOA and individual salts and esters of PFOA Scope of chemical substance group: Based on EU POPs regulation Polycyclic aromatic hydrocarbons (PAHs) Benzo[a]pyrene (BaP) Benzo[a]pyrene (BeP) Benzo[a]anthracene (BaA) Chrycene (CHR)	678970-16-6 678970-17-7 - - 50-32-8 192-97-2 56-55-3 218-01-9	1.000 1.000 1.000 1.000 1.000 1.000 1.000
	(1R,2S,5R,6S,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane (1R,2R,5R,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane PFOA and individual salts and esters of PFOA Scope of chemical substance group: Based on EU POPs regulation Polycyclic aromatic hydrocarbons (PAHs) Benzo[a]pyrene (BaP) Benzo[a]pyrene (BeP) Benzo[a]anthracene (BaA) Chrycene (CHR) Benzo[b]fluoranthene (BbFA)	678970-16-6 678970-17-7 - 50-32-8 192-97-2 56-55-3 218-01-9 205-99-2	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000
	(1R,2S,5R,6S,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane (1R,2R,5R,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane PFOA and individual salts and esters of PFOA Scope of chemical substance group: Based on EU POPs regulation Polycyclic aromatic hydrocarbons (PAHs) Benzo[a]pyrene (BaP) Benzo[a]pyrene (BeP) Benzo[a]anthracene (BaA) Chrycene (CHR) Benzo[b]fluoranthene (BbFA) Benzo[j]fluoranthene (BjFA)	678970-16-6 678970-17-7 - 50-32-8 192-97-2 56-55-3 218-01-9 205-99-2 205-82-3 207-08-9	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000
3	(1R,2S,5R,6S,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane (1R,2R,5R,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane PFOA and individual salts and esters of PFOA Scope of chemical substance group: Based on EU POPs regulation Polycyclic aromatic hydrocarbons (PAHs) Benzo[a]pyrene (BaP) Benzo[a]anthracene (BaA) Chrycene (CHR) Benzo[b]fluoranthene (BbFA) Benzo[k]fluoranthene (BkFA) Benzo[k]fluoranthene (BkFA) Dibenzo[a,h]anthracene (DBAhA)	678970-16-6 678970-17-7 - 50-32-8 192-97-2 56-55-3 218-01-9 205-99-2 205-82-3	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000
3	(1R,2S,5R,6S,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane (1R,2R,5R,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane PFOA and individual salts and esters of PFOA Scope of chemical substance group: Based on EU POPs regulation Polycyclic aromatic hydrocarbons (PAHs) Benzo[a]pyrene (BaP) Benzo[a]pyrene (BeP) Benzo[a]anthracene (BaA) Chrycene (CHR) Benzo[b]fluoranthene (BbFA) Benzo[k]fluoranthene (BkFA) Benzo[k]fluoranthene (BkFA) Dibenzo[a,h]anthracene (DBAhA) Specific phthalates (DEHP, DBP, BBP, DIBP)	678970-16-6 678970-17-7 - 50-32-8 192-97-2 56-55-3 218-01-9 205-99-2 205-82-3 207-08-9 53-70-3	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000
3	(1R,2S,5R,6S,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane (1R,2R,5R,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane PFOA and individual salts and esters of PFOA Scope of chemical substance group: Based on EU POPs regulation Polycyclic aromatic hydrocarbons (PAHs) Benzo[a]pyrene (BaP) Benzo[e]pyrene (BeP) Benzo[a]anthracene (BaA) Chrycene (CHR) Benzo[b]fluoranthene (BbFA) Benzo[k]fluoranthene (BkFA) Dibenzo[a,h]anthracene (DBAhA) Specific phthalates (DEHP, DBP, BBP, DIBP) Bis (2-ethylhexyl) phthalate (DEHP)	678970-16-6 678970-17-7 - 50-32-8 192-97-2 56-55-3 218-01-9 205-99-2 205-82-3 207-08-9 53-70-3 117-81-7	1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000
2 3	(1R,2S,5R,6S,9S,10S)-1,2,5,6,9,10-Hexabromocyclododecane (1R,2R,5R,6S,9S,10R)-1,2,5,6,9,10-Hexabromocyclododecane PFOA and individual salts and esters of PFOA Scope of chemical substance group: Based on EU POPs regulation Polycyclic aromatic hydrocarbons (PAHs) Benzo[a]pyrene (BaP) Benzo[a]pyrene (BeP) Benzo[a]anthracene (BaA) Chrycene (CHR) Benzo[b]fluoranthene (BbFA) Benzo[k]fluoranthene (BkFA) Benzo[k]fluoranthene (BkFA) Dibenzo[a,h]anthracene (DBAhA) Specific phthalates (DEHP, DBP, BBP, DIBP)	678970-16-6 678970-17-7 - 50-32-8 192-97-2 56-55-3 218-01-9 205-99-2 205-82-3 207-08-9 53-70-3	1.000 1.000 1.000 1.000 1.000

35	C9-C14 Perfluorocarboxylic acids (PFCAs), their salts and related substance			
	Scope of chemical substance group: As per the EU REACH Regulation (EU) 2021/1297) PFCAs (C9-C14)	-	1.000	
36	Phenol, Isopropylated Phosphate (3:1); PIP (3:1)			
	Phenol, Isopropylated Phosphate (3:1); PIP (3:1)	68937-41-7	1.000	
37	2-(2H-benzotriazol-2-yl)-4,6-di-tert-pentylphenol; UV-328			
	2-(2H-benzotriazol-2-yl)-4,6-di-tert-pentylphenol; UV-328	25973-55-1	1.000	
38	Dechlorane plus			
	Dechlorane plus (includes its syn-isomer and anti-isomer)	13560-89-9 135821-03-3 135821-74-8	1.000	
39	PFHxS, its salts and PFHxS-related compounds			
	Scope of chemical substance group: Based on EU POPs regulation	-	1.000	
40	$\label{eq:constraint} \begin{array}{ c c c } \hline \textbf{Medium-chain chlorinated paraffins (MCCPs)} \\ \hline \textbf{(i) Substances or mixtures that contain linear chloroalkanes with carbon chain lengths in the range C14-17 and chlorination levels at or exceeding 45 per cent chlorine by weight; \\ \hline \textbf{(ii) Substances or mixtures that contain linear C14-17 chloroalkanes of the following molecular formulae: $C_{14}H_{(30-y)}Cl_y$ where $y ≥ 5; $C_{15}H_{(32-y)}Cl_y$ where $y ≥ 5; $C_{16}H_{(34-y)}Cl_y$ where $y ≥ 6; $C_{17}H_{(36-y)}Cl_y$ where $y ≥ 6. } \end{array}$	-	1.000	
41	$\label{eq:chain perfluorocarboxylic acids, their salts} and related compounds \\(i) Long-chain perfluorocarboxylic acids or their salts : A homologous series of substances with the molecular formula of C_nF_{2n+1}COOH (where 8 \leq n \leq 20); \\(ii) Compounds related to long-chain perfluorocarboxylic acids : Any substance that is a precursor and may transform to long-chain perfluorocarboxylic acids, where the perfluorinated alkyl moiety has the formula C_nF_{2n+1} (where 8 \leq n \leq 20) and is directly bonded to any chemical moiety other than a fluorine, chlorine or bromine atom. \\$	-	1.000	

[Substances for Reduction]

SUB- STANCE GROUP No.	Chemical Substance Name (Detailed)	CAS No	conversion coefficient
17	Antimony and its compounds		• •
	Antimony	7440-36-0	1.000
	Antimony trichloride	10025-91-9	0.534
	Antimony trioxide	1309-64-4	0.835
	Antimony pentoxide	1314-60-9	0.753
	Sodium antimonate	15432-85-6	0.632
8	Other antimony compounds Arsenic and its compounds	-	-
0	Arsenic	7440-38-2	1.000
	Arsine	7784-42-1	0.961
	Pentachloroarsorane	22441-45-8	0.297
	Diarsenic pentoxide	1303-28-2	0.652
	Pentafluoro arsorane	7784-36-3	0.441
	Arsenic trichloride	7784-34-1	0.413
	Arsenic trioxide	1327-53-3	0.758
	Arsenic trifluoride	7784-35-2	0.568
	Arsenic sulphide	1303-33-9	0.609
	Dimethyl arsinic acid	75-60-5	0.543
	Arsenicacid	7778-39-4	0.528
	Sodium arsenate dibasic	7778-43-0	0.403
	Benzene arsonic acid	98-05-5	0.371
	Ammonium methane arson acid	2321-53-1	0.477
	Gallim arsenide	1303-00-0	0.518
	Other arsenic compounds	-	-
9	Beryllium and its compounds	7440 44 7	1 000
	Beryllium Beryllium ablasida	7440-41-7	1.000
	Beryllium chloride	7787-47-5 15191-85-2	0.113 0.164
	Beryllium silicate Beryllium oxide	1304-56-9	0.164
	Beryllium nitrate	13597-99-4	0.360
	Beryllium chloride	7787-49-7	0.000
	Beryllium sulfate tetrahydrate	7787-56-6	0.051
	Beryllium sulphate	13510-49-1	0.086
	Other beryllium compounds	-	-
0	Nickel compounds	P	P
	Nickel	7440-02-0	1.000
	Nickel acetate tetrahydrate	6018-89-9	0.332
	Nickel(II) oxide	1313-99-1	0.786
	Nickel nitrate hexahydrate	13478-00-7	0.202
	Nickel(II) hydroxide	12054-48-7	0.633
	Nickel carbonate	3333-67-3	0.494
	Nickel carbonyl	13463-39-3	0.344
	Nickel dimethyldithiocarbamate	15521-65-0	0.196
	Nickel subsulfide	12035-72-2	0.244
	Nickel(II) sulphate	7786-81-4	0.379
4	Other nickel compounds	-	-
1	Selenium and its compounds Selenium	7782-49-2	1.000
	Selenous acid	7783-00-8	0.612
	Other selenium compounds		0.012
2	Brominated flame retardant (except PBB, PBDE)		
-	Brominated flame retardant which comes under notation of ISO 1043-4 code number FR(14)	-	1.000
	[Aliphatic/alicyclic brominated compounds] Brominated flame retardant which comes under notation of ISO 1043-4 code number FR(15)		1.000
	[Aliphatic/alicyclic brominated compounds in combination with antimony compounds] Brominated flame retardant which comes under notation of ISO 1043-4 code number FR(16) [Aromatic brominated compounds (excluding brominated diphenyl ether and brominated biphenyls)]		1.000
	Brominated flame retardant which comes under notation of ISO 1043-4 code number FR(17) [Aromatic brominated compounds (excluding brominated diphenyl ether and brominated biphenyls) in combination with antimony compounds]	-	1.000
	Brominated flame retardant which comes under notation of ISO 1043-4 code number FR(22) [Aliphatic/alicyclic chlorinated and brominated compounds]	-	1.000
	Brominated flame retardant which comes under notation of ISO 1043-4 code number FR(42) [Brominated organic phosphorus compounds]	-	1.000

Poly(2,6-dibromo-phenylene oxide)	69882-11-7	1.00
Tetra-decabromo-diphenoxy-benzene	58965-66-5	1.00
1,2-Bis(2,4,6-tribromo-phenoxy) ethane	37853-59-1	1.00
3,5,3',5'-Tetrabromo-bisphenol A (TBBA)	79-94-7	1.00
TBBA, unspecified	30496-13-0	1.00
TBBA-epichlorhydrin oligomer	40039-93-8	1.00
TBBA-TBBA-diglycidyl-ether oligomer	70682-74-5	1.00
TBBA carbonate oligomer	28906-13-0	1.00
TBBA carbonate oligomer, phenoxy end capped	94334-64-2	1.00
TBBA carbonate oligomer, 2,4,6-tribromo-phenol terminated	71342-77-3	1.00
TBBA-bisphenol A-phosgene polymer	32844-27-2	1.00
Brominated epoxy resin end-capped with tribromophenol	139638-58-7	1.00
Brominated epoxy resin end-capped with tribromophenol	135229-48-0	1.00
TBBA-(2,3-dibromo-propyl-ether)	21850-44-2	1.00
TBBA bis-(2-hydroxy-ethyl-ether)	4162-45-2	1.00
TBBA-bis-(allyl-ether)	25327-89-3	1.00
TBBA-dimethyl-ether	37853-61-5	1.00
Tetrabromo-bisphenol S	39635-79-5	1.00
TBBS-bis-(2,3-dibromo-propyl-ether)	42757-55-1	1.00
2,4-Dibromo-phenol	615-58-7	1.00
2,4,6-tribromo-phenol	118-79-6	1.00
Pentabromo-phenol	608-71-9	1.00
2,4,6-Tribromo-phenyl-alltl-ether	3278-89-5	1.00
Tribromo-phenyl-allyl-ether, unspecified	26762-91-4	1.00
Hexabromo-cyclo-dodecane (HBCD), unspecified	3194-55-6	1.00
Tetrabromo-chyclo-octane	31454-48-5	1.00
1,2-Dibromo-4-(1,2 dibromo-methyl)-cyclo-hexane	3322-93-8	1.00
TBPA Na salt	25357-79-3	1.00
Tetrabromo phthalic anhydride	632-79-1	1.00
Bis(methyl)tetrabromo-phtalate	55481-60-2	1.00
Bis(2-ethlhexyl)tetrabromo-phtalate	26040-51-7	1.00
2-Hydroxy-propyl-2-(2-hydroxy-ethoxy)-ethyl-TBP	20566-35-2	1.00
TBPA, glycol-and propylene-oxide esters	75790-69-1	1.00
N,N'-Ethylene –bis-(tetrabromo-phthalimide)	32588-76-4	1.00
Ethylene-bis85,6-dibromo-norbornane-2,3-dicarboximide)	52907-07-0	1.00
2,3-Dibromo-2-butene-1,4-diol	3234-02-4	1.00
Dibromo-neopentyl-glycol	3296-90-0	1.00
Dibromo-propanol	96-13-9	1.00
Tribromo-neopentyl-alcohol	36483-57-5	1.00
Poly tribromo-styrene	57137-10-7	1.00
Tribromo-styrene	61368-34-1	1.00
Dibromo-styrene grafted PP	171091-06-8	1.00
Poly-dibromo-styrene	31780-26-4	1.00
Bromo-/Chloro-paraffins	68955-41-9	1.00
Bromo-/Chloro-alpha-olefin	82600-56-4	1.00
Vinylbromide	593-60-2	1.00
Tris-(2,3-dibromo-propyl)-isocyanurate	52434-90-9	1.00
Tris(2,4-Dibromo-phenyl) phosphate	49690-63-3	1.00
Tris(tribromo-neopentyl) phosphate	19186-97-1	1.00
Chlorinated and brominated phosphate ester	125997-20-8	1.00
Pentabromo-toluene	87-83-2	1.00
Pentabromo-benzyl bromide	38521-51-6	1.00
1,3-Butadiene homopolymer,brominated	68441-46-3	1.00
Pentabromo-benzyl-acrylate, monomer	59447-55-1	1.00
Pentabromo-benzyl-acrylate, polymer	59447-57-3	1.00
Decabromo-diphenyl-ethane	61262-53-1	1.00
Tribromo-bisphenyl-maleinimide	59789-51-4	1.00
Brominated trimethylphenyl-lindane		1.00
Other Brominated Flame Retardant		1.00
Poly(vinyl chloride)	9002-86-2	1.00
Phthalates (except DEHP, DBP, BBP, DIBP)	· · · · · · · · · · · · · · · · · · ·	
Diisononyl phthalate (DINP)	28553-12-0	1.00
1,2-Benzenedicarboxylic acid diisodecyl ester (DIDP)	26761-40-0	1.00
Di-n-octyl phthalate (DNOP)	117-84-0	1.00
Other phthalates		1.00

[Substances for Reduction]

SUB- STANCE GROUP No.	Chemical Substance Name (Detailed)	CAS No	conversion coefficient
25	Creosotes		-
	Creosote	8001-58-9	1.000
	Creosote oil	61789-28-4	1.000
	Distillates(coal tar) Naphthalene oils	84650-01-4	1.000
	Creosote oil, Acenaphthalene fraction	90640-84-9	1.000
	Distillates(coal tar) upper	65996-91-0	1.000
	Anthracene oil	90640-80-5	1.000
	Tar acids, Coal, Crude	65996-85-2	1.000
	Creosote, Wood	8021-39-4	1.000
	Low temperature tar oil, alkaline	122384-78-5	1.000
26	Formaldehyde	50-00-0	1.000
42	Perfluoroalkyl and polyfluoroalkyl substances (PFAS)		
	Fluorinated organic chemicals that contain at least one fully fluorinated carbon atom	-	1.000

[Casio Green Components - Exempted Uses for Prohibited Substances

This section outlines the range of prohibited uses for chemical substances with control levels of "prohibited" in the "List of Chemical Substances Group" in Appendix 1.

Note that the prohibited uses may include some designated "exempted uses" that are not prohibited. This list shows all the exempted uses stipulated by the Casio Group.

	ted uses that do not apply to Casio products have been omitted.	datas of applicability
No.	Exempted Uses	dates of applicability
6(a)-I	Lead as an alloying element in machining steels containing up to 0.35% lead by weight and lead as an alloying element in batch hot-dip galvanized steel parts containing up to 0.2% lead by weight	(Deadline to be determined)
6(b)-I	Lead as an alloying element in aluminium containing up to 0.4% lead by weight, provided that it is derived from recycled lead-containing aluminium scrap.	(Deadline to be determined)
6(b)-II	Lead as an alloying element in aluminium intended for machining purposes containing up to 0.4% lead by weight.	(Deadline to be determined)
6(c)	Copper alloys containing up to 4% lead by weight	(Deadline to be determined)
7(a)	Lead in high melting point solders (lead-based alloys containing 85% or more lead by weight)	(Deadline to be determined)
7(b)	Lead in solders for servers, storage devices, storage array systems, network infrastructure equipment for signal switching, transmission and management of telecommunications networks	(No deadline)
7(c)-l	Electrical and electronic components containing lead in glasses or ceramics other than the dielectric ceramic of capacitors (e.g. piezoelectric devices) or in a glass or ceramic matrix compound	(Deadline to be determined)
/(c)-II	Lead in dielectric ceramic in capacitors with a rated voltage of 125V AC or 250V DC or more	(Deadline to be determined)
3(b)-I	 Cadmium and its compounds in electrical contacts used in: circuit breakers, thermal sensing controls, thermal motor protectors (excluding hermetic thermal motor protectors), AC switches rated at: 6 A and more at 250 V AC and more, or 12 A and more at 125 V AC and more, DC switches rated at 20 A and more at 18 V DC and more, and Switches for use with voltage supply frequencies of 200Hz or greater. 	(No deadline)
3(a)	Lead in white glass used for optical purposes	(Deadline to be determined)
3(b)-l	Lead in ion-coloured optical filter glass types	(Deadline to be determined)
3(b)-II	Cadmium in striking optical filter glass, except for uses falling under point 39 of this Annex	(Deadline to be determined)
3(b)-III	Cadmium and lead in glazes used for reflectance standards	(Deadline to be determined)
I5(a)	Lead in solders intended to complete a viable electrical connection between the semiconductor die and the carrier in integrated circuit flip chip packages where at least one of the following criteria applies: - 90 nm semiconductor technology node and above. - Single die 300 mm2 and above in any semiconductor technology node. - Stacked die packages with a die 300 mm2 and above or a silicon interposer 300 mm2 and above.	(Deadline to be determined)
24	Lead in solders for soldering machined through-hole discoidal and planar array ceramic multilayer capacitors	(Deadline to be determined)
29	Lead in crystal glass as defined in Annex I (Categories 1, 2, 3 and 4) of Council Directive 69/493/EEC	(Deadline to be determined)

There are currently no exemptions

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Publishing Department :	Casio Computer Co., Ltd.
	2-1,Sakae-cho 3-chome, Hamura-shi,
	Tokyo 205-8555, JAPAN
E-mail :	casio_green_procurement@casio.co.jp

