# General Standard on Chemical Substances Management (For suppliers)

Version 24.0

NTT Innovative Devices Corporation
Procurement Management Division
Quality Assurance Division

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# 1. Introduction

NTT Innovative Devices Corporation intends to make clear our management criteria and strengthen controls on procurement. This document presents our voluntary standard for the chemical substances;

- (1) Chemical substances contained in parts and materials incorporated into our products and their packaging materials, and packaging materials used for shipping of our products\*1) and
- (2) Chemical substances used in production processes of our products.

We will not purchase any more, in principle, such parts, materials, packaging materials that contain "Banned substance" or use them in the production processes. When our requests for green purchasing inquiry and information are not met, we may have to discontinue our business relationships. When these requirements are met, we give priority to procurement of the products with reduced environmental impact.

We would like to sincerely ask our suppliers to cooperate with our environmental conservation activities on the basis of understanding the purport of our policy and this standard.

If you have questions or advisement, please apply to our contact.

\*1) "Parts and materials, and packaging materials" hereunder shall correctly mean part/ raw materials/ half-finished products/ units/ apparatus/ cable/ display material (ink, labels, etc.) that are incorporated in our products and packaging materials directly-contacting with them (trays, plastic bags, etc.), and packaging materials used for shipping of our products (boxes, trays, tapes, cushions, etc.).

# 2. Scope

This standard shall be applied to parts and materials incorporated into our products and their packaging materials, and packaging materials used for the shipping of our products.

### 3. Definition of terms

# 1) Banned substances in the production process

\_Mean the substances whose use should be banned in the production process of the supplies. These correspond to the ozone depleting substances specified by IEC 62474 database\*2). (Separate Table 1 of Annex)

#### 2) Banned substances

\_Mean the substances that should not be intentionally contained in and/or added as contents of additive to the supplies. If they are unintentionally contained beyond our designated levels, purchase is not implemented. This category includes some materials in IEC 62474 database and/or banned substances specified by NTT (Nippon Telegraph and Telephone Corporation). (Separate Table 2 of Annex)

#### 3) Controlled substances

\_Mean the substances whose contents, containing areas, and aims should be controlled. These substances correspond to IEC 62474 database materials other than above banned substances and substances of very high concern (SVHC) in REACH regulation. (Separate Table 3 of Annex)

#### 4) Specific substances

\_Mean the substances contained in parts, materials and packaging materials or used in their production processes, and which have a possibility of giving an environmental impact. Above (1)-(3) collectively mean "Specific substances".

# 5) Additional survey substances

\_Mean the substances specified by our customer, and whose contents, containing areas, and aims should be controlled.

# 6) Content

\_Means the substances intentionally included as materials (components) or additives, or unintentionally included as impurity and whose amount of content exceeds its threshold level.

# 7) Content information

\_Means the substance names, CAS number, amount of content, composition, main purpose, parts name of specified chemical substances, and their masses.

# 4. Requirements

# 4-1. Specified control of chemicals and materials

No.	Requirements	Contents
(1)	Not to use Banned substances in process	# "Banned substances" (used in process) means the substances prohibited for use in process, assembling, mounting, fabricating, processing or forming.  (Defined in Separate Table 1 of Annex)
(2)	Not to contain Banned substances	# "Banned substances" (contained) means the substances which should not be contained in parts, materials and packaging materials.  (Defined in Separate Table 2 of Annex)  *If it is contained, purchase is not implemented.  *If you note that delivered products contain banned substances, you should inform to us with documents as soon as possible.  \$ In the case of the content less than the limit level, if you know its value, please disclose the content information.  *If you note mistakes in the content information, you should inform to us with documents as soon as possible.
(3)	To properly manage the controlled substances	# The substance should be controlled, and the information about the amount of content should be known. (Defined in Separate Table 3 of Annex) *Please disclose the content information. *If you note mistakes in the content information, you should inform to us with documents as soon as possible.

<sup>#:</sup> Essential requirement/\$: Essential requirement if applicable

# 4-2. Change management

If there are important changes concerning the material, parts and process, please inform us with documents about the details of the changes concerning the above Section 4-1.

<sup>\*2)</sup> The IEC 62474 database is available at: http://std.iec.ch/iec62474.

#### 5. Submission of documents

We require suppliers to submit the below documents\*3).

No.	Documents	Substances
(a)	"Non-containing Certification of Banned Substances" (Form 1-1)	"Banned substances"
(b)	"Chemical Substances Survey Sheet" (Form 2-1), or "chemSHERPA*4)"	"Banned substances" "Controlled substances" ("Additional survey substances")
(c)	"SVHC Survey Sheet" (Form 2-2)	"Controlled substances" ("SVHC")
(d)	List of Total Constructional Elements. (Form 3)	

<sup>\*3)</sup> We may require other survey forms to comply with our customer request.

# 6. Operation

Each supplier is requested to follow the "General Standard on Chemical Substances Management" product by product for the purchase specifications or purchase order.

# 7. Establishment and revision history

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1st edition: Established on Oct.21, 2003 / Enforced on Nov.10, 2003
2<sup>nd</sup> edition: Established on Mar.22, 2005 / Enforced on Apr.1, 2005
3<sup>rd</sup> edition: Established on Jan.20, 2006 / Enforced on Jan.23, 2006
4th edition: Established on May 22, 2006 / Enforced on Jun. 1, 2006
5th edition: Established on May 18, 2007 / Enforced on Jun. 1, 2007
6th edition: Established on Mar. 27, 2008 / Enforced on Apr. 1, 2008
7th edition: Established on Apr. 21, 2008 / Enforced on May 1, 2008
8th edition: Established on Nov. 30, 2009 / Enforced on Dec. 1, 2009
9<sup>th</sup> edition: Established on May 28, 2010 / Enforced on Jun. 1, 2010
10th edition: Established on Nov. 26, 2010 / Enforced on Dec. 1, 2010
11th edition: Established on May 11, 2011 / Enforced on Jun. 1, 2011
12th edition: Established on Sep. 21, 2012 / Enforced on Oct. 1, 2012
13th edition: Established on Sep. 13, 2013 / Enforced on Oct. 1, 2013
14th edition: Established on Sep. 12, 2014 / Enforced on Oct. 1, 2014
15th edition: Established on Sep. 11, 2015 / Enforced on Oct. 1, 2015
16th edition: Established on Sep. 16, 2016 / Enforced on Oct. 1, 2016
17th edition: Established on Sep. 13, 2017 / Enforced on Oct. 1, 2017
18th edition: Established on Jun. 15, 2018 / Enforced on Jul. 1, 2018
19th edition: Established on Mar. 20, 2019 / Enforced on Apr. 1, 2019
20th edition: Established on Oct. 18, 2019 / Enforced on Nov. 1, 2019
21st edition: Established on Mar. 19, 2021 / Enforced on Apr. 1, 2021
22<sup>nd</sup> edition: Established on Sep. 15, 2021 / Enforced on Oct. 1, 2021
23rd edition: Established on Sep. 16, 2022 / Enforced on Oct. 1, 2022
24th edition: Established on Sep. 12, 2023 / Enforced on Sep. 12, 2023
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<sup>\*4)</sup> Please submit the latest version of "chemSHERPA" downloaded at the following URL: <a href="https://chemsherpa.net/chemSHERPA/english/">https://chemsherpa.net/chemSHERPA/english/</a>.

# Ref. Main revised terms at 24th Ed

Name changed to NTT Innovative Devices Corporation

# **General Standard Chemical Substances Management Ver. 24.0 ANNEX**

# **Table 1 Banned substances in production processes**

The following substances are banned from being used in production process of the products. These correspond to the ozone depleting substances in IEC 62474 database.

No.	Substances Group	Substances
	Ozone-depleting substances defined by Montreal Protocol	Chlorofluorocarbons (CFCs)
		1,1,1-Trichloroethane
		Carbon tetrachloride
0-1		Halons
		HBFCs
		Methyl bromide
		Bromochloromethane
		HCFCs

# **Table 2 Banned substances**

The following substances are banned from being contained in and/or being added to the products that delivered to us. If they are unintentionally contained beyond threshold levels, purchase is not implemented. This category includes some materials in IEC 62474 database and/or banned substances specified by NTT (Nippon Telegraph and Telephone Corporation).

No.	IEC/ NTT*1)	Substances	Threshold levels (Remarks)
1-1	IEC	Cadmium/Cadmium compounds	Threshold levels and
1-2	IEC	Hexavalent chromium	exempted applications are
1-3	IEC Lead/Lead compounds		indicated in Tables 2a and
1-4	IEC, N Mercury/Mercury compounds		2b, respectively.
1-5	IEC, N	Polybrominated biphenyls (PBBs)	- (Substances banned by RoHS directive)
1-6	IEC, N	Polybrominated diphenylethers (PBDEs)	
1-7	IEC	Bis(2-ethylhexyl) phthalate (DEHP) (CAS No. 117-81-7)	
1-8	IEC	Benzyl butyl phthalate (BBP) (CAS No. 85-68-7)	
1-9	IEC	Dibutyl phthalate (DBP) (CAS No. 84-74-2)	
1-10	IEC	Diisobutyl phthalate (DIBP) (CAS No. 84-69-5)	
1-11	IEC, N	Bis(Tributyl tin) oxide (TBTO) (CAS No. 56-35-9)	Intentionally added, or 1000 ppm
1-12	IEC	Tri-substituted organostannic compounds (TBT and TPT, etc.)	Intentionally added, or 1000 ppm
1-13	IEC	Dibutyltin (DBT) compounds	1000 ppm
1-14	IEC	Dioctyltin (DOT) compounds	
1-15	IEC, N	Polychlorinated biphenyls (PCBs) and specific substitutes (Ugilec141, Ugilec121, Ugilec21, DBBT)	Intentionally added
1-16	IEC	Polychlorinated terphenyls (PCTs)	50 ppm
1-17	IEC, N	Polychlorination naphthalenes (PCNs) (1 or more [ The number of chlorine ] )	Intentionally added
1-18	IEC, N	Short-chain chlorinated paraffins (carbon chain length 10-13)	Intentionally added, or 1000 ppm
1-19	IEC, N	Asbestos (Amosite, Crocidolite, Chrysotile, Actinolite, Anthophyllite, and Tremolite)	Intentionally added
1-20	IEC	Azo compounds that produces specific amines (Table 2c) by decomposition	30 ppm
1-21	IEC, N	Ozone-depleting substances (CFCs, 1,1,1-Trichloroethane, Carbon tetrachloride, Halons, HBFCs, Methyl bromide, Bromochloromethane, HCFCs)	Intentionally added
1-22	IEC	Radioactive substances	Intentionally added

			T =
1-23	IEC, N	2-(2H-1,2,3-benzotriazol-2-yl)-4,6-di-tert-butylphenol(CAS No. 3846-71-7)	Intentionally added, or 1000 ppm
		Perfluorooctane sulfonate (PFOS/PFOSF)	Intentionally added on
1-24	IEC, N	(C <sub>8</sub> F <sub>17</sub> SO <sub>2</sub> X; X=OH, O-M <sup>+</sup> , halide, amide, and other	Intentionally added, or
		derivatives including polymers)	1000 ppm
			0.025 ppm
1-25	IEC	Perfluorooctanoic acid (PFOA) and its salts, and PFOA-	The total concentration of
1-23	IEC	related substances	PFOA-related substances:
			1 ppm
1-26	IEC	Dimethyl fumarate (CAS No. 624-49-7)	0.1 ppm
1-27	IEC, N	Hexabromocyclododecane (HBCDD)	Intentionally added, or 1000 ppm
1.20	IEC	Phenol, isopropylated phosphate (PIP (3:1))	
1-28	IEC	(CAS No. 68937-41-7)	Intentionally added
		Parfly and and availage side with 0 to 14 and an atoms (CO C14	0.025 ppm
1-29	IEC	Perfluorocarboxylic acids with 9 to 14 carbon atoms (C9-C14 PFCAs) and their salts, and C9-C14 PFCA-related	The total concentration of
1-29	IEC	substances	C9-C14 PFCA-related
		Substatices	substances: 0.26ppm
1-30		Red phosphorus (use in resin only)	Intentionally added
1-31	N	Hexachlorobenzene (HCB)	Intentionally added
1-32	N	Aldrin	(Banned substances
1-33	N	Dieldrin	specified by NTT)
1-34	N	Endrin	
1-35	N	DDT	
1-36	N	Chlordanes (Heptachlor)	
1-37	N	N,N-Ditolyl-p-phenylenediamine, N-Tolyl-N-xylyl -p-	
1-37	11	phenylenediamine, and N,N-Dixylyl -p- phenylenediamine	
1-38	N	2,4,6-Tri Tertiary Butyl Phenol	
1-39	N	Toxaphene	
1-40	N	Mylex	
1-41	N	Yellow-phosphorus match	
1-42	N	Benzidines	
1-43	N	4-Aminodiphenyls	
1-44	N	4-Nitrodiphenyls	
1-45	N	Bis(chloromethyl)ether	
1-46	N	Beta-naphthylamines	
1-47	N	Rubber adhesive containing benzene beyond 5wt%	
1-48	N	Cyanogen compounds	
1-49	N	Organophosphorous compounds (Parathion, Methyl-	
		parathion, Methyl-demeton, and EPN)	_
1-50	N	Polychlorinated dibenzofuran (PCDF)	_
1-51	N	Polychlorinated dibenzo-p-dioxin (PCDD)	_
1-52	N	Coplanar PCB (Co-PCB)	_
1-53	N	Kelthane or Dicofol	_
1-54	N	Hexachlorobuta-1,3-diene	_
1-55	N	Pentachlorobenzene	_
1-56	N	Alfa-hexachlorocyclohexane	_
1-57	N	Beta-hexachlorocyclohexane	_
1-58	N	Gamma-hexachlorocyclohexane/Lindane	-
1-59	N	Chlordecone	_
1-60	N	Endosulfan	_
1-61	N	Pentachlorophenol, and individual salts and esters	

<sup>\*1)</sup> IEC: Specific substances in IEC 62474 database, N: Banned substances specified by NTT.

Table 2a Substances banned by RoHS directive and threshold levels\*2)

Substance name	Threshold level	
Cadmium/Cadmium compounds	100 ppm	The sum of the
Hexavalent chromium	1000 ppm	concentrations of 4
Lead/Lead compounds	1000 ppm	substances in packaging materials: 100 ppm
	300 ppm (for vinyl chloride cables)	
Mercury/Mercury compounds	1000 ppm	
Polybrominated biphenyls (PBBs)	1000 ppm	
Polybrominated diphenylethers	1000 ppm	
(PBDEs)		
Bis(2-ethylhexyl) phthalate	1000 ppm	
(DEHP)		
Benzyl butyl phthalate (BBP)	1000 ppm	
Dibutyl phthalate (DBP)	1000 ppm	
Diisobutyl phthalate (DIBP)	1000 ppm	

<sup>\*2)</sup> Concentration should be calculated based on the mass of each part uniformly containing above substances.

Table 2b Exempted applications from RoHS directive

Substance name	Exemption	Exempted application	
	code		
Cadmium the date decided		Cadmium and its compounds in electrical contacts used in: (Expires on the date decided by EU) - circuit breakers,	
compounds		- 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 at voltage supply frequency $\geq 200$ Hz.	
	Cd-13(b)-(II)	Cadmium in striking optical filter glass types. (Expires on the date decided by EU)	
	Cd-13(b)- (III)	Cadmium in glazes used for reflectance standards. (Expires on the date decided by EU)	
Lead/Lead compounds	Pb-5(b)	Lead in glass of fluorescent tubes not exceeding 0.2 % by weight. (Expires on the date decided by EU)	
•	Pb-6(a)-I	Lead as an alloying element in steel for machining purposes containing up to 0.35 % lead by weight and in batch hot dip galvanised steel components containing up to 0.2 % lead by weight. (Expires on the date decided by EU)	
	Pb-6(b)-II	Lead as an alloying element in aluminum for machining purposes with a lead content up to 0.4 % by weight. (Expires on the date decided by EU)	
	Pb-6(c)	Copper alloy containing up to 4 % lead by weight. (Expires on the date decided by EU)	
	Pb-7(a)	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead). (Expires on the date decided by EU)	
	Pb-7(c)-I	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound. (Expires on the date	

		decided by EU)
1	Pb-7(c)-II	Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC
	10-7(0)-11	or 250 V DC or higher. (Expires on the date decided by EU)
	Pb-13(a)	Lead in white glasses used for optical applications. (Expires on the date
		decided by EU)
		Lead in ion coloured optical filter glass types. (Expires on the date
		decided by EU)
decided by EU)		Lead in glazes used for reflectance standards. (Expires on the date
	Pb-15(a)	Lead in solders to complete a viable electrical connection between the
		semiconductor die and carrier within integrated circuit flip chip packages
		where at least one of the following criteria applies: (Expires on the date decided by EU)
		- a semiconductor technology node of 90 nm or larger;
		- a single die of 300 mm <sup>2</sup> or larger in any semiconductor technology
		node;
		- stacked die packages with die of 300 mm <sup>2</sup> or larger, or silicon
		interposers of 300 mm <sup>2</sup> or larger.
	Pb-18(b)	Lead as activator in the fluorescent powder (1 % lead by weight or less)
		of discharge lamps when used as sun tanning lamps containing phosphors
	D1 24	such as BSP (BaSi <sub>2</sub> O <sub>5</sub> :Pb). (Expires on the date decided by EU)
	Pb-24	Lead in solders for the soldering to machined through hole discoidal and
		planar array ceramic multilayer capacitors. (Expires on the date decided by EU)
	Pb-29	Lead bound in crystal glass as defined in Annex I (Categories 1, 2, 3 and
Pb-32 Lead oxide in seal frit u Krypton laser tubes. (E Pb-34 Lead in cermet-based to		4) of Council Directive 69/493/EEC. (Expires on the date decided by EU)
		Lead oxide in seal frit used for making window assemblies for Argon and
		Krypton laser tubes. (Expires on the date decided by EU)
		Lead in cermet-based trimmer potentiometer elements. (Expires on the
		date decided by EU)
Mercury/	Hg-1	Mercury in single capped (compact) fluorescent lamps not exceeding (per
Mercury		burner):
compounds		(f)-I For lamps designed to emit mainly light in the ultraviolet spectrum: 5 mg. (Expires on 24 February 2027)
		(f)-II For special purposes: 5 mg. (Expires on 24 February 2025)
	Hg-2(b)	Mercury in other fluorescent lamps not exceeding (per lamp):
	118 =(0)	(3) Non-linear tri-band phosphor lamps with tube diameter > 17 mm (e.g.
		T9): 10 mg. (Expires on 24 February 2025)
		(4)-I Lamps for other general lighting and special purposes (e.g.
		induction lamps): 15 mg. (Expires on 24 February 2025)
		(4)-II Lamps emitting mainly light in the ultraviolet spectrum: 15 mg.
		(Expires on 24 February 2027)
•	П~ 2	(4)-III Emergency lamps: 15 mg. (Expires on 24 February 2027)  Mercury in cold cathode fluorescent lamps and external electrode
	Hg-3	fluorescent lamps (CCFL and EEFL) for special purposes used in EEE
		placed on the market before 24 February 2022not exceeding (per lamp):
		(a) Short length ( $\leq 500$ mm): 3.5 mg. (Expires on 24 February 2025)
		(b) Medium length (> 500 mm and $\leq$ 1500 mm): 5 mg. (Expires on 24
February 2025)		February 2025)
		(c) Long length (>1500 mm): 13 mg. (Expires on 24 February 2025)
	Hg-4(a)-I	Mercury in low pressure non-phosphor coated discharge lamps, where
		the application requires the main range of the lamp- spectral output to be
		in the ultraviolet spectrum: up to 15 mg mercury may be used per lamp.
	Hg-4(b)	(Expires on 24 February 2027)  Mercury in High Pressure Sodium (vapour) lamps for general lighting
	11g <del>-4</del> (0)	whereary in ringh resource socioum (vapour) familys for general righting

	purposes not exceeding (per burner) in lamps with improved colour	
	rendering index Ra $> 80$ : P $\le 105$ W: 16 mg may be used per burner.	
	(Expires on 24 February 2027)	
Hg-4(c)	Mercury in other High Pressure Sodium (vapour) lamps for general	
	lighting purposes not exceeding (per burner): (Expires on 24 February	
	2027)	
	(I) $P \le 155 \text{ W}$ : 20 mg.	
	$(II)$ 155 W < P $\leq$ 405 W: 25 mg.	
	(III) P > 405 W: 25 mg.	
Hg-4(e)	Mercury in metal halide lamps (MH). (Expires on 24 February 2027)	
Hg-4(f)	(I) Mercury in other discharge lamps for special purposes not specifically	
	mentioned in the Annex of 2011/65/EU. (Expires on 24 February 2025)	
	(II) Mercury in high pressure mercury vapour lamps used in projectors	
	where an output ≥ 2000 lumen ANSI is required. (Expires on 24 February	
	2027)	
	(III) Mercury in high pressure sodium vapour lamps used for horticulture	
	lighting. (Expires on 24 February 2027)	
	(IV) Mercury in lamps emitting light in the ultraviolet spectrum. (Expires	
	on 24 February 2027)	

Table 2c Specific amines

Substance Chemical	CAS No.	Chemical Formula
Biphenyl-4-ylamine	92-67-1	C <sub>12</sub> H <sub>11</sub> N
Benzidine	92-87-5	$C_{12}H_{12}N_2$
4-chloro-o-toluidine	95-69-2	C <sub>7</sub> H <sub>8</sub> ClN
2-naphthylamine	91-59-8	C <sub>10</sub> H <sub>9</sub> N
o-aminoazotoluene	97-56-3	$C_{14}H_{15}N_3$
5-nitro-o-toluidine	99-55-8	$C_7H_8N_2O_2$
4-chloroaniline	106-47-8	C <sub>6</sub> H <sub>6</sub> ClN
4-methoxy-m-phenylenediamine	615-05-4	$C_7H_{10}N_2O$
4,4'-methylenedianiline	101-77-9	$C_{13}H_{14}N_2$
3,3'-dichlorobenzidine	91-94-1	$C_{12}H_{10}C_{12}N_2$
3,3'-dimethoxybenzidine	119-90-4	$C_{14}H_{16}N_2O_2$
3,3'-dimethylbenzidine	119-93-7	$C_{14}H_{16}N_2$
4,4'-methylenedi-o-toluidine	838-88-0	C <sub>15</sub> H <sub>18</sub> N <sub>2</sub>
6-methoxy-m-toluidine	120-71-8	C <sub>8</sub> H <sub>11</sub> NO
4,4'-methylene-bis(2-chloroaniline)	101-14-4	$C_{13}H_{12}C_{12}N_2$
4,4'-oxydianiline	101-80-4	$C_{12}H_{12}N_2O$
4,4'-thiodianiline	139-65-1	$C_{12}H_{12}N_2S$
o-toluidine	95-53-4	C <sub>7</sub> H <sub>9</sub> N
4-methyl-m-phenylenediamine	95-80-7	$C_7H_{10}N_2$
2,4,5-trimethylaniline	137-17-7	C <sub>9</sub> H <sub>13</sub> N
o-anisidine	90-04-0	C <sub>7</sub> H <sub>9</sub> NO
4-aminoazobenzene	60-09-3	$C_{12}H_{11}N_3$

#### **Table 3 Controlled substances**

Substances with control mean that the content of the substances in the products should be confirmed and controlled appropriately. "Contained" means situations in which the substances are intentionally added to, blended with, or adheres to any parts of the supplies, or in which they are unintentionally contained beyond the threshold levels. This category corresponds to IEC 62474 database materials other than banned substances shown in Table 2 and substances of very high concern (SVHC) in REACH regulation. The concentration should be calculated for each part of products.

No.	IEC*3)	Substances	Threshold levels (Remarks)
2-1	IEC	Beryllium Oxide (BeO) (CAS No. 1304-56-9)	1000 ppm
2-2	IEC	Nickel (external application only)	Intentionally added
2-3		Polyvinyl Chloride (PVC) and PVC copolymers	1000 ppm
2-4	IEC	Brominated flame retardants (except PBB, PBDE, and HBCDD)	1000 ppm
2-5	IEC	Chlorinated flame retardants	1000 ppm
2-6	IEC	Perchlorates	0.006 ppm
2-7	IEC	Fluorinated greenhouse gases (PFC, SF6, HFC)	Intentionally added
2-8	IEC	Formaldehyde (CAS No. 50-00-0)	Intentionally added
2-9	IEC	Diisononyl phthalate (DINP) (CAS No. 28553-12-0, CAS No. 68515-48-0)	Intentionally added, or 1000 ppm
2-10	IEC	Diisononyl phthalate (DIDP) (CAS No. 26761-40-0, CAS No. 68515-49-1)	Intentionally added, or 1000 ppm
2-11	IEC	Di-n-octyl phthalate (DNOP) (CAS No. 117-84-0)	Intentionally added, or 1000 ppm
2-12	IEC	Di-n-hexyl phthalate (DnHP) (CAS No. 84-75-3)	Intentionally added, or 1000 ppm
2-13	IEC	Polycyclic-aromatic hydrocarbons (PAH) Benzo[a]pyrene (CAS No. 50-32-8) Benzo[e]pyrene (CAS No. 192-97-2) Benzo[a]anthracene (CAS No. 56-55-3) Chrysen (CAS No. 218-01-9) Benzo[b]fluoranthene (CAS No. 205-99-2) Benzo[j]fluoranthene (CAS No. 205-82-3) Benzo[k]fluoranthene (CAS No. 207-08-9) Dibenzo[a,h]anthracene (CAS No. 53-70-3)	1 ppm
2-14	IEC	4,4'-isopropylidenediphenol (CAS No. 80-05-7)	Intentionally added, or 1000 ppm
2-15		Pentachlorothiophenol (CAS No. 133-49-3)	1 %
2-16		Antimony/Antimony compounds	1000 ppm
2-17		Arsenic/Arsenic compounds	1000 ppm
2-18		Other Beryllium/Beryllium compounds	1000 ppm
2-19		Selenium/Selenium compounds	1000 ppm
2-20 To be cont.		SVHC in REACH regulation*4)	1000 ppm

<sup>\*3)</sup> IEC: Specific substances in IEC 62474 database.

<sup>\*4)</sup> When the European Chemical Agency (ECHA) has added some substances to the candidate list of Substances of Very High Concern (SVHC), the substances are included in the list of "Controlled substances".