< KUBOTA Group Green Procurement Guidelines Appendix >

Substances of Concern List

January 2019

KUBOTA Corporation

Introduction

This document is for providing information related to "3. Substances of Concern" of "Eco-friendliness standards for products" specified in "KUBOTA Group Green Procurement Guidelines" revised on January 2019.

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[Disclaimer]

While the information is made based on the related regulatory control etc. of December 1, 2018, we make no warranties about the completeness and accuracy. Please confirm the original of the related regulatory control or the industry standards of the latest version properly in yourself when you use it. The publisher, Kubota Corporation, doesn't assume the responsibility of the damage suffers by using it. Moreover, we may revise it without a previous notice according to the reorganization of the related regulatory control and the industry standards.

【Revision History】

Date of revision	Table Number	Revision
2009.4.1	-	Established the Appendix "Substances of Concern List" to the "Kubota Group Green Procurement Guidelines."
2013.4.1	Attached Table I-B : ELV Exemptions List	Amended as Commission Regulation 2011/37/EU of 30 May 2011.
	Reference List of Substances to be Prohibited, Restricted and Controlled	Review the contents according to the revised relevant rules and JAMP controlled substance list. (Addition of REACH rule SVHC, reflection of revision of JAMP controlled substance such as content related to CLP Regulation Annex V, etc.
2014.7.1	Attached Table I-B : ELV Exemptions List	Amended as Commission Regulation 2013/86/EU of 22 May 2013.
	Reference List of Substances to be Prohibited, Restricted and Controlled	Amended as the revised related rules and JAMP Declarable Substances Reference List.
2016. 1. 1	Table 1 : Prohibited	Addition of "Endosulfan","HBCD","Chloroalkane C10-13"etc.
	Table 2 : Substances to be Restricted	- Addition of restricted substance group accompanying revised RoHS Directive. - Addition of due to revision of REACH Regulation Annex XXII (Restricted Substances).
2017. 1. 1	Table 1 : Prohibited	- Addition of "Pentachlorophenol or its chloride or ester" - Addition of CAS number and Related laws and ordinances of "Hexabromocyclododecane" - Change the chlorine number of "Polychlorinated naphthalene"
	Attached Table I-B : ELV Exemptions List	Delete
2018. 1. 1	Table 2 : Substances to be Restricted	Revised due to enactment of Minamata Convention on Mercury
	Attached Table I-A : RoHS Exemptions List	Revised due to legislative amendments
2019. 1. 1	Table 1: Banned substances	- Added the CAS number of "6,7,8,9,10,10-Hexachloro-1,5,5a,6,9,9a-hexahydro-6,9-methano-2,4,3- -benzodioxathiepin 3-oxide." '- Changed "chlorinated paraffin" to "polychlorinated normal paraffin" and added CAS numbers and related laws. '- Added "1,1'-oxybis(2,3,4,5,6-pentabromobenzene)."
	Table 2: Restricted substances	- Additions were made as a consequence of the amendment to the REACH Annex XVII (Restricted substances). '- Example substances were added based on the EU Mercury Regulation (EU 2017/852)
	Attached Table I-A: RoHS exemptions list	Revised as a result of the amendment of the law.
	Reference document: List of banned, restricted, or controlled substance	Changed "substances subject to JAMP" to "substances subject to chemSHERPA."

Table 1 : Substances to be Prohibited

Following substances should not be contained in the products nor used in the production process.
The content as impurities should be less than 0.1 percent by weight per homogeneous material.

No.	CAS Number	Substance Name	Synonym	Major Regulatory Control
1-1	12185-10-3	Yellow phosphorus matches	Tetraphosphorus	*A, *B
1-2	92-87-5	Benzidine and its salts	4,4'-Diamino-1,1'-biphenyl	*A
1-3	92-67-1	4-aminodiphenyl and its salts		*A
1-4	92-93-3	4-nitrodiphenyl and its salts		*A
1-5	1332-21-4	Asbestos（Asbestos fiber [group],Asbestos mineral [group]）		*A *C *D We prohibit the use of asbestos regardless of the concentrations, regardless of the laws or regulations or others.
1-6	12001-28-4 132207-33-1	Crocidolite		
1-7	12172-73-5	Amosite		
1-8	77536-67-5 17068-78-9	Anthophyllite		
1-9	77536-66-4 13768-00-8 12172-67-7	Actinolite		
1-10	77536-68-6 14567-73-8	Tremolite		
1-11	12001-29-5 132207-32-0	Chrysotile		
1-12	542-88-1	Bis (chloromethyl) ether	Oxybis(chloromethane)	*A
1-13	91-59-8	Beta-naphthylamine and its salts	2-Naphthylamine	*A
1-14	71-43-2	Gum containing benzene, in which the volume of contained benzene exceeds 5 % of the solvent (including diluents) of the said gum		*A
1-15	1336-36-3	Polychlorinated biphenyls	Polychlorobiphenyl, PCB, PCBS	*C, *E
1-16	70776-03-3	Polychlorinated naphthalenes (limited to those containing two or more chlorine atoms)		*E
1-17	118-74-1	Hexachlorobenzene	HCB, Perchlorobenzene	*E
1-18	309-00-2	Aldrin		*E
1-19	60-57-1	Dieldrin		*E
1-20	72-20-8	Endrin		*E
1-21	50-29-3	DDT		*E
1-22	57-74-9	Chlordane		*E
1-23	76-44-8	Heptachlor		*E
1-24	56-35-9	Bis(tributyltin) oxide		*E, *C, *D, REACH SVHC
1-25	620-91-7	N,N'-Ditolyl-p-phenylenediamine, N-tolyl-N'-xylyl-p-phenylenediamine, or N,N'-dixylyl-p-phenylenediamine		*E
1-26	732-26-3	2,4,6-Tri- tert-butylphenol		*E
1-27	8001-35-2	Polychloro-2,2-dimethyl-3-methylidenebicyclo[2.2.1]heptane	Toxaphene	*E
1-28	2385-85-5	Dodecachloropentacyclo [5.3.0.02,6.03,9.04,8] decane	Mirex	*E
1-29	115-32-2	2,2,2- Trichloro-1,1- bis(4-chlorophenyl) ethanol	Kelthane, Dicofol	*E
1-30	87-68-3	Hexachlorobuta-1,3-diene		*E
1-31	3846-71-7	Phenol, 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylethyl)-		*E
1-32	1763-23-1	Perfluoro(octane-1-sulfonic acid) or its salts	PFOS	*D, *E
1-33	307-35-7	Perfluoro(octane-1-sulfonyl) fluoride	PFOSF	*E
1-34	608-93-5	Pentachlorobenzene		*E
1-35	319-84-6	r-1,c-2,t-3,c-4,t-5,t-6-Hexachlorocyclohexane	alpha-Hexachlorocyclohexane	*E
1-36	319-85-7	r-1,t-2,c-3,t-4,c-5,t-6-Hexachlorocyclohexane	beta-Hexachlorocyclohexane	*E
1-37	58-89-9	r-1,c-2,t-3,c-4,c-5,t-6-Hexachlorocyclohexane	gamma-Hexachlorocyclohexane, Lindane	*E

Table 1 : Substances to be Prohibited

Following substances should not be contained in the products nor used in the production process.
The content as impurities should be less than 0.1 percent by weight per homogeneous material.

No.	CAS Number	Substance Name	Synonym	Major Regulatory Control
1-38	143-50-0	Decachloropentacyclo[5.3.0.0(2,6).0(3,9).0(4,8)]decan-5-one	Chlordecone	*E
1-39	36355-01-8	Hexabromobiphenyl		*D, *E, RoHS
1-40	40088-47-9	Tetrabromo(phenoxybenzene)	Tetrabromodiphenyl ether	*E, RoHS
1-41	32534-81-9	Pentabromo(phenoxybenzene)	Pentabromodiphenyl ether	*D, *E, RoHS
1-42	31153-30-7	Hexabromo(phenoxybenzene)	Hexabromodiphenyl ether	*E, RoHS
1-43	68928-80-3	Heptabromo(phenoxybenzene)	Heptabromodiphenyl ether	*E, RoHS
1-44	959-98-8 115-29-7 33213-65-9	6,7,8,9,10,10-Hexachloro-1,5,5a,6,9,9a-hexahydro-6,9-methano-2,4,3-benzodioxathiepin-3-oxide	Endosulfan or Benzoepin	*E, *H
1-45	25637-99-4 3194-55-6 134237-50-6 134237-51-7	Hexabromocyclododecane	(HBCD)	*E, *H
1-46	87-86-5 131-52-2 27735-64-4 3772-94-9	Pentachlorophenol or its chloride or ester		*E
1-47	152-16-9	Octamethyl pyrophosphoramide	Schradan	*F
1-48		Preparations containing Octamethyl pyrophosphoramide		*F
1-49		Tetraalkyl lead	Tetramix	*C, *F
1-50	1762-26-1	Ethyltrimethyl lead		*C, *F
1-51	1762-27-2	Diethyldimethyl lead		*C, *F
1-52	1762-28-3	Triethylmethyl lead		*C, *F
1-53	75-74-1	Tetramethyl lead		*C, *F
1-54	78-00-2	Tetraethyl lead		*C, *F
1-55		Preparations containing Tetraalkyl lead		*C, *F
1-56	56-38-2	Diethyl paranitrophenyl thiophosphate	O,O-Diethyl-O-(p-nitrophenyl) phosphorothioate, Parathion	*F
1-57		Preparations containing Diethyl paranitrophenyl thiophosphate		*F
1-58	8022-00-2	Dimethylethylmercaptoethyl thiophosphate	Demeton-methyl	*F
1-59		Preparations containing Dimethylethylmercaptoethyl thiophosphate		*F
1-60	13171-21-6	Dimethyl-(diethylamido-1-chlorocrotonyl)-phosphate	Phosphamidon	*F
1-61		Preparations containing Dimethyl-(diethylamido-1-chlorocrotonyl)-phosphate		*F
1-62	298-00-0	Dimethyl paranitrophenyl thiophosphate	Parathion-methyl	*F
1-63		Preparations containing Dimethyl paranitrophenyl thiophosphate		*F
1-64	107-49-3	Tetraethyl pyrophosphate	TEPP	*F
1-65		Preparations containing Tetraethyl pyrophosphate		*F
1-66	144-49-0	Monofluoro acetate	Fluoroacetic acid	*F
1-67		Preparations containing Monofluoro acetate and its salts		*F
1-68	640-19-7	Fluoroacetamide	Monofluoroacetamide	*F
1-69	62-74-8	Monofluoro acetates	Sodium fluoroacetate	*F
1-70		Preparations containing Monofluoroacetamide		*F
1-71	20859-73-8	Aluminium phosphide		*C, *F
1-72		Preparations containing Aluminium phosphide and its degradation accelerator		*F
1-73	75-69-4	Trichlorofluoromethane	CFC-11	*C, *G(A-I)

Table 1 : Substances to be Prohibited

Following substances should not be contained in the products nor used in the production process.
The content as impurities should be less than 0.1 percent by weight per homogeneous material.

No.	CAS Number	Substance Name	Synonym	Major Regulatory Control
1-74	75-71-8	Dichlorodifluoromethane	CFC-12	*C, *G(A-I)
1-75	26523-64-8	Trichlorotrifluoroethane	CFC-113	*C, *G(A-I)
1-76	76-13-1	1,1,2 Trichloro-1,2,2 trifluoroethane		*C, *G(A-I)
1-77	354-58-5	1,1,1 Trichlorotrifluoroethane		*C, *G(A-I)
1-78	1320-37-2	Dichlorotetrafluoroethane	CFC-114	*C, *G(A-I)
1-79	76-14-2	1,2 Dichloro-1,1,2,2tetrafluoroethane		*C, *G(A-I)
1-80	374-07-2	1,1 Dichloro-1,2,2,2tetrafluoroethane		*C, *G(A-I)
1-81	76-15-3	chloropentafluoroethane	CFC-115	*C, *G(A-I)
1-82	353-59-3	Bromochlorodifluoromethane	Halone-1211	*C, *G(A-II)
1-83	75-63-8	Bromotrifluoromethane	Halone-1301	*C, *G(A-II)
1-84	25497-30-7	Dibromotetrafluoroethane	Halone-2402	*C, *G(A-II)
1-85	124-73-2	1,2-dibromotetrafluoroethane		*C, *G(A-II)
1-86	27336-23-8	1,1-dibromotetrafluoroethane	1,1-Dibromo-1,2,2,2-tetrafluoroethane	*C, *G(A-II)
1-87	75-72-9	Chlorotrifluoromethane	CFC-13	*C, *G(B-I)
1-88	354-56-3	Pentachlorofluoroethane	CFC-111	*G(B-I)
1-89	28605-74-5	Tetrachlorodifluoroethane	CFC-112	*C, *G(B-I)
1-90	76-11-9	1,1,1,2-Tetrachloro-2,2,difluoroethane		*C, *G(B-I)
1-91	76-12-0	1,1,2,2-Tetrachloro-1,2,difluoroethane		*C, *G(B-I)
1-92	422-78-6	Heptachlorofluoropropane	CFC-211	*G(B-I)
1-93	3182-26-1	Hexachlorodifluoropropane	CFC-212	*G(B-I)
1-94	134237-31-3	Pentachlorotrifluoropropane	CFC-213	*G(B-I)
1-95	2354-06-5	1,1,1,3,3-Pentachlor-2,2,3-trifluoropropane	CFC-213	*G(B-I)
1-96	29255-31-0	Tetrachlorotetrafluoropropane	CFC-214	*G(B-I)
1-97	2268-46-4	1,1,1,3-Tetrachlorotetrafluoropropane		*G(B-I)
1-98	—	Trichloropentafluoropropane	CFC-215	*G(B-I)
1-99	1599-41-3	1,2,2-Trichloropentafluoropropane		*G(B-I)
1-100	4259-43-2	1,1,1-Trichloropentafluoropropane		*G(B-I)
1-101	42560-98-5	Dichlorohexafluoropropane	CFC-216	*G(B-I)
1-102	661-97-2	1,2-Dichloro -1,1,2,3,3,3-hexafluoropropane	CFC-216	*G(B-I)
1-103	422-86-6	Monochloroheptafluoropropane	CFC-217	*G(B-I)
1-104	76-18-6	2-Chloroheptafluoropropane		*G(B-I)
1-105	56-23-5	Carbon tetrachloride	Tetrachloromethane	*C, *G(B-II)
1-106	71-55-6	1,1,1-trichloroethane	Methyl chloroform	*C, *G(B-III)
1-107	1868-53-7	Dibromofluoromethane		*G(C-II)
1-108	1511-62-2	Bromodifluoromethane	HBFC-22B1	*G(C-II)
1-109	373-52-4	Bromofluoromethane		*G(C-II)
1-110		Tetrabromofluoromethane		*G(C-II)
1-111		Tribromofluoromethane		*G(C-II)
1-112		Dibromofluoromethane		*G(C-II)
1-113		Bromotetrafluoroethane		*G(C-II)
1-114	124-72-1	2-Bromo-1,1,1,2-tetrafluoroethane		*G(C-II)
1-115		Tribromofluoroethane		*G(C-II)
1-116		Dibromofluoroethane		*G(C-II)
1-117		Bromotrifluoroethane		*G(C-II)
1-118	421-06-7	2-Bromo-1,1,1,-trifluoroethane		*G(C-II)
1-119		Dibromofluoroethane		*G(C-II)
1-120	358-97-4	1,2-Dibromo-1-fluoroethane		*G(C-II)
1-121		Bromodifluoroethane		*G(C-II)
1-122	359-07-9	2-Bromo-1,1-difluoroethane		*G(C-II)
1-123		Bromofluoroethane		*G(C-II)
1-124	762-49-2	1-Bromo-2-fluoroethane		*G(C-II)
1-125		Hexabromofluoropropane		*G(C-II)
1-126		Pentabromodifluoropropane		*G(C-II)

Table 1 : Substances to be Prohibited

Following substances should not be contained in the products nor used in the production process.
The content as impurities should be less than 0.1 percent by weight per homogeneous material.

No.	CAS Number	Substance Name	Synonym	Major Regulatory Control
1-127		Tetrabromotrifluoropropane		*G(C-II)
1-128		Tribromotetrafluoropropane		*G(C-II)
1-129		Dibromopentafluoropropane		*G(C-II)
1-130		Bromohexafluoropropane		*G(C-II)
1-131	2252-78-0	1-Bromo-1,1,2,3,3,3,-hexafluoropropane		*G(C-II)
1-132		Pentabromofluoropropane		*G(C-II)
1-133		Tetrabromodifluoropropane		*G(C-II)
1-134		Tribromotrifluoropropane		*G(C-II)
1-135		Dibromotetrafluoropropane		*G(C-II)
1-136		Bromopentafluoropropane		*G(C-II)
1-137		Tetrabromofluoropropane		*G(C-II)
1-138		Tribromodifluoropropane		*G(C-II)
1-139		Dibromotrifluoropropane		*G(C-II)
1-140		Bromotetrafluoropropane		*G(C-II)
1-141		Tribromofluoropropane		*G(C-II)
1-142		Dibromodifluoropropane		*G(C-II)
1-143		Bromotrifluoropropane		*G(C-II)
1-144		Dibromofluoropropane		*G(C-II)
1-145		Bromodifluoropropane		*G(C-II)
1-146		Bromofluoropropane		*G(C-II)
1-147	74-97-5	Bromochloromethane		*G(C-III)
1-148	74-83-9	Methyl bromide	Bromomethane	*G(E-I)
1-149	18993-26-5 36312-81-9 219697-10-6 219697-11-7 221174-07-8 276673-33-7 601523-20-0 601523-25-5 85535-84-8	Polychlorinated normal paraffin (limited to those with the number of carbon atoms is 10 to 13 and the content of chlorine is over 48% of the total weight)		*E,*H
1-150	308068-56-6	Carbon nanotube		
1-151	1163-19-5	1,1'-oxybis(2,3,4,5,6-pentabromobenzene)	Decabromodiphenyl oxide	*C,*D,*E

*A: The Industrial Safety and Health Act of Japan：Substances Subject to Prohibition of Manufacturing
*B: Poisonous and Deleterious Substances Control Law of Japan：Poisonous Substances
*C: Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof of Japan (PRTR Law)：Specific Class I Designated Chemical Substance
*D: EU Regulation-REACH (EC) No 1907/2006: ANNEX ⅩⅦ Substances subject to restriction
*E: Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. of Japan ：Class I Specified Chemical Substances
*F: Poisonous and Deleterious Substances Control Law of Japan：Specified Poisonous Substances
*G: Law Concerning the Protection of the Ozone Layer through the Control of Specified Substances and Other Measures：Specified Substances (Montreal Protocol Annex A Group Ⅰ, Ⅱ, Annex B Group Ⅰ, Ⅱ, Ⅲ, Annex C Group Ⅱ, Ⅲ, Annex E Group Ⅰ)
*H: EU Regulation- on persistent organic pollutants (EC) No 850/2004

Table 2 : Substances to be Restricted

Following substances should not be contained in the products nor used in the production process under the conditions or applications.

No.	CAS Number	Substance Name	Specified Conditions or Applications	Major Regulatory Control
2-1	-	**Cadmium and its compounds**	・Should not be contained intentionally or as impurities in concentrations greater than 0.01% by weight per homogeneous material. ・Should not be contained in batteries in concentrations greater than 0.002% by weight. ・However, the following applications are excluded. ① RoHS and ELV Exemptions (see Attached Table I-A・B) ② The applications in which KUBOTA Group admits to contain: ・At present, there are no available substitutional technologies or products. ・The materials KUBOTA Group specified.	RoHS, ELV, Battery Directive, REACH Annex ⅩⅦ, PRTR Law Specific Class I
(Example Substances)	7440-43-9	Cadmium		
	1306-19-0	Cadmium oxide		
	1306-23-6	Cadmium sulphide		
	10108-64-2	Cadmium chloride		
	513-78-0	Cadmium carbonate		
	506-82-1	Dimethylcadmium		
	10124-36-4	Cadmium sulphate		
2-2	-	**Hexavalent chromium compounds**	・Should not be contained intentionally or as impurities in concentrations greater than 0.1% by weight per homogeneous material. ・Should not be contained in cement in concentrations greater than 0.0002%. ・However, the following applications are excluded. ① RoHS and ELV Exemptions (see Attached Table I-A・B) ② The applications in which KUBOTA Group admits to contain: ・At present, there are no available substitutional technologies or products. ・The materials KUBOTA Group specified.	RoHS, ELV, REACH Annex ⅩⅦ、 PRTR Law Specific Class I
(Example Substances)	1333-82-0	Chromium (VI), oxide		
	1333-82-0	Chromium (VI), trioxide		
	7775-11-3	Sodium chromate		REACH SVHC,Annex ⅩⅣ
	10588-01-9	Sodium dichromate, anhydrate		REACH SVHC,Annex ⅩⅣ
	7789-12-0	Sodium dichromate, dihydrate		REACH SVHC,Annex ⅩⅣ
	7789-00-6	Potassium chromate(Ⅵ)		REACH SVHC,Annex ⅩⅣ
	7789-09-5	Ammonium dichromate		REACH SVHC,Annex ⅩⅣ
	7778-50-9	Potassium dichromate		REACH SVHC,Annex ⅩⅣ
	7758-97-6	Lead(II) chromate		REACH SVHC,Annex ⅩⅣ
	12656-85-8	Lead chromate molybdate sulfate		REACH SVHC,Annex ⅩⅣ
	1344-37-2	Pigment Yellow 34		REACH SVHC,Annex ⅩⅣ
2-3	-	**Lead and its compounds**	・Should not be contained intentionally or as impurities in concentrations greater than 0.1% by weight per homogeneous material. ・However, the following applications are excluded. ① RoHS and ELV Exemptions (see Attached Table I-A・B) ② The applications in which KUBOTA Group admits to contain: ・At present, there are no available substitutional technologies or products. ・The materials KUBOTA Group specified.	RoHS, ELV, PRTR Law Specific Class I
(Example Substances)	7439-92-1	Lead		
	7446-14-2	Lead(II) sulphate		
	598-63-0 1319-46-6	Lead carbonate		REACH Annex ⅩⅦ
	15739-80-7	Lead sulphate		REACH Annex ⅩⅦ
	7446-27-7	Trilead bis(orthophosphate)		
	12069-00-0	Lead selenide		
	12060-00-3	Lead(II) titanate		REACH SVHC
	1072-35-1	Lead(II) stearate		
	1314-41-6	Lead(Ⅱ, Ⅳ) oxide		REACH SVHC
	7784-40-9	Lead hydrogen arsenate		REACH SVHC
	7758-97-6	Lead(II) chromate		REACH SVHC,Annex ⅩⅣ
	12656-85-8	Lead chromate molybdate sulfate		REACH SVHC,Annex ⅩⅣ
	1344-37-2	Pigment Yellow 34		REACH SVHC,Annex ⅩⅣ

Table 2 : Substances to be Restricted

Following substances should not be contained in the products nor used in the production process under the conditions or applications.

No.	CAS Number	Substance Name	Specified Conditions or Applications	Major Regulatory Control
2-4	-	**Mercury and its compounds**	・Should not be contained intentionally or as impurities in concentrations greater than 0.1% by weight per homogeneous material. ・Should not be contained in batteries in concentrations greater than 0.005% by weight except in botton cells with a mercury content of no more than 2%. ・However, the following applications are excluded. ① RoHS and ELV Exemptions (see Attached Table I-A・B) ② The applications in which KUBOTA Group admits to contain: ・At present, there are no available substitutional technologies or products. ・The materials KUBOTA Group specified. Import and export prohibitions of specified products with mercury due to Foreign Exchange and Foreign Trade Control Law Batteries (alkaline manganese button cells): from Dec 31, 2020 onwards, switches and relays: from Dec 31, 2020 onwards, electronic displays: from Jan 1, 2018 onwards, etc.	RoHS, ELV, Battery Directive, REACH Annex ⅩⅦ, PRTR Law Specific Class I, Mercury Contamination Prevention Act, Foreign Exchange and Foreign Trade Control Law EU Mercury Regulation: (EU) 2017/852
(Example Substances)	7439-97-6	Mercury and its compounds		
	7487-94-7	Mercury dichloride		
	7783-35-9	Mercury sulphate		
	10045-94-0	Mercury (II) nitrate		
	21908-53-2	Mercury (II) oxide		
	102-98-7	Dihydrogen [orthoborato(3-)-O]phenylmercurate(2-)		
	1344-48-5	Mercury(II) sulfide		
	10112-91-1	Mercury chloride (I)		
2-5	59536-65-1	**Polybromobiphenyls (PBBs)** (Hexabromobiphenyl should be probobited.)	・Should not be contained intentionally or as impurities in concentrations greater than 0.1% by weight per homogeneous material. ・However, the following applications are excluded. ① The applications in which KUBOTA Group admits to contain: ・At present, there are no available substitutional technologies or products.	RoHS REACH Annex ⅩⅦ
(Example Substances)	40088-45-7	Tetrabromobiphenyl		
	56307-79-0	Pentabromobiphenyl		
	35194-78-6	Heptabromobiphenyl		
	62188-13-9	Octabromobiphenyl		
	133654-09-6	Decabromobiphenyl		
2-6	-	**Polybromo diphenyl ethers (PBDEs)** （Tetrabromo diphenyl ether, Pentabromo diphenyl ether, Hexabromo diphenyl ether and Heptabromo diphenyl ether should be prohibited.）	・Should not be contained intentionally or as impurities in concentrations greater than 0.1% by weight per homogeneous material. ・However, the following applications are excluded. ① The applications in which KUBOTA Group admits to contain: ・At present, there are no available substitutional technologies or products.	RoHS, REACH Annex ⅩⅦ
(Example Substances)	32536-52-0	Octabromodiphenyl ether		
	1163-19-5	Decabromodiphenyl ether		
2-7	84-74-2	**Di-n-butyl phthalate, Dibutyl phthalate (DBP)**	・Should not be contained intentionally or as impurities in concentrations greater than 0.1% by ① The applications in which KUBOTA Group admits to contain: ・At present, there are no available substitutional technologies or products.	RoHS、 REACH Annex ⅩⅦ REACH SVHC
2-8	117-81-7	**Phthalic acid bis(2-ethylhexyl), Diethylhexylphthalate (DEHP)**	・Should not be contained intentionally or as impurities in concentrations greater than 0.1% by ① The applications in which KUBOTA Group admits to contain: ・At present, there are no available substitutional technologies or products.	RoHS、 REACH Annex ⅩⅦ REACH SVHC

Table 2 : Substances to be Restricted

Following substances should not be contained in the products nor used in the production process under the conditions or applications.

No.	CAS Number	Substance Name	Specified Conditions or Applications	Major Regulatory Control
2-9	85-68-7	**Phthalic acid n-butyl benzyl, Benzyl butyl phthalate (BBP)**	・Should not be contained intentionally or as impurities in concentrations greater than 0.1% by ① The applications in which KUBOTA Group admits to contain: ・At present, there are no available substitutional technologies or products.	RoHS、 REACH Annex ⅩⅦ REACH SVHC
2-10	84-69-5	**Diisobutyl phthalate (DIBP)**	・Should not be contained intentionally or as impurities in concentrations greater than 0.1% by ① The applications in which KUBOTA Group admits to contain: ・At present, there are no available substitutional technologies or products.	RoHS、 REACH SVHC
2-11	-	**HCFCs**	・Should not be used in products intentionally as a refrigerant gas and a heat insulator.	Law Concerning the Protection of the Ozone Layer Montreal Protocol Annex C
(Example Substances)	75-43-4	Dichlorofluoromethane	HCFC-21	
	75-45-6	Chlorodifluoromethane	HCFC-22	
	593-70-4	Chlorofluoromethane	HCFC-31	
	134237-32-4	Tetrachlorofluoroethane	HCFC-121	
	354-11-0	1,1,1,2-Tetrachloro-2-fluoroethane		
	354-14-3	1,1,2,2-Tetracloro-1-fluoroethane		
	―	Trichlorodifluoroethane	HCFC-122	
	354-15-4	Ethane, 1,2-difluoro-1,1,2-trichloro-		
	134237-33-5	Dichlorotrifluoroethane		
	306-83-2	2,2-Dichloro-1,1,1-trifluroethane	HCFC-123	
	354-23-4	1,2-Dichloro-1,1,2-trifluroethane		
	34077-87-7	Dichlorotrifluoroethane		
	63938-10-3	Chlorotetrafluoroethane		
	354-25-6	1-Chloro-1,1,2,2-tetrafluoroethane		
	2837-89-0	2-Chloro-1,1,1,2-tetrafluoroethane	HCFC-124	
	134237-34-6	Trichlorofluoroethane	HCFC-131	
	811-95-0	1,1,1-Trichloro-2-fluoroethane		
	27154-33-2	Trichlorofluoroethane		
	25915-78-0	Dichlorodifluoroethane	HCFC-132	
	1330-45-6	Chlorotrifluoroethane	HCFC-133	
	75-88-7	2-Chloro-1,1,1-trifluoroethane		
	25167-88-8	Dichlorofluoroethane	HCFC-141	

Table 2 : Substances to be Restricted

Following substances should not be contained in the products nor used in the production process under the conditions or applications.

No.	CAS Number	Substance Name	Specified Conditions or Applications	Major Regulatory Control
	430-57-9	1,2-Dichloro-1-fluoroethane		
	1717-00-6	1,1-Dichloro-1-fluoroethane	HCFC-141b	
	25497-29-4	Chlorodifluoroethane	HCFC-142	
	75-68-3	1-Chloro-1,1-difluoroethane	HCFC-142b	
	338-64-7	Ethane, 1-chloro-1,2-difluoro-		
	110587-14-9	Chlorofluoroethane	HCFC-151	
	134237-35-7	Hexachlorofluoropropane	HCFC-221	
	134237-36-8	Pentachlorodifluoropropane	HCFC-222	
	134237-37-9	Tetrachlorotrifluropropane	HCFC-223	
	127564-91-4	Trichlorotetrafluropropane	HCFC-224	
	134237-38-0	Trichlorotetrafluropropane		
	127564-92-5	Dichloropentafluoropropane	HCFC-225	
	422-44-6	1,2-Dichloro-1,1,2,3,3-pentafluoropropane		
	422-56-0	3,3-Dichloro-1,1,1,2,2-pentafluoropropane	HCFC-225ca	
	507-55-1	1,3-Dichloro-1,1,2,2,3-pentafluoropropane	HCFC-225cb	
	13474-88-9	1,1-Dichloro-1,2,2,3,3-pentafluoropropane		
	128903-21-9	2,2-Dichloro-1,1,1,3,3-pentafluoropropane		
	134308-72-8	Chlorohexafluoropropane	HCFC-226	
	422-55-9	1-Chloro-1,1,2,2,3,3-hexafluropropane		
	422-57-1	3-Chloro-1,1,1,2,2,3-hexafluropropane		
	134190-48-0	Pentachlorofluoropropane	HCFC-231	
	127564-82-3	Tetrachlorodifluoropropane	HCFC-232	
	134237-39-1	Tetrachlorodifluoropropane		
	134237-40-4	Trichlorotrifluoropropane	HCFC-233	
	127564-83-4	Dichlorotetrafluoropropane	HCFC-234	
	134237-41-5	Chloropentafluoropropane	HCFC-235	
	134190-49-1	Tetrachlorofluoropropane	HCFC-241	
	127564-90-3	Trichlorodifluoropropane	HCFC-242	
	134237-42-6	Trichlorodifluoropropane		
	134237-43-7	Dichlorotrifluoropropane	HCFC-243	
	134190-50-4	Chlorotetrafluoropropane	HCFC-244	
	134190-51-5	Trichlorofluoropropane	HCFC-251	
	818-99-5	1,1,3-Trichloro-1-fluoropropane		
	134190-52-6	Dichlorodifluoropropane	HCFC-252	

Table 2 : Substances to be Restricted

Following substances should not be contained in the products nor used in the production process under the conditions or applications.

No.	CAS Number	Substance Name	Specified Conditions or Applications	Major Regulatory Control
	134237-44-8	Chlorotrifluoropropane	HCFC-253	
	134237-45-9	Dichlorofluoropropane	HCFC-261	
	7799-56-6	1,1-Dichloro-1-fluoropropane		
	134190-53-7	Chlorodifluoropropane	HCFC-262	
	102738-79-4	2-Chloro-1,3-difluoropropane		
	134190-54-8	Chlorofluoropropane	HCFC-271	
2-12	-	**Specific azo compounds**	・Prohibited to intentionally add the substance to textile and leather products that may directly contact with human skin or oral cavity for a long time. ・Specific amines that must not be generated by reduction/degradation of azo compounds are shown in the left columns. ・Except for the following exempted applications. ① The applications in which KUBOTA Group admits to contain: ・At present, there are no available substitutional technologies or products.	REACH Annex ⅩⅦ
(Example Substances)	92-67-1	4-Aminodiphenyl		
	92-87-5	Benzidine		
	95-69-2	4-Chloro-o-toluidine		
	91-59-8	2-Naphthylamine		
	97-56-3	o-Aminoazotoluene		
	99-55-8	5-Nitro-o-toluidine		
	106-47-8	4-Chloroaniline		
	615-05-4	4-Methoxy-m-phenylenediamine		
	101-77-9	4,4'-Diaminodiphenylmethane		
	91-94-1	3,3'-Dichlorobenzidine		
	119-90-4	3,3'-Dimethoxybenzidine		
	119-93-7	3,3'-Dimethylbenzidine		
	838-88-0	3,3'-Dimethyl-4,4'-diaminodiphenylmethane		
	120-71-8	p-Cresidine		
	101-14-4	4,4'-Methylenebis(2-chlorobenzenamine)		
	101-80-4	4,4'-Oxybisaniline		
	139-65-1	4,4'-Thiodianiline		
	95-53-4	o-Toluidine		
	95-80-7	2,4-Toluilenediamine		
	137-17-7	2,4,5-Trimethylaniline		
	90-04-0	o-Anisidine		
	60-09-3	4-Aminoazobenzene		

Table 2 : Substances to be Restricted

Following substances should not be contained in the products nor used in the production process under the conditions or applications.

No.	CAS Number	Substance Name	Specified Conditions or Applications	Major Regulatory Control
2-13	-	**Polycyclic aromatic hydrocarbons (PAH)**	・Prohibited to intentionally add the substance to gum or plastic parts that directly contact with human skin or oral cavity for a long time or repeatedly for a short time. ① The applications in which KUBOTA Group admits to contain: ・At present, there are no available substitutional technologies or products.	REACH Annex ⅩⅦ
(Example Substances)	50-32-8	Benzo[a]pyrene		
	192-97-2	Benzo[c]pyrene		
	56-55-3	Benz[a]anthracene		
	218-01-9	Chrysene		
	205-99-2	Benzo[b]fluoranthene		
	205-82-3	Benzo[j]fluoranthene		
	207-08-9	Benzo[k]fluoranthene		
	53-70-3	Dibenz[a,h]anthracene		
2-14	-	**Polychlorinated terphenyl (PCT)**	・Prohibited to be contained in the substances and mixture beyond 50 ppm and devices. ① The applications in which KUBOTA Group admits to contain: ・At present, there are no available substitutional technologies or products.	REACH Annex ⅩⅦ
(Example Substances)	61788-33-8	Polychlorinated terphenyls (all isomers and homologs)		
2-15	-	**Organic tin compounds** (Excluding the prohibited substances: Bis(tributyltin)oxide, Tributyltin oxide (TBTO))	・Prohibited to be contained beyond 0.1% by weight (converted to tin). ・Except for the following exempted applications. ① The applications in which KUBOTA Group admits to contain: ・At present, there are no available substitutional technologies or products.	REACH Annex ⅩⅦ
(Example Substances)	2155-70-6	Tributyltin methacrylate (TBT)		
	6454-35-9	Bis(tributyltin)fumalate		
	115-90-2	Tributyltin fluoride		
	31732-71-5	Bis(tributyltin)2,3-dibromosuccinate		
	56-36-0	Tributyltin acetate		
	3090-36-6	Tributyltin laurate		
	4782-29-0	Bis(tributyltin)phthalate		
	67772-01-4	Alkyl acrylate・Methyl methacrylate・Tributyltin methacrylate, copolymers (limited to alkyl acrylate with 8 alkyl carbons)		
	6517-25-5	Tributyltin sulfamate		
	14275-57-1	Bis(tributyltin) maleate		
	85409-17-2	Tributyltin yclopentanecarboxylate and		
	26239-64-5	Tributyltin1,2,3,4,4a,4b,5,6,10,10a-decahydro-1,4a-dimethyl-1-isopropylphenanthrencarboxylate and mixture of its analogs		
	3644-37-9	(2-biphenyloxy)tributyltin		
	1461-23-0	Tributyltin bromide		
	7342-38-3	Tributyltin chloride		
	892-20-6	Triphenyltin hydride		
	894-09-7	Triphenyltin iodide		

Table 2 : Substances to be Restricted

Following substances should not be contained in the products nor used in the production process under the conditions or applications.

No.	CAS Number	Substance Name	Specified Conditions or Applications	Major Regulatory Control
	7324-74-5	Dibutyltin bis(benzyl maleate)		
	1067-33-0	Dibutyltin diacetate		
	77-58-7	Dibutyltin dilaurate		
	78-04-6	Dibutyltin maleate		
	818-08-6	Dibutyltin oxide (DBT)		
	26401-97-8	Dioctyltin		
	3542-36-7	Dioctyltin dichloride		
	16091-18-2	Dioctyltin maleate		
	870-08-6	Dioctyltin oxide (DOT)		
	3648-18-8	Dioctyltin dilaurate		
2-16	624-49-7	**Fumaric acid dimethyl, Dimethylfumarate (DMF)**	・Prohibited to be contained beyond 0.1 ppm of homogeneous material intentionally or as ① Application with the substance recognized by Kubota Group ・No alternative technology or product available at present	REACH Annex ⅩⅦ
2-17	62-38-4 103-27-5 13302-00-6 13864-38-5 26545-49-3	Phenylmercury compounds Phenylmercuric propionate Phenylmercury 2-ethylhexanoate Phenylmercury octanoate Phenylmercury neodecanoate	- Manufacture, market release or use as compounds is prohibited when the mercury concentration of the substance or in the compound is 0.01 wt% or more, and release of articles or their components that contain one or more of these substances is prohibited if the mercury concentration of the substance in the articles or their components is 0.01 wt% or more. - The above is not applicable to the following exempt applications. □ Application in which inclusion is permitted by Kubota Group	REACH Annex ⅩⅦ
2-18	-	Inorganic ammonium salt	- Market release or use of cellulose insulation materials that emit inorganic ammonium salt at the rate of 2.12 mg/m3 or more under given test conditions was banned on July 14, 2018. - The above is not applicable to the following exempt applications. □ Application in which inclusion is permitted by Kubota Group - When usable alterative technology or product is	REACH Annex ⅩⅦ
2-19	67-56-1	Methanol	- Release to general market of windshield washing fluids or defrosting fluids that contain the corresponding substance at the rate of 0.6 wt% or more will be banned on May 9, 2019. - The above is not applicable to the following exempt applications. □ Application in which inclusion is permitted by	REACH Annex ⅩⅦ

Attached Table I-A : RoHS Exemptions List
(reflected to the Commission Directive announced on 18 May 2018 2018/742/EU)

Exemption		Scope and dates of applicability
1	Mercury in single capped (compact) fluorescent lamps not exceeding (per burner):	
1(a)	For general lighting purposes < 30 W: 5 mg	Expires on 31 December 2011; 3,5 mg may be used per burner after 31 December 2011 until 31 December 2012; 2,5 mg shall be used per burner after 31 December 2012
1(b)	For general lighting purposes ≥ 30 W and < 50 W: 5 mg	Expires on 31 December 2011; 3,5 mg may be used per burner after 31 December 2011
1(c)	For general lighting purposes ≥ 50 W and < 150 W: 5 mg	
1(d)	For general lighting purposes ≥ 150 W: 15 mg	
1(e)	For general lighting purposes with circular or square structural shape and tube diameter ≤ 17 mm	No limitation of use until 31 December 2011; 7 mg may be used per burner after 31 December 2011
1(f)	For special purposes: 5 mg	
1(g)	For general lighting purposes with lifetime 20000 hrs over < 30 W: 3.5 mg	Expires on 31 December 2017
2(a)	Mercury in double-capped linear fluorescent lamps for general lighting purposes not exceeding (per lamp):	
2(a)(1)	Tri-band phosphor with normal lifetime and a tube diameter < 9 mm (e.g. T2): 5 mg	Expires on 31 December 2011; 4 mg may be used per lamp after 31 December 2011
2(a)(2)	Tri-band phosphor with normal lifetime and a tube diameter ≥ 9 mm and ≤ 17 mm (e.g. T5): 5 mg	Expires on 31 December 2011; 3 mg may be used per lamp after 31 December 2011
2(a)(3)	Tri-band phosphor with normal lifetime and a tube diameter > 17 mm and ≤ 28 mm (e.g. T8): 5 mg	Expires on 31 December 2011; 3,5 mg may be used per lamp after 31 December 2011
2(a)(4)	Tri-band phosphor with normal lifetime and a tube diameter > 28 mm (e.g. T12): 5 mg	Expires on 31 December 2012; 3,5 mg may be used per lamp after 31 December 2012
2(a)(5)	Tri-band phosphor with long lifetime (≥ 25000 h): 8 mg	Expires on 31 December 2011; 5 mg may be used per lamp after 31 December 2011
2(b)	Mercury in other fluorescent lamps not exceeding (per lamp):	
2(b)(1)	Linear halophosphate lamps with tube > 28 mm (e.g. T10 and T12): 10 mg	Expires on 13 April 2012
2(b)(2)	Non-linear halophosphate lamps (all diameters): 15 mg	Expires on 13 April 2016
2(b)(3)	Non-linear tri-band phosphor lamps with tube diameter > 17 mm (e.g. T9)	No limitation of use until 31 December 2011; 15 mg may be used per lamp after 31
2(b)(4)	Lamps for other general lighting and special purposes (e.g. induction lamps)	No limitation of use until 31 December 2011; 15 mg may be used per lamp after 31
3	Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for special purposes not exceeding (per lamp):	
3(a)	Short length (≤ 500 mm)	No limitation of use until 31 December 2011; 3,5 mg may be used per lamp after 31 December 2011
3(b)	Medium length (> 500 mm and ≤ 1500 mm)	No limitation of use until 31 December 2011; 5 mg may be used per lamp after 31 December 2011
3(c)	Long length (> 1500 mm)	No limitation of use until 31 December 2011; 13 mg may be used per lamp after 31 December 2011

Attached Table I-A : RoHS Exemptions List
(reflected to the Commission Directive announced on 18 May 2018 2018/742/EU)

Exemption		Scope and dates of applicability
4(a)	Mercury in other low pressure discharge lamps (per lamp)	No limitation of use until 31 December 2011; 15 mg may be used per lamp after 31 December 2011
4(b)	Mercury in High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner) in lamps with improved colour rendering index Ra > 60:	
4(b)-I	P ≤ 155 W	No limitation of use until 31 December 2011; 30 mg may be used per burner after 31 December 2011
4(b)-II	155 W < P ≤ 405 W	No limitation of use until 31 December 2011; 40 mg may be used per burner after 31 December 2011
4(b)-III	P > 405 W	No limitation of use until 31 December 2011; 40 mg may be used per burner after 31 December 2011
4(c)	Mercury in other High Pressure Sodium (vapour) lamps for general lighting purposes not exceeding (per burner):	
4(c)-I	P ≤ 155 W	No limitation of use until 31 December 2011; 25 mg may be used per burner after 31 December 2011
4(c)-II	155 W < P ≤ 405 W	No limitation of use until 31 December 2011; 30 mg may be used per burner after 31 December 2011
4(c)-III	P > 405 W	No limitation of use until 31 December 2011; 40 mg may be used per burner after 31 December 2011
4(d)	Mercury in High Pressure Mercury (vapour) lamps (HPMV)	Expires on 13 April 2015
4(e)	Mercury in metal halide lamps (MH)	
4(f)	Mercury in other discharge lamps for special purposes not specifically mentioned in this Annex	
4(g)	Mercury in handicraft luminous discharge tube (HLDT) used for sign, decoration, construction and specific lighting and illumination art and limited to the following inclusion requirements (a) Internal and external use constantly at <20°C, 20 mg per electrode, and 0.3 mg/cm and <80 mg per tube length. (b) Other internal use at 15 mg per electrode and 0.24 mg/cm and <80mg per tube length	Expires on 31 December 2018
5(a)	Lead in glass of cathode ray tubes	
5(b)	Lead in glass of fluorescent tubes not exceeding 0,2 % by weight	

Attached Table I-A : RoHS Exemptions List
(reflected to the Commission Directive announced on 18 May 2018 2018/742/EU)

Exemption		Scope and dates of applicability
6(a)	Lead as an alloying element in steel for machining purposes and in galvanized steel containing up to 0,35 % lead by weight	This applies to category 8, 9, and 11.The expiration dates are shown below: • Category 8 (medical devices for in vitro diagnosis): July 21, 2023 • Category 9 (industrial monitoring and control equipment) and category 11: July 21, 2024 • Others than above in categories 8 and 9: July 21, 2021
6(a)-I	Lead contained as an alloying element in machining steel materials up to 0.35 wt% and lead contained in hot dip galvanizing zinc plating steel up to 0.2 wt%	This applies to categories 1 to 7 and 10. The expiration date is 21 July 2021.
6(b)	Lead contained as an alloying element in aluminum up to 0.4 wt%	This applies to category 8, 9, and 11.The expiration dates are shown below: • Category 8 (medical devices for in vitro diagnosis): July 21, 2023 • Category 9 (industrial monitoring and control equipment) and category 11: July 21, 2024 • Others than above in categories 8 and 9: July 21, 2021
6(b)-I	Lead contained as an alloying element in aluminum up to 0.4 wt% produced by recycling aluminum scrap containing lead	This applies to categories 1 to 7 and 10. The expiration date is 21 July 2021.
6(b)-II	Lead contained as an alloying element in machining aluminum up to 0.4 wt%	This applies to categories 1 to 7 and 10. The expiration date is 18 May 2021.
6(c)	Copper alloy containing up to 4 % lead by weight	This applies to categories 1 to 11.The expiration dates are shown below: • Category 8 (medical devices for in vitro diagnosis): July 21, 2023 • Category 9 (industrial monitoring and control equipment) and category 11: July 21, 2024 • Others than above in categories 1to 10:
7(a)	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)	This applies to categories 1 to 11.The expiration dates are shown below: • Category 8 (medical devices for in vitro diagnosis): July 21, 2023 • Categories 9 (industrial monitoring and control equipment) and 11: July 21, 2024 • Others than above in categories 1to 10 (except for applications that fall under Section 24 of Annex III): July 21, 2021
7(b)	Lead in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signalling, transmission, and network management for telecommunications	

Attached Table I-A : RoHS Exemptions List
(reflected to the Commission Directive announced on 18 May 2018 2018/742/EU)

Exemption		Scope and dates of applicability
7(c)-I	Electric/electronic components (piezoelectric elements, etc.) with lead in glass or ceramic other than dielectric ceramic in capacitors, and electric/electronic components with lead in glass or ceramic compounds	This applies to categories 1 to 11.The expiration dates are shown below: • Category 8 (medical devices for in vitro diagnosis): July 21, 2023 • Category 9 (industrial monitoring and control equipment) and category 11: July 21, 2024 • Others than above in categories 1to 10 (except for applications that fall under
7(c)-II	Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher	
7(c)-III	Lead in dielectric ceramic in capacitors for a rated voltage of less than 125 V AC or 250 V DC	Expires on 1 January 2013 and after that date may be used in spare parts for EEE placed on the market before 1 January 2013
7(c)-IV	Lead in PZT based dielectric ceramic materials for capacitors being part of integrated circuits or discrete semiconductors	Expires on 21 July 2016
8(a)	Cadmium and its compounds in one shot pellet type thermal cut-offs	Expires on 1 January 2012 and after that date may be used in spare parts for EEE placed on the market before 1 January 2012
8(b)	Cadmium and its compounds in electrical contacts	
9	Hexavalent chromium as an anticorrosion agent of the carbon steel cooling system in absorption refrigerators up to 0,75 % by weight in the cooling solution	
9(b)	Lead in bearing shells and bushes for refrigerant-containing compressors for heating, ventilation, air conditioning and refrigeration (HVACR) applications	This applies to category 8, 9, 11. The expiration dates are shown below: • category 8 (medical devices for in vitro diagnosis): 21 July 2023 • category 9 (industrial monitoring and control equipment) and category 11: 21 July 2024 • Others than above in category 8 and 9
9(b)-(I)	Lead in bearing shells and bushes for refrigerant-containing sealed scroll compressors with 9 kW or lower Rated Power for heating, ventilation, air	This applies to category 1. The expiration date is 21 July 2019.
11(a)	Lead used in C-press compliant pin connector systems	May be used in spare parts for EEE placed on the market before 24 September 2010
11(b)	Lead used in other than C-press compliant pin connector systems	Expires on 1 January 2013 and after that date may be used in spare parts for EEE placed on the market before 1 January 2013
12	Lead as a coating material for the thermal conduction module C-ring	May be used in spare parts for EEE placed on the market before 24 September 2010

Attached Table I-A : RoHS Exemptions List
(reflected to the Commission Directive announced on 18 May 2018 2018/742/EU)

Exemption		Scope and dates of applicability
13(a)	Lead in white glasses used for optical applications	This applies to all categories. The expiration dates are shown below: • category 8 (medical devices for in vitro diagnosis): 21 July 2023 • category 9 (industrial monitoring and control equipment) and category 11: 21 July 2024 • Others than above category: 21 July 2021
13(b)	Lead and cadmium in filter glasses and glasses used for reflectance standards	This applies to categories 8, 9, 11. The expiration dates are shown below: • category 8 (medical devices for in vitro diagnosis): 21 July 2023 • category 9 (industrial monitoring and control equipment) and category 11: 21 July 2024 • Others than above in category 8 and 9 : 21 July 2021
13(b)-(I)	Lead in ion colored optical filter glass	This applies to categories 1 to 7 and 10. The expiration date is 21 July 2021.
13(b)-(II)	Cadmium in striking optical filter glass except for applications that fall under 39 items in Annex III	
13(b)-(III)	Lead and cadmium in glaze for standard reflectors	
14	Lead in solders consisting of more than two elements for the connection between the pins and the package of microprocessors with a lead content of more than 80 % and less than 85 % by weight	Expires on 1 January 2011 and after that date may be used in spare parts for EEE placed on the market before 1 January 2011
15	Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit flip chip packages	
16	Lead in linear incandescent lamps with silicate coated tubes	Expires on 1 September 2013
17	Lead halide as radiant agent in high intensity discharge (HID) lamps used for professional reprography applications	
18(a)	Lead as activator in the fluorescent powder (1 % lead by weight or less) of discharge lamps when used as speciality lamps for diazoprinting reprography, lithography, insect traps, photochemical and curing processes containing phosphors such as SMS ((Sr,Ba) 2 MgSi 2 O 7 :Pb)	Expires on 1 January 2011
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 such as BSP (BaSi 2 O 5 :Pb)	
19	Lead with PbBiSn-Hg and PbInSn-Hg in specific compositions as main amalgam and with PbSn-Hg as auxiliary amalgam in very compact energy saving lamps (ESL)	Expires on 1 June 2011
20	Lead oxide in glass used for bonding front and rear substrates of flat fluorescent lamps used for Liquid Crystal Displays (LCDs)	Expires on 1 June 2011

Attached Table I-A : RoHS Exemptions List
(reflected to the Commission Directive announced on 18 May 2018 2018/742/EU)

Exemption		Scope and dates of applicability
21	Lead and cadmium in printing inks for the application of enamels on glasses, such as borosilicate and soda lime glasses	
23	Lead in finishes of fine pitch components other than connectors with a pitch of 0,65 mm and less	May be used in spare parts for EEE placed on the market before 24 September 2010
24	Lead in solder used for discoidal or planar array ceramic multilayer capacitors with machined through hole	This applies to categories 1 to 11.The expiration dates are shown below: • Category 8 (medical devices for in vitro diagnosis): July 21, 2023 • Category 9 (industrial monitoring and control equipment) and category 11: July 21, 2024 • Others than above in categories 1to 10 : July 21, 2021
25	Lead oxide in surface conduction electron emitter displays (SED) used in structural elements, notably in the seal frit and frit ring	
26	Lead oxide in the glass envelope of black light blue lamps	Expires on 1 June 2011
27	Lead alloys as solder for transducers used in high-powered (designated to operate for several hours at acoustic power levels of 125 dB SPL and above)	Expired on 24 September 2010
29	Lead bound in crystal glass as defined in Annex I (Categories 1, 2, 3 and 4) of Council Directive 69/493/EEC	
30	Cadmium alloys as electrical/mechanical solder joints to electrical conductors located directly on the voice coil in transducers used in high-powered loudspeakers with sound pressure levels of 100 dB	
31	Lead in soldering materials in mercury free flat fluorescent lamps (which e.g. are used for liquid crystal displays, design or industrial lighting)	
32	Lead oxide in seal frit used for making window assemblies for Argon and Krypton laser tubes	
33	Lead in solders for the soldering of thin copper wires of 100 µm diameter and less in power transformers	
34	Lead in components of trimmer potentiometer mainly consisting of cermets	This applies to categories 1 to 11.The expiration dates are shown below: • Category 8 (medical devices for in vitro diagnosis): July 21, 2023 • Category 9 (industrial monitoring and control equipment) and category 11: July 21, 2024 • Others than above in categories 1to 10 : July 21, 2021
36	Mercury used as a cathode sputtering inhibitor in DC plasma displays with a content up to 30 mg per display	Expired on 1 July 2010
37	Lead in the plating layer of high voltage diodes on the basis of a zinc borate glass body	

Attached Table I-A : RoHS Exemptions List
(reflected to the Commission Directive announced on 18 May 2018 2018/742/EU)

Exemption		Scope and dates of applicability
38	Cadmium and cadmium oxide in thick film pastes used on aluminium bonded beryllium oxide	
39(a)	Cadmium selenide in semiconductor nanocrystal quantum dot with low cadmium for display lighting (the content in a 1 mm^2 display area is ＜0.2μg Cd)	Expires on 31 October 2019
40	Cadmium in photoresistors for analogue optocouplers applied in professional audio equipment	Expires on 31 December 2013
41	Lead in an ignition directly or closely installed in a cylinder or crank case of a handheld internal-combustion engine (Class SH:1, SH:2, SH:3 of Directive 97/68/EC) due to technical reason, and finishing of a printed circuit board used for other electrical and electronic control system, and end-finishing or soldering of electrical and electronic parts	Expires on 31 December 2018

Table 3 : Substances to be Controlled

Substances specified by the regulatory control etc. of Table 3 except substances listed in Table 1 and Table 2 should be recognized their presence in the products or use in the production process.

No.	Name of the regulatory control etc.
3-1	PRTR Law: Specific Class I Designated Chemical Substance
3-2	PRTR Law: Class I Designated Chemical Substance
3-3	Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. of Japan (Chemical Substances Control Law): Class II Specified Chemical Substances
3-4	Poisonous and Deleterious Substances Control Law of Japan: Poisonous Substances
3-5	EU REACH: Substances in the Candidate List for Authorization (SVHC) and Substances in the Authorization List (Annex XIV)
3-6	EU REACH: Restricted Substances (Annex XVII)
3-7	EU CLP: Annex VI CMR Cat. 1, 2
3-8	GADSL *1
3-9	chemSHERPA Declarable Substances List *2

*1 GADSL: Global Automotive Declarable Substance List

It is a declarable substance list which Global Automotive Stakeholder Group (GASG) provides as a standard for automobile industry to exchange information regarding the material and substance composition of automotive parts.

*2 chemSHERPA Declarable Substances List is a list which JAMP (Joint Article Management Promotion-consortium) provides as a cross-industrial standard to exchange chemical information.