

**Notes for inputting "Report on Chemical Substances Contained in the Product (ver.15.0)"**

1 This report consists of following sheets :

Sheet	Content	Page
A.RoHS	A1. Presence of banned substances in the product A2. Presence of banned substances depending on application	1/4
B.Others	B1. Presence of banned substances in the product B2. Presence of banned substances depending on application B3. Ozone-depleting substances contained in the product or used in manufacturing	2/4 ~ 3/4
C.Candidate	C. Candidate substances to be banned	Candidate 4/4
A (appendix). RoHS	A2-Appendix	RoHS (appendix) 1/2 ~ 2/2
B (appendix). Others	B2-Appendix	Others (appendix) 1/3 ~ 3/3

**Note)** All newly-adopted parts and materials.

Packaging which is used for delivered parts/materials is applied.

Please report the substances containing in the packaging with the same standard (threshold).

However, the packaging is not applicable when it is clear that packaging will be discarded at Sharp site and no possibility of migration and adulteration of object substances to the parts and the materials.

Regarding "C.Candidate", please submit the content status.

Regarding "A2-Appendix" and "B2-Appendix",

please attach when the "banned substances depending on application" in A2 and/or B2 are contained.

2 Please fill the contents below:

Sheet	Content	
A.RoHS	"Date" "Company name", "Department"	
C.Candidate	"Writer" "Responsible Person" (Signature or, input and seal)	

3 In the fields of "Information on surveyed product" on the sheet "A. RoHS", please fill the contents below:

Fields	Content	
1) Sharp Part Code	The product code assigned by Sharp	
2) Product Name	The name of the product which you deliver	
3) Manufacturer's Model Code	The model code assigned by your company	
4) Product Weight [g]	The weight of the product which you deliver	

4 When inputting into each sheet directly,  
please select the answer from the drop-down list of each criteria.

5 In case of changing the description of this report,  
please send promptly the revised report to Sharp.

To: SHARP Corporation

Date (yyyy/mm/dd) \_\_\_\_\_

Company Name \_\_\_\_\_

Department \_\_\_\_\_

## Report on Chemical Substances Contained in the Product (ver.15.0)

We report the following verified results on the chemical substances.

### Information on surveyed product

1) Sharp Part Code \_\_\_\_\_

2) Product Name \_\_\_\_\_

3) Manufacturer's Model Code \_\_\_\_\_

4) Product Weight [g] \_\_\_\_\_

## A.RoHS-related chemical Substances

### A1.Presence of banned substances in the product

< Meet criteria: "Applicable" , Do not meet criteria: "Not Applicable" >

No.	Substances	Check point (Criteria) *1)	Result
1	Hexavalent chromium compound *2)	Content is 1000ppm or less. However, content is less than 3ppm of the dry weight of the leather in leather articles and parts coming into contact with the skin.	< Applicable / Not Applicable >
2	Polybrominated biphenyls (PBBs)	Content is 1000ppm or less.	< Applicable / Not Applicable >
3	Polybrominated diphenyl ethers (PBDEs)	The following (1) and (2) are satisfied. (1) Content is 1000ppm or less in all parts/materials. (2) In the case of parts/materials used for products other than those regulated by the EU RoHS Directive, Content is less than 500ppm in the Mixture or Article.	< Applicable / Not Applicable >

\*1) Unit for calculating content rate is homogeneous material if not otherwise specified.

\*2) On EU Directive on Packaging etc., for packaging part and packaging material, the total concentration of these four heavy metals in part/material, ink and paint which constitute a package is 100ppm or less each.

**Note) When the result shows "Not Applicable", the product is not adopted by SHARP in principle.**

### A2.Presence of banned substances depending on application

< Meet criteria: "Applicable" , Do not meet criteria: "Not Applicable" >

No.	Substances	Check point (Criteria) *1)	Result
1	Cadmium and its compound *2)	Content is 100ppm or less. Regarding batteries, complying with the EU Battery Directive (2006/66/EC, 2013/56/EU).	< Applicable / Not Applicable >
2	Lead and its compound *2)	All of the following (1) to (4) are satisfied. (1) In the case of plastics, the content is 300ppm or less. (2) In the case of batteries, comply with the EU Battery Directive (2006/66/EC, 2013/56/EU). (3) In case of use in toy/products for children, not correspond to the banned criteria of both (1) and (2) in 2 of A2-Appendix. (4) In the cases other than the above (1) to (3), the content is 1000ppm or less.	< Applicable / Not Applicable >
3	Mercury and its compound *2)	Content is 1000ppm or less. Regarding batteries, complying with the EU Battery Directive (2006/66/EC, 2013/56/EU).	< Applicable / Not Applicable >
4	Bis(2-ethylhexyl)phthalate (DEHP), Dibutyl phthalate (DBP), Bis(butylbenzyl) phthalate (BBP), Diisobutyl phthalate (DIBP) *3)	Total content of 4 substances (DEHP, DBP, BBP, DIBP) is 1000ppm or less.	< Applicable / Not Applicable >

\*1) Unit for calculating content rate is homogeneous material if not otherwise specified.

\*2) On EU Directive on Packaging etc., for packaging part and packaging material, the total concentration of these four heavy metals in part/material, ink and paint which constitute a package is 100ppm or less each.

\*3) The four types of phthalates (DEHP, BBP, DBP, DIBP) are mainly used as plasticizers for soft resins, and have the property of being transferred from other products by contact (migration). Since there is a possibility of transfer from packaging to parts and materials, please report the substances containing in the packaging with the same standard (threshold).

**When the result shows "Not Applicable", we complete the A2-Appendix where the use of each substance is detailed and attach it.**

**B.Others**

**B1.Presence of banned substances in the product**

< Meet criteria: "Applicable", Do not meet criteria: "Not Applicable" >

No.	Substances	Check point (Criteria) *1)	Result
1	Tributyl Tin Oxide (TBTO)	Content is 1000ppm or less and Not intentionally added.	< Applicable / Not Applicable >
2	Tri-substituted organostannic compounds	Content is 1000ppm or less and Not intentionally added.	< Applicable / Not Applicable >
3	Polychlorinated biphenyls (PCBs) and specific substitutes	Not intentionally added.	< Applicable / Not Applicable >
4	Polychlorinated naphthalenes	Not intentionally added. (Chlorine atom 1-8 are subject to the regulation.)	< Applicable / Not Applicable >
5	Short chain chlorinated paraffin (SCCP, C:10-13)	Content is less than 1000ppm and Not intentionally added.	< Applicable / Not Applicable >
6	Asbestos	Not intentionally added.	< Applicable / Not Applicable >
7	Polychlorinated Terphenyls (PCTs)	Content is 50ppm or less and Not intentionally added.	< Applicable / Not Applicable >
8	Phenol,2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylethyl)	Not intentionally added.	< Applicable / Not Applicable >
9	Hexabromocyclododecane (HBCDD)	Content is 100ppm or less and Not intentionally added.	< Applicable / Not Applicable >
10	Cobalt dichloride	Content is 1000ppm or less and Not intentionally added.	< Applicable / Not Applicable >
11	Dimethyl fumarate	Content is 0.1ppm or less and Not intentionally added.	< Applicable / Not Applicable >
12	Refractory Ceramic Fibers, Aluminosilicate	Not intentionally added.	< Applicable / Not Applicable >
13	Refractory Ceramic Fibers, Zirconia Aluminosilicate	Not intentionally added.	< Applicable / Not Applicable >
14	Dibutyltin (DBT) compounds	Content is 1000ppm or less by weight of tin in a material.	< Applicable / Not Applicable >
15	Pentachlorothiophenol (PCTP)	Content is 1wt% or less.	< Applicable / Not Applicable >
16	Perfluorocarboxylic acids containing 9 to 14 carbon atoms in the chain (C9-C14 PFCAs), their salts and C9-C14 PFCA-related substances	The following (1) and (2) are to be satisfied in the Mixture or Article. (1) The sum of C9-C14 PFCAs and their salts: Content is less than 25ppb (0.025ppm). (2) The sum of C9-C14 PFCA-related substances: Content is less than 260 ppb (0.26ppm).	< Applicable / Not Applicable >
17	Perfluorohexane-1-sulphonic acid (PFHxS), its salts and PFHxS-related substances	The following (1) and (2) are to be satisfied in the Mixture or Article. (1) The sum of PFHxS and their salts: Content is 0.000025% (25ppb) or less. (2) The sum of PFHxS-related substances: Content is 0.0001% (1000ppb) or less.	< Applicable / Not Applicable >
18	Dechlorane plus and its syn-isomer and anti-isomer	Not intentionally added.	< Applicable / Not Applicable >
19	MOAH (Aromatic hydrocarbons of mineral oil comprising from 1 to 7 aromatic rings) ※ In (2) on the right, delivery prohibited after 1st July 2024.	(1) Total content in the ink is 1% or less for all packaging. (2) Total content in the ink is 0.1% or less for all packaging and printing.	< Applicable / Not Applicable >
20	MOAH (Aromatic hydrocarbons of mineral oil comprising from 3 to 7 aromatic rings) ※ Delivery prohibited after 1st July 2024.	Total content in the ink is 1ppm or less for all packaging and printing.	< Applicable / Not Applicable >
21	MOSH (Saturated hydrocarbons of mineral oil comprising from 16 to 35 carbon atoms) ※ Delivery prohibited after 1st July 2024.	Total content in the ink is 0.1% or less for all packaging and printing.	< Applicable / Not Applicable >

\*1) Unit for calculating content rate is homogeneous material if not otherwise specified.

**Note) When the result shows "Not Applicable", the product is not adopted by SHARP in principle.**

**B2.Presence of banned substances depending on application**

< Meet criteria: "Applicable", Do not meet criteria: "Not Applicable" >

No.	Substances	Check point (Criteria) *1)	Result
1	Beryllium and its compound	Content is 1000ppm or less and Not intentionally added.	< Applicable / Not Applicable >
2	Azo colorants	Not intentionally added.	< Applicable / Not Applicable >
3	Polyvinyl Chloride and its copolymer	Not intentionally added.	< Applicable / Not Applicable >
4	Phthalates other than the four RoHS-related Phthalates.	Total content of content is 1000ppm or less regarding other than following four phthalates. Bis(2-ethylhexyl)phthalate:DEHP, Dibutyl phthalate: DBP, Bis(butylbenzyl) phthalate: BBP, Diisobutyl phthalate: DIBP,	< Applicable / Not Applicable >
5	Radioactive substances	Not intentionally added.	< Applicable / Not Applicable >

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No.	Substances	Check point (Criteria) *1)	Result
6	Perfluorooctane sulfonate (PFOSs) *2)	Not intentionally added, and Content in substance/mixture is 10ppm or less, Content of sub-product/article etc. except substance/mixture is 1000ppm or less, Content of coating agent is 1µg/m <sup>2</sup> or less.	< Applicable / Not Applicable >
7	Fluorinated greenhouse gases (HFC, PFC, SF6)	Not intentionally added.	< Applicable / Not Applicable >
8	Formaldehyde	Wood component: atmospheric concentration is 0.1ppm or less (by the chamber method). Plastics/fibers: content is 75ppm or less.	< Applicable / Not Applicable >
9	Perchlorates	Not intentionally added. (Only battery is targeted by this survey. No response is necessary except battery)	< Applicable / Not Applicable >
10	Nickel and its compound	Not intentionally added.	< Applicable / Not Applicable >
11	Arsenic and its compound	Content is 1000ppm or less and Not intentionally added.	< Applicable / Not Applicable >
12	Boric acid	Content is 1000ppm or less and Not intentionally added.	< Applicable / Not Applicable >
13	Disodium tetraborate, anhydrous, Tetraboron disodium heptaoxide, hydrate	Content is 1000ppm or less and Not intentionally added.	< Applicable / Not Applicable >
14	Diocetyl tin (DOT) compounds	Content is 1000ppm or less by weight of tin in a material.	< Applicable / Not Applicable >
15	Perfluorooctanoic acid (PFOA) and its salts and PFOA-related substances *3)	The following (1) and (2) are to be satisfied in the Mixture or Article. (1) PFOA (including its salt): Content is 25ppb or less. (2) Combination of one or multiple PFOA-related substances: Total content is 1000ppb (1ppm) or less.	< Applicable / Not Applicable >
16	Chlorinated flame retardants	Content is 1000ppm or less and Not intentionally added.	< Applicable / Not Applicable >
17	Halogenated compound (Halogenated flame retardant etc.)	The following (1) and (2) are to be satisfied (1) Halogenated flame retardants are Not intentionally added. (2) In the case used for (1) in 17 of B2-Appendix, total content of all halogen elements in the homogeneous material is 0.1wt% or less.	< Applicable / Not Applicable >
18	Tris (2-chloroethyl) phosphate (TCEP)	Content is 1000ppm or less and Not intentionally added.	< Applicable / Not Applicable >
19	Tris(2-chloro-1-methylethyl) phosphate (TCPP)	Content is 1000ppm or less and Not intentionally added.	< Applicable / Not Applicable >
20	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	Content is 1000ppm or less and Not intentionally added.	< Applicable / Not Applicable >
21	Polycyclic aromatic hydrocarbons (PAHs)	Content is less than 1ppm regarding target PAHs *4).	< Applicable / Not Applicable >
22	Red phosphorus	Content is 1000ppm or less and Not intentionally added.	< Applicable / Not Applicable >
23	Isopropylphenyl phosphate (PIP(3:1))	Not intentionally added.	< Applicable / Not Applicable >
24	Hexachlorobutadiene (HCBD)	Not intentionally added.	< Applicable / Not Applicable >
25	2,4,6-tris(tert-butyl)phenol (2,4,6-TTBP)	Not intentionally added.	< Applicable / Not Applicable >
26	4,4'-isopropylidenediphenol (Bisphenol A)	Content is less than 0.02wt%.	< Applicable / Not Applicable >
27	4,4'-sulfonyldiphenol (Bisphenol S)	Content is less than 0.02wt%.	< Applicable / Not Applicable >
28	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	Not intentionally added.	< Applicable / Not Applicable >

\*1) Unit for calculating content rate is homogeneous material if not otherwise specified.

\*2) As for "Perfluorooctane sulfonate (PFOSs) and its salt", Scoped substances CAS No. (1763-23-1, 307-35-7, 29457-72-5, 2795-39-3).

\*3) Total content of substances with following CAS No. (335-67-1, 3825-26-1, 335-95-5, 2395-00-8, 335-93-3, 335-66-0, 376-27-2, 3108-24-5).

\*4) Scoped substances CAS No. (50-32-8, 192-97-2, 56-55-3, 218-01-9, 205-99-2, 205-82-3, 207-08-9, 53-70-3).

**When the result shows "Not Applicable", we complete the B2-Appendix where the use of each substance is detailed and attach it.**

### B3.Ozone-depleting substances contained in the product or used in manufacturing

< Meet criteria: "Applicable", Do not meet criteria: "Not Applicable" >

No.	Substances	Check point (Criteria)	Result
1	Ozone-depleting substances [regulated by the Montreal Protocol (Class I and II)] *1)	(1) Not intentionally added.	< Applicable / Not Applicable >
		(2) Using printed wiring boards (PWBs) in the product	< Yes / No >
		(3) Not used in the rinse process. (If the result in the item (2) is YES only, answer this item) (Even if "Not used" is selected, that means you didn't use these substances to rinse process, describe rinse solution and method of the rinse process.)	< Used / Not Used >
		Rinse solution :	
	Rinse method :		

\*1) Regarding Ozone-depleting substances, scoped substances are CFC, 1,1,1-trichloroethane, Carbon tetrachloride, Bromomethane, Bromochloromethane, Halon, HBFC and HCFC.

**Note) When "Not Applicable" and/or "Used" is selected on the Result, the part or material is prohibited by the SHARP standard.**

**C. Candidate substances to be banned**

**C1.Presence of candidate substances to be banned in the product**

Please reply the content status of "Candidate substances to be banned" in the table below.

**Explanation of "Candidate substances to be banned" :**

Sharp's "**Candidate** substances to be banned", so please promote substitution.

- Substances that are expected to be banned in the near future under domestic and foreign laws and regulations.
- Since the threshold value, prohibited date, regulated use (excluded use), etc. have not been determined in the laws and regulations, it cannot be specified as Sharp's "Candidate substances to be banned" at this time, but in the future based on the trends of laws and regulations, etc. Specify for Sharp's "Candidate substances to be banned".
- Depending on the timing when laws and regulations are finalized, it may not be possible to set a grace period from the designation as Sharp's "Banned substances" to the delivery prohibition date, so if it is contained, please proceed with the substitution as soon as possible.

Select from "Applicable" or "Not Applicable" for No.1 to 5 in the table below.

< Meet criteria: "Applicable", Do not meet criteria: "Not Applicable", /Content status unknown: "Not clear" >

No.	Substances	Check point (Criteria) *1)	Result
1	1,2-Bis(2,3,4,5,6-pentabromophenyl)ethane (DBDPE)	Not intentionally added.	< Applicable / Not Applicable >
2	Tetrabromobisphenol A (TBBPA)	Not intentionally added.	< Applicable / Not Applicable >
3	Medium Chain Chlorinated paraffins (MCCPs, C14-17, chlorination levels at or exceeding 45% chlorine by weight)	Not intentionally added.	< Applicable / Not Applicable >
4	Perfluorocarboxylic acids containing 15 to 21 carbon atoms in the chain (C15-C21 PFCAs), their salts and C15-C21 PFCA-related substances	Not intentionally added.	< Applicable / Not Applicable >
5	Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS), which is designated as a declarable substance in the latest version of chemSHERPA *2)	Not intentionally added.	< Applicable / Not Applicable >

Select from "Applicable" , "Not Applicable" or "Not clear" for No.6 to 8 in the table below.

6	Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS) other than No.5 above	Not intentionally added.	< Applicable / Not Applicable / Not clear>
7	Perfluorohexanoic acid (PFHxA), its salts and PFHxA-related substances	The following (1) and (2) are to be satisfied in the Mixture or Article. (1) The sum of PFHxA and their salts: Content is less than 0.0000025% (25ppb) (2) The sum of PFHxA-related substances and their combinations: Content is less than 0.0001% (1000ppb).	< Applicable / Not Applicable / Not clear>
8	Bisphenols (excluding Bisphenol A and Bisphenol S)*2	Not intentionally added.	< Applicable / Not Applicable / Not clear>

**Note) Regarding the Result of the above "Candidate substances to be banned", the details may be confirmed separately from our business division.**

\*1) Unit for calculating content rate is homogeneous material if not otherwise specified.

\*2) Please refer to the chemSHERPA website (<https://chemsherpa.net/english> ) for chemSHERPA.

The latest version of chemSHERPA is Ver.2.08 at the time of issuance of this report (Oct. 2023).

PFAS, which is designated as a declarable substance in chemSHERPA Ver.2.08, is listed in the IEC62474 Declarable Substances List (DSL), Reference Substances List (RSL) or Global Automotive Declarable Substances List (GADSL).

\*3) Report Bisphenol A and Bisphenol S as "B2. Presence of banned substances depending on application".

Writer

\_\_\_\_\_

Responsible Person

\_\_\_\_\_

("Signature" OR "input name and Seal")

**A2-Appendix**

Regarding items whose confirmatory result are "Not Applicable" in clause A2, "X" are marked in the result column based on the criteria in accordance with "The SHARP's policy of delivery dates to SHARP and EU RoHS exemption's due date".

**The SHARP's policy of delivery dates to SHARP and EU RoHS exemption's due date.**

1) In principle, SHARP set up delivery prohibition date to SHARP as "six month" before the due date of EU RoHS exemption.  
 Example) If the deadline of RoHS Exemption is "21 July 2021," the delivery prohibition date to SHARP is "21 Jan. 2021".

2) If the deadline of RoHS Exemption is changed after issuance of this report, in principle, the delivery prohibition date to SHARP will be six months before the changed deadline.

3) It is based on information on the exemption deadline of the EU RoHS Directive at the time of issuance of this report (Oct. 2023).

Substances	No.	Check point (Criteria)	RoHS Exemption *1)	Result		
<b>1 Cadmium and its compound</b>						
<b>Banned</b>	(1)	Used in every application other than the following (2)-(5).	-			
	Usable	(2)	Used for electrical contacts [Under deliberation for exemption renewal in EU]*2	8(b)-I	-	
		(a)	Circuit breakers			
		(b)	Thermal sensing controls			
		(c)	Thermal motor protectors (excluding hermetic thermal motor protectors)			
		(d)	AC switches rated at 6A and more at 250V AC and more, or 12A and more at 125V AC and more			
		(e)	DC switches rated at 20A and more at 18V DC and more			
	(f)	Switches for use at voltage supply frequency ≥ 200 Hz				
	(3)	Used in striking optical filter glass types, excluding applications falling under point 39 of EU RoHS directive annex III [Under deliberation for exemption renewal in EU]*2	13(b)-(II)			
	(4)	Used in white glass used for an optical purpose [Under deliberation for exemption renewal in EU]*2	13(b)-(III)			
(5)	Using exemptions listed in EU RoHS directive other than above and having permission from adoption decision.	-				
		EU RoHS directive Annex No. :	-	< AnnexIII / AnnexIV >		
		RoHS Exemption No. :	-			
<b>2 Lead and its compound</b>						
<b>Banned</b>	(1)	Used in products for children 12 and under, containing lead exceeding 0.01wt% per armored part.	-			
	(2)	Used in parts/material used in toys, containing lead above 0.009% per surface treatment layer such as coating.	-			
	(3)	Used in every application other than the following (4)-(13).	-			
Usable	(4)	Used in high-melting point solder (lead-based alloys containing 85 % by weight or more lead) [Under deliberation for exemption renewal in EU]*2	7(a)			
	(5)	Used in electrical and electronic components in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectric devices, or in a glass or ceramic matrix compound [Under deliberation for exemption renewal in EU]*2	7(c)-I			
	(6)	Used less than 0.2% by weight in glass of fluorescent tubes [Under deliberation for exemption renewal in EU]*2	5(b)			
	(7)	Contained as an alloying element	(a)	Used less than 0.35% by weight in steel alloy for machining purposes [Under deliberation for exemption renewal in EU]*2	6(a)-I	
			(b)	Used less than 0.4% by weight in aluminium alloy for machining purposes [Under deliberation for exemption renewal in EU]*2	6(b)-II	
			(c)	Used less than 4% by weight in copper alloy [Under deliberation for exemption renewal in EU]*2	6(c)	
	Usable	(8)	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 [Under deliberation for exemption renewal in EU]*2	15(a)	-	
(a)						A semiconductor technology node of 90 nm or larger
(b)						A single die of 300 mm <sup>2</sup> or larger in any semiconductor technology node
(c)						Stacked die packages with die of 300 mm <sup>2</sup> or larger, or silicon interposers of 300 mm <sup>2</sup> or larger
(9)	Used in white glass used for an optical purpose [Under deliberation for exemption renewal in EU]*2	13(a)				
(10)	Used in ion coloured optical filter glass types [Under deliberation for exemption renewal in EU]*2	13(b)-(I)				
(11)	Used in glazes used for reflectance standards [Under deliberation for exemption renewal in EU]*2	13(b)-(III)				
(12)	Used in dielectric ceramic used in a capacitor with rated voltage of 125V AC or 250V DC or larger [Under deliberation for exemption renewal in EU]*2	7(c)-II				
(13)	Using exemptions listed in EU RoHS directive other than above and having permission from adoption decision.	-				
		EU RoHS directive Annex No. :	-	< AnnexIII / AnnexIV >		
		RoHS Exemption No. :	-			

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Substances	No.	Check point (Criteria)	RoHS Exemption *1)	Result
<b>3 Mercury and its compound</b>				
<b>Banned</b>	(1)	Used in every application other than the following (2)-(6).	-	
<b>Usable</b>	(2)	Used in metal halide lamps (MH). [Expires on 24 Aug. 2026]	4(e)	
	(3)	Used in other discharge lamps for special purposes specified in of EU RoHS directive Annex III 4(f)-I (2011/65/EU). [Expires on 24 Aug. 2024]	4(f)-I	
	(4)	Mercury in high pressure mercury vapour lamps used in projectors where an output $\geq$ 2000 lumen ANSI is required [Expires on 24 Aug. 2026]	4(f)-II	
	(5)	Mercury in lamps emitting light in the ultraviolet spectrum [Expires on 24 Aug. 2026]	4(f)-IV	
	(6)	Using exemptions listed in EU RoHS directive other than above and having permission from adoption decision.	-	
		EU RoHS directive Annex No. :	-	< AnnexIII / AnnexIV >
		RoHS Exemption No. :	-	
<b>4 Bis(2-ethylhexyl)phthalate (DEHP), Dibutyl phthalate (DBP), Bis(butylbenzyl) phthalate (BBP), Diisobutyl phthalate (DIBP)</b>				
<b>Banned</b>	(1)	Used other than the following (2).	-	
<b>Usable</b>	(2)	In the case of parts/materials used in the product that is both "regulated EU RoHS Directive" and "other than Children's toy or child care article", content of DEHP, DBP, BBP and DIBP is 1000ppm or less respectively.	-	

\*1) The number of this column is that of an exempted application of EU RoHS directive Annex III (2011/65/EU) .

\*2) An application for extension of exemption was accepted in the EU, and it is under deliberation at the time of issuance of this report (Oct. 2023).

This exemption is valid during deliberation. When the deadline is decided, delivery prohibition date to SHARP will be six months before the deadline.

**B2-Appendix**

Regarding items whose confirmatory result are "Not Applicable" in clause B2, "X" are entered in the result column as the result of the confirmation pursuant to the criteria.

Substances	No.	Check point (Criteria)	Result
<b>1 Beryllium and its compound</b>			
<b>Banned</b>	(1)	Using Beryllium oxide.	
	(2)	Used in the other than the following (3).	
Usable	(3)	Used in the exception items.	
		(a) Alloy	
		(b) Ceramics	
		(c) Glass	
		(d) Semiconductor	
<b>2 Azo colorants</b>			
<b>Banned</b>	(1)	Used in a contact part with human body of a product (e.g. : electric carpet, earphone, strap and etc.) which is manufactured based on the premise that the product continuously contacts human body, and may produce carcinogenic amine over 30ppm when discomposed.	
Usable	(2)	Used in every application other than the above (1). (Used in a part which does not continuously contact with human body)	
<b>3 Polyvinyl Chloride and its copolymer</b>			
<b>Banned</b>	(1)	Used in packaging material and packaging part for Sharp product.	
Usable	(2)	Used in the other than the above (1).	
<b>4 Phthalates other than the four RoHS related Phthalates.</b>			
<b>Banned</b>	(1)	Diisononyl Phthalate:DINP, Diisodecyl phthalate:DIDP or Di-n-octyl phthalate:DNOP is used in parts/materials that is used in products that are children's toy or child care article that can be placed in a child's mouth (over 1000ppm in total).	
Usable	(2)	Used under conditions that do not correspond to (1) above.	
<b>5 Radioactive substances</b>			
<b>Banned</b>	(1)	Used in the other than the following (2)-(3).	
Usable	(2)	Using "Thorium" in the magnetron of a microwave oven.	
	(3)	Using "Krypton 85" in the electric bulb for a LCD projector.	
<b>6 Perfluorooctane sulfonate (PFOSs)</b>			
<b>Banned</b>	(1)	Used in the other than the following (2).	
Usable	(2)	Used in mist suppressants for hard chrome plating, and moistening agent used in equipment for plating.	
<b>7 Fluorinated greenhouse gases (HFC, PFC, SF6)</b>			
<b>Banned</b>	(1)	Used in the other than the following (2).	
Usable	(2)	Use for the refrigerant and/or the thermal insulator (HFC only).	
<b>8 Formaldehyde</b>			
<b>Banned</b>	(1)	Used in wooden parts.	
	(2)	Used in a direct human body contact part of a product which is intended to continuously contact with human body. (e.g.: electric carpet, earphone, strap and etc.)	
Usable	(3)	Used in the other than the above (1)-(2).	
<b>9 Perchlorates</b>			
Usable	(1)	Contained above 6ppb by weight per battery. (Necessary to caution on operation manual)	
	(2)	Contained less than 6ppb by weight per battery.	
<b>10 Nickel and its compound</b>			
<b>Banned</b>	(1)	Used in parts which continuously contact with human skin for a long time.	
Usable	(2)	Used in the other than the above (1).	

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Substances	No.	Check point (Criteria)	Result
<b>11 Arsenic and its compound</b>			
<b>Banned</b>	(1)	Using Diarsenic Pentoxide	
	(2)	Used in the other than the following (3)-(4).	
Usable	(3)	Used in the lamp of LCD projector. (Diarsenic trioxide)	
	(4)	Used for the exception items.	
		(a) Semiconductor	
		(b) Resist	
		(c) Magnet filter	
		(d) Copper foil	
(e) Battery			
<b>12 Boric acid</b>			
<b>Banned</b>	(1)	Used in the other than the following (2).	
Usable	(2)	Used for applications below;	
		(a) Polarizers (made of PVA)	
		(b) Glass	
		(c) Adhesive agent	
<b>13 Disodium tetraborate, anhydrous, Tetraboron disodium heptaoxide, hydrate</b>			
<b>Banned</b>	(1)	Used in the other than the following (2).	
Usable	(2)	Used for applications below;	
		(a) Polarizers (made of PVA)	
		(b) Glass	
		(c) Adhesive agent	
		(d) Fiber	
<b>14 Dioctyltin (DOT) compounds</b>			
<b>Banned</b>	(1)	Used for two-component room temperature vulcanisation moulding kits (RTV-2 moulding kits).	
Usable	(2)	Used in the other than the above (1).	
<b>15 Perfluorooctanoic acid (PFOA) and its salts and PFOA-related substances</b>			
<b>Banned</b>	(1)	Used in the other than the following (2)-(4).	
Usable	(2)	Used in photo-lithography processes for semiconductors or in etching processes for compound semiconductors	
		Used in photo coating used in printing plates, film, and documents.	
	(4)	Using exemptions listed in EU POPs regulation Annex I Part A other than above and having permission from adoption decision.	
		(Required fields) Applied exemption ( )	
<b>16 Chlorinated flame retardants</b>			
<b>Banned</b>	(1)	Used in the other than the following (2).	
Usable	(2)	It is difficult to substitute, and a permission from the adoption decision department in Sharp was obtained.	
		(Required fields) Reason for "difficult to substitute" and Point of use ( )	
<b>17 Halogenated compound (Halogenated flame retardant etc.)</b>			
<b>Banned</b>	(1)	Used in enclosure and stand of electronic displays including televisions, monitors and digital signage displays with a screen area over 100cm <sup>2</sup> .	
Usable	(2)	Used in the other than the above (1).	
	(3)	Used in the above (1) , and used for products with a limited destination and having permission from adoption decision.	
<b>18 Tris (2-chloroethyl) phosphate (TCEP)</b>			
<b>Banned</b>	(1)	Used in products for children 12 and under or home furnishings covered with fiber.	
	(2)	Used in the other than the following (3)-(6).	
Usable	(3)	Used in motor vehicles or replacement parts or replacement equipment for motor vehicles.	
	(4)	Used in commercial or residential building insulation or wiring that otherwise complies with the Construction Codes Supplement, set forth in Title 12 of the District of Columbia Municipal Regulations	
	(5)	Used in desktop and laptop computers, audio and video equipment, calculators, wireless telephones, game consoles, handheld devices incorporating a screen that are used to access interactive software and their associated peripherals, and cables, adaptors, and other similar connecting devices; or.	
	(6)	Used in storage media, such as compact discs, for interactive software, such as computer games.	
<b>19 Tris(2-chloro-1-methylethyl) phosphate (TCPP)</b>			
<b>Banned</b>	(1)	Used in products for children 12 and under or home furnishings covered with fiber.	
Usable	(2)	Used in the other than the above (1).	

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Substances	No.	Check point (Criteria)	Result
<b>20 Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)</b>			
<b>Banned</b>	(1)	Used in products for children 12 and under or home furnishings covered with fiber.	
	(2)	Used in the other than the following (3)-(6).	
<b>Usable</b>	(3)	Used in motor vehicles or replacement parts or replacement equipment for motor vehicles.	
	(4)	Used in commercial or residential building insulation or wiring that otherwise complies with the Construction Codes Supplement, set forth in Title 12 of the District of Columbia Municipal Regulations	
	(5)	Used in desktop and laptop computers, audio and video equipment, calculators, wireless telephones, game consoles, handheld devices incorporating a screen that are used to access interactive software and their associated peripherals, and cables, adaptors, and other similar connecting devices; or.	
	(6)	Used in storage media, such as compact discs, for interactive software, such as computer games.	
<b>21 Polycyclic aromatic hydrocarbons (PAHs)</b>			
<b>Banned</b>	(1)	Used in rubber or plastic components that come into direct as well as prolonged or shortterm repetitive contact with the human skin or the oral cavity.	
<b>Usable</b>	(2)	Used in the other than the above (1).	
<b>22 Red phosphorus</b>			
<b>Banned</b>	(1)	Used in plastic or rubber.	
<b>Usable</b>	(2)	Used in the other than the above (1).	
	(3)	Used in the above (1) , and it is difficult to substitute, and a permission from the adoption decision department in Sharp was obtained. (Required fields) Reason for "difficult to substitute" and Point of use ( )	
<b>23 Isopropylphenyl phosphate (PIP(3:1))</b>			
<b>Banned</b>	(1)	Used in the other than the following (2)-(5).	
<b>Usable</b>	(2)	Used in adhesives or sealants and a permission from the adoption decision department in Sharp was obtained. [Prohibited after 6 January 2024] /	
	(3)	Used in lubricants or greases.	
	(4)	Used in products or articles made of plastic recycled from products or articles containing PIP (3:1), where no new PIP (3:1) was added during the production of the products or articles made of recycled plastic.	
	(5)	Using exemptions listed in USA TSCA SECTION 6 PBT-chemicals other than above and having permission from adoption decision. (Required fields) Applied exemption ( )	
<b>24 Hexachlorobutadiene (HCBD)</b>			
<b>Banned</b>	(1)	Used in the other than the following (2).	
<b>Usable</b>	(2)	Unintentional production of HCBD as a byproduct in the production of chlorinated solvents	
<b>25 2,4,6-tris(tert-butyl)phenol (2,4,6-TTBP)</b>			
<b>Banned</b>	(1)	Used in the other than the following (2).	
<b>Usable</b>	(2)	Used in articles	
<b>26 4,4'-isopropylidenediphenol (Bisphenol A)</b>			
<b>Banned</b>	(1)	Used in thermal paper, containing equal to or greater than 0.02wt%.	
<b>Usable</b>	(2)	Used in the other than the above (1).	
<b>27 4,4'-sulfonyldiphenol (Bisphenol S)</b>			
<b>Banned</b>	(1)	Used under conditions that do not correspond to following (2)-(3).	
<b>Usable</b>	(2)	Used for other than thermal paper.	
	(3)	(Used in thermal paper, containing equal to or greater than 0.02wt%) and used for products with a limited destination and having permission from adoption decision.	
<b>28 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)</b>			
<b>Banned</b>	(1)	Used in the other than the following (2)-(3).	
<b>Usable</b>	(2)	Used in Tri-acetyl cellulose (TAC) film in polarizers.	
	(3)	Used in parts for Motor vehicles.	

Revision point from ver.14.0

List of surveyed substances

No.	Ver.14.0 Substances	Ver.15.0 Substances	Remarks (Change etc.)
<b>A1. RoHS-related Presence of banned substances in the product</b>			
1	Hexavalent chromium compound	<-	
2	Polybrominated biphenyls (PBBs)	<-	
3	Polybrominated diphenyl ethers (PBDEs)	<-	Changed Check point (Criteria).
<b>A2. RoHS-related Presence of banned substances depending on application</b>			
1	Cadmium and its compound	<-	
2	Lead and its compound	<-	
3	Mercury and its compound	<-	
4	Bis(2-ethylhexyl)phthalate (DEHP), Dibutyl phthalate (DBP), Bis(butylbenzyl) phthalate (BBP), Diisobutyl phthalate (DIBP)	<-	
<b>B1. Others Presence of banned substances in the product</b>			
1	Tributyl Tin Oxide (TBTO)	<-	
2	Tri-substituted organostannic compounds	<-	
3	Polychlorinated biphenyls (PCBs) and specific	<-	
4	Polychlorinated naphthalenes	<-	
5	Short chain chlorinated paraffin (SCCP, C:10-13)	<-	Changed Check point (Criteria).
6	Asbestos	<-	
7	Polychlorinated Terphenyls (PCTs)	<-	
8	Phenol,2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-	<-	
9	Hexabromocyclododecane (HBCDD)	<-	
10	Cobalt dichloride	<-	
11	Dimethyl fumarate	<-	
12	Refractory Ceramic Fibers, Aluminosilicate	<-	
13	Refractory Ceramic Fibers, Zirconia Aluminosilicate	<-	
14	Dibutyltin (DBT) compounds	<-	
15	Pentachlorothiophenol (PCTP)	<-	
16	Perfluorocarboxylic acids containing 9 to 14 carbon atoms in the chain (C9-C14 PFCAs), their salts and C9-C14 PFCA-related substances	<-	
17	Perfluorohexane-1-sulphonic acid (PFHxS), its salts and PFHxS-related substances	<-	
18	-	Dechlorane plus and its syn-isomer and anti-isomer	Change from "candidate substances to be banned" to "banned substances"
19	-	MOAH (Aromatic hydrocarbons of mineral oil comprising from 1 to 7 aromatic rings)	
20	-	MOAH (Aromatic hydrocarbons of mineral oil comprising from 3 to 7 aromatic rings)	Reflects the standards of the circular issued on August 31, 2022.
21	-	MOSH (Saturated hydrocarbons of mineral oil comprising from 16 to 35 carbon atoms)	
<b>B2. Others Presence of banned substances depending on application</b>			
1	Beryllium and its compound	<-	
2	Azo colorants	<-	
3	Polyvinyl Chloride and its copolymer	<-	
4	Phthalates	<-	
5	Radioactive substances	<-	
6	Perfluorooctane sulfonate (PFOSs)	<-	
7	Fluorinated greenhouse gases (HFC, PFC, SF6)	<-	
8	Formaldehyde	<-	
9	Perchlorates	<-	
10	Nickel	<-	
11	Arsenic and its compound	<-	
12	Boric acid	<-	
13	Disodium tetraborate, anhydrous, Tetraboron disodium heptaoxide, hydrate	<-	
14	Diocetyl tin (DOT) compounds	<-	
15	Perfluorooctanoic acid (PFOA) and its salts and esters of PFOA	<-	
16	Chlorinated flame retardants	<-	
17	Halogenated compound (Halogenated flame retardant etc.)	<-	Changed Substance name and Check point (Criteria).
18	Tris (2-chloroethyl) phosphate (TCEP)	<-	
19	Tris(2-chloro-1-methylethyl) phosphate (TCPP)	<-	
20	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	<-	
21	Polycyclic aromatic hydrocarbons (PAHs)	<-	
22	Red phosphorus	<-	
23	Isopropylphenyl phosphate (PIP(3:1))	<-	
24	Hexachlorobutadiene (HCBD)	<-	
25	2,4,6-tris(tert-butyl)phenol (2,4,6-TTBP)	<-	
26	4,4'-isopropylidenediphenol (Bisphenol A)	<-	
27	4,4'-sulfonyldiphenol (Bisphenol S)	<-	
28	-	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	Change from "candidate substances to be banned" to "banned substances depending on application"
<b>B3. Others Ozone-depleting substances contained in the product or used in manufacturing</b>			
1	Ozone-depleting substances	<-	
<b>C. Candidate substances to be banned</b>			
-	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	(Deleted)	Moved to "banned substances depending on application"
-	Dechlorane plus and its syn-isomer and anti-isomer	(Deleted)	Moved to "banned substances"
-	Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS)	(Separated into No.5 and 6 below)	Changed to separate PFAS.
1	1,2-Bis(2,3,4,5,6-pentabromophenyl)ethane (DBDPE)		
2	Tetrabromobisphenol A (TBBPA)		
3	Medium Chain Chlorinated paraffins (MCCPs, C14-17, chlorination levels at or exceeding 45% chlorine by weight)		
4	-	Perfluorocarboxylic acids containing 15 to 21 carbon atoms in the chain (C15-C21 PFCAs), their salts and C15-C21 PFCA-related substances	Newly added
5	-	Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS), which is designated as a declarable substance in the latest version of chemSHERPA	Changed to separate PFAS.
6	-	Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS) other than No.5 above	Changed to separate PFAS.
7	Perfluorohexanoic acid (PFHxA), its salts and PFHxA-related substances		
8	-	Bisphenols (excluding Bisphenol A and Bisphenol S)	Newly added

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List of main reference laws

No.	Substances	Main reference laws etc.
<b>A1. RoHS-related Presence of banned substances in the product</b>		
1	Hexavalent chromium compound	EU RoHS directive, EU REACH regulation Annex XVII
2	Polybrominated biphenyls (PBBs)	EU RoHS directive, EU REACH regulation Annex XVII
3	Polybrominated diphenyl ethers (PBDEs)	Japan CSCL, EU RoHS directive, EU REACH regulation Annex XVII, EU POPs regulation Annex I, USA TSCA
<b>A2. RoHS-related Presence of banned substances depending on application</b>		
1	Cadmium and its compound	EU RoHS directive, EU REACH regulation Annex XVII
2	Lead and its compound	EU RoHS directive, EU REACH regulation Annex XVII, USA CPSIA
3	Mercury and its compound	EU RoHS directive, EU REACH regulation Annex XVII
4	Bis(2-ethylhexyl)phthalate (DEHP), Dibutyl phthalate (DBP), Bis(butylbenzyl) phthalate (BBP), Diisobutyl phthalate (DIBP)	EU RoHS directive(EU COMMISSION DELEGATED DIRECTIVE 2015/863), EU REACH regulation Annex XVII, USA CPSIA
<b>B1. Others Presence of banned substances in the product</b>		
1	Tributyl Tin Oxide (TBTO)	Japan CSCL
2	Tri-substituted organostannic compounds	Japan CSCL, EU REACH regulation Annex XVII
3	Polychlorinated biphenyls (PCBs) and specific substitutes	Japan CSCL, EU POPs regulation Annex I
4	Polychlorinated naphthalenes	Japan CSCL, EU POPs regulation Annex I
5	Short chain chlorinated paraffin (SCCP, C:10-13)	EU POPs regulation Annex I
6	Asbestos	Japan Industrial Safety and Health Act, EU REACH regulation Annex
7	Polychlorinated Terphenyls (PCTs)	EU REACH regulation Annex XVII
8	Phenol,2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylethyl)	Japan CSCL
9	Hexabromocyclododecane (HBCDD)	Japan CSCL, EU POPs regulation
10	Cobalt dichloride	(EU REACH regulation) (*)
11	Dimethyl fumarate	EU REACH regulation Annex XVII
12	Refractory Ceramic Fibers, Aluminosilicate	(EU REACH regulation)
13	Refractory Ceramic Fibers, Zirconia Aluminosilicate	(EU REACH regulation)
14	Dibutyltin (DBT) compounds	EU REACH regulation Annex XVII
15	Pentachlorothiophenol (PCTP)	USA TSCA
16	Perfluorocarboxylic acids containing 9 to 14 carbon atoms in the chain (C9-C14 PFCA), their salts and C9-C14 PFCA-related substances	EU REACH regulation Annex XVII
17	Perfluorohexane-1-sulphonic acid (PFHxS), its salts and PFHxS-related substances	Swiss Chemical Risk Reduction Ordinance, POPs Convention
18	Dechlorane plus and its syn-isomer and anti-isomer	POPs Convention
19	MOAH (Aromatic hydrocarbons of mineral oil comprising from 1 to 7 aromatic rings)	French decree
20	MOAH (Aromatic hydrocarbons of mineral oil comprising from 3 to 7 aromatic rings)	French decree
21	MOSH (Saturated hydrocarbons of mineral oil comprising from 16 to 35 carbon atoms)	French decree
<b>B2. Others Presence of banned substances depending on application</b>		
1	Beryllium and its compound	-
2	Azo colorants	EU REACH regulation Annex XVII
3	Polyvinyl Chloride and its copolymer	-
4	Phthalates	EU REACH regulation Annex XVII, USA CPSIA
5	Radioactive substances	Act on Prevention of Radiation Hazards due to Radioisotopes, etc., Act on the Regulation of Nuclear Source Material, Nuclear Fuel Material and Reactors
6	Perfluorooctane sulfonate (PFOS)	Japan CSCL, EU POPs regulation Annex I, Canadian Environmental Protection Act
7	Fluorinated greenhouse gases (HFC, PFC, SF6)	EU F-Gas Regulation(517/2014)
8	Formaldehyde	Germany Chem Verbots V, Denmark formaldehyde regulations
9	Perchlorates	USA CA Perchlorate management rules
10	Nickel	EU REACH regulation Annex XVII
11	Arsenic and its compound	(EU REACH regulation)
12	Boric acid	(EU REACH regulation)
13	Disodium tetraborate, anhydrous, Tetraboron disodium heptaoxide, hydrate	(EU REACH regulation)
14	Diocetyl tin (DOT) compounds	EU REACH regulation Annex XVII
15	Perfluorooctanoic acid (PFOA) and its salts and PFOA-related substances	EU POPs regulation
16	Chlorinated flame retardants	<Sharp own forbiddance>
17	Halogenated compound (Halogenated flame retardant etc.)	EU 2019/2021 (ecodesign requirements for electronic displays), USA Washington state law
18	Tris (2-chloroethyl) phosphate (TCEP)	USA VT Act85, USA DC.Law 21-108/2016, (EU REACH regulation)
19	Tris(2-chloro-1-methylethyl) phosphate (TCPP)	USA VT Act85
20	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	USA VT Act85, USA DC.Law 21-108/2016
21	Polycyclic aromatic hydrocarbons (PAHs)	EU REACH regulation Annex XVII
22	Red phosphorus	<Sharp own forbiddance>
23	Isopropylphenyl phosphate (PIP(3:1))	USA TSCA
24	Hexachlorobutadiene (HCBd)	USA TSCA
25	2,4,6-tris(tert-butyl)phenol (2,4,6-TTBP)	USA TSCA
26	4,4'-isopropylidenediphenol (Bisphenol A)	EU REACH regulation Annex XVII, Swiss Chemical Risk Reduction Ordinance, US CT Public Act No.11-222
27	4,4'-sulfonyldiphenol (Bisphenol S)	Swiss Chemical Risk Reduction Ordinance
28	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	POPs Convention
<b>B3. Others Ozone-depleting substances contained in the product or used in manufacturing</b>		
1	Ozone-depleting substances	Montreal Protocol, USA Chlorofluorocarbon tax
<b>C. Candidate substances to be banned</b>		
1	1,2-Bis(2,3,4,5,6-pentabromophenyl)ethane (DBDPE)	CEPA 1999
2	Tetrabromobisphenol A (TBBPA)	EU RoHS directive
3	Medium Chain Chlorinated paraffins (MCCPs, C14-17, chlorination levels at or exceeding 45% chlorine by weight)	EU RoHS directive
4	Perfluorocarboxylic acids containing 15 to 21 carbon atoms in the chain (C15-C21 PFCA), their salts and C15-C21 PFCA-related substances	POPs Convention, CEPA 1999
5	Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS), which is designated as a declarable substance in the latest version of chemSHERPA	US Specified State TIP
6	Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS) other than No.5 above	
7	Perfluorohexanoic acid (PFHxA), its salts and PFHxA-related substances	EU REACH regulation Annex XVII
8	Bisphenols (excluding Bisphenol A and Bisphenol S)	Regulations in Europe, USA and Canada

(\*) "(EU REACH regulation)" means the substance which was listed in Authorisation List of SVHC.