※ Attachment 8. Persistent Organic Pollutants Regulation

Table1. List of Persistent organic pollutants and their exemption items in EU

No	Substance	CAS No	exemption
1	Tetrabromodiphenyl ether	40088-47-9	1. For the purposes of this entry, Each substance shall apply to concentrations of ether equal to or below 10 mg/kg (0,001 % by weight) where it is present in substances. 2. For the purposes of the entries on tetra-, penta-, hexa-, hepta- and decaBDE, The sum of the concentration of those substances shall apply up to 500 mg/kg where they are present in mixtures or articles, subject to review and assessment by the Commission by 16 July 2021. This review shall assess, inter alia, all relevant impacts with regard to health and the environment. 3. By way of derogation, the manufacturing, placing on the market and use of the following shall be allowed: electrical and electronic equipment within the scope of Directive 2011/65/EC. 4. Use of articles in the Union containing each substance already shall be allowed before 25 August 2010. Article 4(2, 3, 4)s shall apply in relation to such articles.
2	Pentabromodiphenyl ether	32534-81-9	
3	Hexabromodiphenyl ether	36483-60-0	
4	Heptabromodiphenyl ether	68928-80-3	
5	Decabromdiphenyl ether (Deca-BDE)	1163-19-5	1. For the purposes of this entry, point (b) of Article 4(1) shall apply to concentrations of decaBDE equal to or below 10 mg/kg (0,001 % by weight) where it is present in substances. 2. For the purposes of the entries on tetra-, penta-, hexa-, hepta- and decaBDE, point (b) of Article 4(1) shall apply to the sum of the concentrations of those substances up to 500 mg/kg where they are present in mixtures or articles, subject to review and assessment by the Commission by 16 July 2021. This review shall assess, inter alia, all relevant impacts with regard to health and the environment. 3. By way of derogation, the manufacturing, placing on the market and use of decaBDE shall be allowed for the following purposes, provided that Member States report to the Commission by December 2019 in accordance with the Convention: (a) in the manufacturing of an aircraft, for which type approval has been applied for before 2 March 2019 and has been received before December 2022, until 18 December 2023, or, in cases where the continuing need is justified, until 2 March 2027 (b) in the manufacturing of spare parts for either of the following: (i) an aircraft, for which type approval has been applied for before 2 March 2019 and has been received before December 2022, produced before 18 December 2023, or, in cases where the continuing need is justified, produced before 2 March 2027, until the end of service life of that

			aircraft; (ii) motor vehicles within the scope of Directive 2007/46/EC of the European Parliament and of the Council(2), produced before 15 July 2019, either until 2036 or the end of service life of those motor vehicles, whichever date comes earlier; (c) electric and electronic equipment within the scope of Directive 2011/65/EC. 4. The specific exemptions for spare parts for use in motor vehicles referred to in point 2(b)(ii) shall apply for the manufacturing and use of commercial decaBDE falling into one or more of the following categories (a) powertrain and under-hood applications such as battery mass wires, battery interconnection wires, mobile air condition (MAC) pipes, powertrains, exhaust manifold bushings, under- hood insulation, wiring and harness under-hood (engine wiling, etc.), speed sensors, hoses, fan modules and knock sensors; b) fuel system applications such as fuel hoses, fuel tanks and fuel tanks under body (c) pyrotechnical devices and applications affected by pyrotechnical devices such as airbag ignition cables, seat covers/fabrics, only if airbag relevant and airbags (front and side). 5. Use of articles already in use before 15 July 2019 in the Union containing decaBDE shall be allowed. Article 4(2), third and fourth subparagraphs shall apply in relation to such articles. 6. Without prejudice to the application of other Union provisions on the classification, packaging and labelling of substances and mixtures, articles in which decaBDE is used shall be identifiable by labelling or other means throughout its life cycle. 7. The placing on the market and use of articles containing decaBDE imported for the purposes of the specific exemptions in point 2 shall be allowed until the expiry of those exemptions. Point 6 shall apply as if such articles were produced pursuant to the exemption in point 2. Such articles already in use by the date of expiry of the relevant exemption may continue to be used. 8. For the purposes of this entry ‘aircraft’ means the following (a) a civil aircraft produced in accordance with a type certificate issued under Regulation (EC) No 216/2008 of the European Parliament and of the Council(3) or with a design approval issued under the national regulations of a contracting state of ICAO, or for which a certificate of airworthiness has been issued by an ICAO Contracting State under Annex 8 to the Convention on International Civil Aviation

			(b) a military aircraft
6	Perfluorooctane sulfonic acid and its derivatives (PFOS)	1763-23-1 2795-39-3 29457-72-5 29081-56-9 70225-14-8 56773-42-3 251099-16-8 4151-50-2 31506-32-8 1691-99-2 24448-09-7 307-35-7	1. For the purposes of this entry, point (b) of Article 4(1) shall apply to concentrations of PFOS equal to or below 10 mg/kg (0,001 % by weight) where it is present in substances or in mixtures. 2. For the purposes of this entry, point (b) of Article 4(1) shall apply to concentrations of PFOS in semi-finished products or articles, or parts thereof, if the concentration of PFOS is lower than 0,1 % by weight calculated with reference to the mass of structurally or micro-structurally distinct parts that contain PFOS or, for textiles or other coated materials, if the amount of PFOS is lower than 1 µg/m2 of the coated material. 3. Use of articles already in use in the Union before 25 August 2010 containing PFOS shall be allowed. Article 4(2), third and fourth subparagraphs shall apply in relation to such articles. 4.If the quantity released into the environment is minimised, manufacturing and placing on the market is allowed for the following specific uses provided that Member States report to the Commission every four years on progress made to eliminate PFOS: mist suppressants for non-decorative hard chromium (VI) plating in closed loop systems. Where such a derogation concerns production or use in an installation within the scope of Directive 2008/1/EC of the European Parliament and of the Council(4), the relevant best available techniques for the prevention and minimisation of emissions of PFOS described in the information published by the Commission pursuant to Article 17(2), second subparagraph, of Directive 2008/1/EC shall apply. As soon as new information on details of uses and safer alternative substances or technologies becomes available, the Commission shall

			review the derogation in the second subparagraph so that: (a) the uses of PFOS will be phased out as soon as the use of safe r alternatives is technically and economically feasible; (b) a derogation can only be continued for essential uses for which safer alternatives do not exist and where the efforts undertaken to find safer alternatives have been reported on; (c) releases of PFOS into the environment have been minimised by applying best available techniques. 5. Once standards are adopted by the European Committee for Standardisation (CEN) they shall be used as the analytical test methods for demonstrating the conformity of substances, mixtures and articles to points 1 and 2. Any other analytical method for which the user can prove equivalent performance could be used as an alternative to the CEN standards.
7	DDT (1,1,1-trichloro-2,2-bis (4-chlorophenyl)ethane	50-29-3	
8	Chlordane	57-74-9	
9	Hexachlorocyclohexanes, including lindane	58-89-9 319-84-6 319-85-7 608-73-1	
10	Dieldrin	60-57-1	
11	Endrin	72-20-8	
12	Heptachlor	76-44-8	
13	Endosulfan	115-29-7 959-98-8 33213-65-9	1. Placing on the market and use of articles already in use before or on 10 July 2012 containing endosulfan shall be allowed. 2. Article 4(2), third and fourth subparagraphs shall apply to articles referred to in point 1.
14	Hexachlorobenzene	118-74-1	
15	Chlordecone	143-50-0	
16	Aldrin	309-00-2	
17	Pentachlorobenzene	608-93-5	
18	Polychlorinated Biphenyls (PCB)	1336-36-3 and others	Without prejudice to Directive 96/59/EC, articles already in use at the time of the entry into force of this Regulation are allowed to be used. Member States shall identify and remove from use equipment (e.g. transformers, capacitors or other receptacles containing liquid stocks) containing more than 0,005 % PCBs and volumes greater than 0,05 dm3, as soon as possible but no later than 31 December 2025.
19	Mirex	2385-85-5	
20	Toxaphene	8001-35-2	
21	Hexabromobiphenyl	36355-01-8	

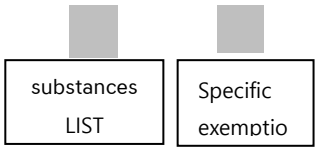
22	Hexabromocyclododecane (HBCD)	25637-99-4, 3194-55-6, 134237-50-6, 134237-51-7, 134237-52-8	1. Do not exceed the HBCDD concentration of 75 mg/kg (0.0075 wt%, 75 ppm) in the substance, mixture, or product after 2024.10.16 if present in the product, mixture, or substance as a flame retardant ingredient. 100 mg/kg (0.01 wt%) of HBCDD concentration if recycled polystyrene is used in the production of EPS and XPS insulation used in buildings or civil engineering works.. 2.Expanded polystyrene articles containing hexabromocyclododecane already in use in buildings before 21 February 2018 in accordance with Commission Regulation (EU) 2016/293(5) and Commission Implementing Decision No 2016/C 12/06(6), and extruded polystyrene articles containing hexabromocyclododecane already in use in buildings before 23 June 2016 may continue to be used. Article 4(2), third and fourth subparagraphs shall apply to such articles 3. Without prejudice to the application of other Union provisions on the classification, packaging and labelling of substances and mixtures, expanded polystyrene placed on the market after 23 March 2016 in which hexabromocyclododecane was used shall be identifiable by labelling or other means throughout its life cycle.
23	Hexachlorobutadiene	87-68-3	1. Placing on the market and use of articles already in use before or on 10 July 2012 containing hexachlorobutadiene shall be allowed. 2. Article 4(2), third and fourth subparagraphs shall apply to articles referred to in point 1.
24	Pentachlorophenol and its salts and esters	87-86-5	
25	Polychlorinated naphthalenes	70776-03-3	1. Placing on the market and use of articles already in use before or on 10 July 2012 containing polychlorinated naphthalenes shall be allowed 2. Article 4(2), third and fourth subparagraphs shall apply to articles referred to in point 1.
26	Alkanes C10-C13, chloro (short-chain chlorinated paraffins) (SCCPs)	85535-84-8	1. By way of derogation, the manufacturing, placing on the market and use of substances or mixtures containing SCCPs in concentrations lower than 1 % by weight or articles containing SCCPs in concentrations lower than 0,15 % by weight shall be allowed. 2. Use shall be allowed in respect of (a) conveyor belts in the mining industry and dam sealants containing SCCPs already in use before or on 4 December 2015 (b) articles containing SCCPs other than those referred to in point (a) already in use before or on 10 July 2012. 3. The third and fourth subparagraphs of Article 4(2) shall apply to the articles referred to in point 2.

27	"Perfluorooctanoic acid (PFOA), its salts and PFOA-related compounds Perfluorooctanoic acid (PFOA), its salts and PFOA-related compounds"means the following: (i) perfluorooctanoic acid, including any of its branched isomers; (ii) its salts; (iii) PFOA-related compounds which, for the purposes of the Convention, are any substances that degrade to PFOA, including any substances (including salts and polymers) having a linear or branched perfluoroheptyl group with the moiety (C7F15)C as one of the structural elements. The following compounds are not included as PFOA-related compounds: (i) C8F17-X, where X= F, Cl, Br; (ii) fluoropolymers that are covered by CF3[CF2]n-R', where R'=any group, n>16; (iii) perfluoroalkyl carboxylic acids (including their salts, esters, halides and anhydrides) with ≥8 perfluorinated carbons; (iv) perfluoroalkane sulfonic acids and perfluoro phosphonic acids (including their salts, esters, halides and anhydrides) with ≥9 perfluorinated carbons; (v) perfluorooctane sulfonic acid and its derivatives (PFOS), as listed in this Annex.	335-67-1 and others	1. For the purposes of this entry, point (b) of Article 4(1) shall apply to concentrations of PFOA or any of its salts equal to or below 0,025 mg/kg (0,0000025 % by weight) where they are present in substances, mixtures or articles. 2. For the purposes of this entry, point (b) of Article 4(1) shall apply to concentrations of any individual PFOA-related compound or a combination of PFOA-related compounds equal to or below 1 mg/kg (0,0001 % by weight) where they are present in substances, mixtures or articles. 3. For the purposes of this entry, point (b) of Article 4(1) shall apply to concentrations of PFOA-related compounds equal to or below 20 mg/kg (0,002 % by weight) where they are present in a substance to be used as a transported isolated intermediate within the meaning of Article 3 point 15 (c) of Regulation (EC) No 1907/2006 and fulfilling the strictly controlled conditions set out in Article 18(4)(a) to (f) of that Regulation for the production of fluorochemicals with a carbon chain equal to or shorter than 6 atoms. This exemption shall be reviewed and assessed by the Commission no later than 5.7.2022. 4. For the purposes of this entry, point (b) of Article 4(1) shall apply to concentrations of PFOA and its salts equal to or below 1 mg/kg (0,0001 % by weight) where they are present in polytetrafluoroethylene (PTFE) micropowders produced by ionising irradiation of up to 400 kilograys or by thermal degradation as well as in mixtures and articles for industrial and professional uses containing PTFE micropowders. All emissions of PFOA during the manufacture and use of PTFE micropowders shall be avoided and, if not possible, reduced as far as possible. This exemption shall be reviewed and assessed by the Commission no later than 5.7.2022. 5. By way of derogation, the manufacturing, placing on the market and use of PFOA, its salts and PFOA-related compounds shall be allowed for the following purposes: (a) photolithography or etch processes in semiconductor manufacturing, until 4 July 2025; (b) photographic coatings applied to films, until 4 July 2025; (c) textiles for oil- and water-repellency for the protection of workers from dangerous liquids that comprise risks to their health and safety, until 4 July 2023; (d) invasive and implantable medical devices, until 4 July 2025; (e) manufacture of polytetrafluoroethylene (PTFE) and polyvinylidene fluoride (PVDF) for the production of: (i) high-performance, corrosion-resistant gas filter membranes, water filter membranes and membranes for medical textiles, (ii) industrial waste heat exchanger equipment, (iii) industrial sealants capable of preventing leakage of volatile organic compounds and PM2.5 particulates, until 4 July 2023. 6. By way of derogation, the use of PFOA, its salts and PFOA-related compounds shall be allowed in fire-fighting foam for liquid fuel vapour suppression and liquid

			fuel fire (Class B fires) already installed in systems, including both mobile and fixed systems, until 4 July 2025, subject to the following conditions: (a) fire-fighting foam that contains or may containPFOA, its salts and/or PFOA-related compounds shall not be used for training; (b) fire-fighting foam that contains or may contain PFOA, its salts and/or PFOA-related compounds shall not be used for testing unless all releases are contained; (c) as from 1 January 2023, uses of fire-fighting foam that contains or may contain PFOA, its salts and/or PFOA-related compounds shall only be allowed in sites where all releases can be contained; (d) fire-fighting foam stockpiles that contain or may contain PFOA, its salts and/or PFOA-related compounds shall be managed in accordance with Article 5. 7. By way of derogation, the use of perfluooroctyl bromide containing perfluoroctyl iodide for the purpose of producing pharmaceutical products shall be allowed, subject to review and assessment by the Commission by 31 December 2026, every four years thereafter and by 31 December 2036. 8. Use of articles already in use in the Union before 4 July 2020 containing PFOA, its salts and/or PFOA-related compounds shall be allowed. Article 4(2), third and fourth subparagraphs shall apply in relation to such articles. 9. By way of derogation, the use of PFOA, its salts and/or PFOA-related compounds shall be allowed until 3 December 2020 in the following articles: (a) medical devices other than implantable ones, within the scope of Regulation (EU) 2017/745*; (b) latex printing inks; (c) plasma nano-coatings. -------- *Regulation (EU) 2017/745 of the European Parliament and of the Council of 5 April 2017 on medical devices, amending Directive 2001/83/EC, Regulation (EC) No 178/2002 and Regulation (EC) No 1223/2009 and repealing Council Directives 90/385/EEC and 93/42/EEC. ”."
28	‘Perfluorohexane sulfonic acid (PFHxS), its salts and PFHxS-related compounds “Perfluorohexane sulfonic acid (PFHxS), its salts and PFHxS-related compounds” means the following: (i) perfluorohexane sulfonic acid, including any of its branched isomers; (ii) its salts; (iii) PFHxS-related compounds which, for the purposes of the Convention, are any substance that contains the chemical moiety	355-46-4 and others EC No. 206-587-1 and others List of PFHxS	1. For the purposes of this entry, Article 4(1), point (b), shall apply to concentrations of PFHxS or any of its salts equal to or below 0,025 mg/kg (0,0000025 % by weight) where they are present in substances, mixtures or articles. 2. For the purposes of this entry, Article 4(1), point (b), shall apply to the sum of concentrations of all PFHxS-related compounds equal to or below 1 mg/kg (0,0001 % by weight) where they are present in substances, mixtures or articles. 3. For the purposes of this entry, Article 4(1), point (b), shall apply to concentrations of PFHxS, its salts and PFHxS-related compounds equal to or below 0,1 mg/kg (0,00001 % by weight) where it is present in concentrated firefighting foam mixtures that are to be used or are used in the production of other firefighting foam mixtures. This exemption shall be reviewed and assessed by the Commission no later than [… PO: please insert the date 3 years after entry into force of this amending Regulation]’. ----------

	C6F13S- as one of its structural elements and that degrades to PFHxS.		* Commission Delegated Regulation (EU) : amending Annex I to Regulation (EU) 2019/1021 of the European Parliament and of the Council as regards the listing of perfluorohexane sulfonic acid (PFHxS), its salts and PFHxS-related compounds In Part A of Annex I to Regulation (EU) 2019/1021, the following entry is added / Brussels, 30.5.2023 C(2023) 3387 final
29	Methoxychlor “Methoxychlor” refers to any possible isomer of dimethoxydiphenyltrichloroethane or any combination thereof.	72-43-5 30667-99-3 76733-77-2 255065-25-9 255065-26-0 59424-81-6 1348358-72-4 and others	Do not exceed 0.01 mg/kg (0.000001 wt%, 0.01 ppm) of methoxychlor concentration in substances, mixtures, and products after 1.2024.10.16

Table insertion. List of prohibited persistent organic pollutants in Korea



1. eigennumber : Stockholm Convention Registration Year-Year
2. Annex Registration Information : Substances listed in Annexes A to B as A (prohibited substances), B (restricted substances), and C (unintentional production substances) shall be prohibited or restricted from being produced, used, imported and exported except for the purpose permitted by the Stockholm Convention, and substances listed in Annex C shall be subject to emission source and emission investigation and emission reduction measures.

Table 2. List of Persistent organic pollutants in except for EU

No	Substance	CAS No.	Korea[1,2]	Brazil	China	India	Turkey[4]
1	Aldrin	309-00-2	o	o	o	o	o
2	Chlordane	57-74-9	o	o	-	o	o
3	Dieldrin	60-57-1	o	o	o	o	o
4	Endrin	72-20-8	o	o	o	o	o
5	Heptachlor	76-44-8	o	o	o	o	o
6	Hexachlorobenzene	118-74-1	o	o	o	o	o
7	Mirex	2385-85-5	o	o	o	o	o
8	Toxaphene	8001-35-2	o	o	o	o	o
9	Polychlorinated Biphenyls (PCBs)	1336-36-3	o	2028~	o	o	-
10	DDT	50-29-3	o	o	o	o	o
11	Polychlorinated dibenzo-p-dioxins (PCDD)	110-00-9	o	-	o	o	-
12	Polychlorinateddibenzofurans (PCDF)	-	o	-	-	o	-

13	Alpha hexachlorocyclohexane	319-84-6	○	○	○	○	○
14	Beta hexachlorocyclohexane	319-85-7	○	○	○	○	○
15	BHC (mixture of hexachlorocyclohexanes)	608-73-1	-	-	-	-	○
16	Chlordecone	143-50-0	○	○	○	○	○
17	Hexabromobiphenyl	36355-01-8	○	○	○	○	○
18	Hexachlorobutadiene (HCBD)	87-68-3	○	-	-	○	-
19	Hexabomocyclododecane (HBCD)	25637-99-4 3194-55-6 134237-50-6 134237-51-7 134237-52-8	○	-	○	○	-
20	Hexabromodiphenyl ether and heptabromodiphenyl ether (octabromodiphenyl ether)	68631-49-2 207122-15-4 446255-22-7 207122-16-5	○	2030~	○	○	-
21	Lindane	58-89-9	○	○	○(2)	○	○
22	Pentachlorobenzene	608-93-5	○	○	○	○	○
23	Pentachlorophenol and its salts and esters (PCP)	87-86-5 131-52-2 27735-64-4 3772-94-9 1825-21-4	○	-	-	-	○
24	Perfluorooctane sulfonic acid (PFOS), its salts and perfluorooctane sulfonyl fluoride (PFOSF)	1763-23-1	○	○ (partial acceptance)	○(2)	-	-
25	Polychlorinated naphthalenes (PCN)	70706-03-3	○	-	-	-	-
26	Alkanes C10-C13, chloro (short-chain chlorinated paraffins) (SCCPs)	85535-84-8	-	-	-	○	-
27	Technical endosulfan and its related isomers	115-29-7 959-98-8 33213-65-9	○	○	○(2)	○	○
28	Tetrabromodiphenyl ether an Pentabromodiphenyl ether (commercial Pentabromodiphenyl ether)	40088-47-9 32534-81-9	○	2030~	○	○	-
29	Dicofol	115-32-2	○	-	-	-	○
30	Decabromodiphenyl ether	1163-19-5	○	-	-	-	-
31	Mercury and mercury compounds	7439-97-6	○	-	-	-	-
32	Perfluorooctanoic acid (PFOA) and its salt, PFOA-related compounds	335-67-1 and others	○	-	-	-	-

(1) In addition to the above substances, the Environment Minister is concerned with the substances listed in the Stockholm Convention or the Minamata Convention.

Substances disclosed in consultation with the head of the central government agency are included in the prohibited list.

(2) KOREA CAS No List

(3) No special exemption or acceptable use other than

(4) In Turkey, only prohibited substances are shown in Table 2, and restricted substances are listed separately in Table 3.

Table 3. List of Persistent organic pollutants restriction in Turkey

No	Substance	CAS No	Intermediate use or other definition specific exemption
1	Tetrabromodiphenyl ether	40088-47-9 and others	1. Article 6 (1) (b) applies where the concentration of tetrabromodiphenyl ether in the substance is less than or equal to 10 mg / kg (0.001% by weight). 2. If the concentrations of tetra-, penta-, hexa-, hepta- and decaBDE in the mixture or article are less than or equal to 500 mg / kg in total, Article 6 (1) (b) applies. 3.As an exception, the production, use and placing on the market is permitted: (a) Electrical and electronic devices within the scope of the Regulation on Control of Waste Electrical and Electronic Equipment published in the Official Gazette dated 22/05/2012 and numbered 28300. 4. The use of articles containing Tetrabromodiphenyl ether, which were in use before the effective date of this regulation, is permitted. The third sentence of Article 6 (2) applies in relation to these articles.
2	Pentabromodiphenyl ether	32534-81-9 and others	1. Article 6 (1) (b) applies where the concentration of pentabromodiphenyl ether is less than or equal to 10 mg / kg (0.001% by weight) in the substance. 2. If the concentrations of tetra-, penta-, hexa-, hepta- and decaBDE in the mixture or article are less than or equal to 500 mg / kg in total, Article 6 (1) (b) applies. 3.As an exception, the production, use and placing on the market is permitted: (a) Electrical and electronic devices within the scope of the Waste Electrical and Electronic Equipment Control Regulation published in the Official Gazette dated 22/05/2012 and numbered 28300. 4. The use of articles containing Pentabromodiphenyl ether, in use before the effective date of this regulation, is permitted. Article 6 (2), the third sentence, applies to these articles.
3	Hexabromodiphenyl ether	36483-60-0 and others	1. Article 6 (1) (b) applies where the hexabromodiphenyl ether concentration in the substance is less than or equal to 10 mg / kg (0.001% by weight). 2. If the concentrations of tetra-, penta-, hexa-, hepta- and decaBDE in the mixture or article are less than or equal to 500 mg / kg in total, Article 6 (1) (b) applies. 3.As an exception, the production, use and placing on the market is permitted: (a) Electrical and electronic devices within the scope of the Regulation on the Control of Waste Electrical and Electronic Equipment published in the Official Gazette dated 22/05/2012 and numbered 28300. 4. The use of articles containing Hexabromodiphenyl ether, in use before the effective date of this regulation, is permitted. The third sentence of Article 6 (2) applies in relation to these articles.
4	Heptabromodiphenyl ether	68928-80-3 and others	1. Where the heptabromodiphenyl ether concentration is equal to or less than 10 mg / kg (0.001% by weight) in the substance, Article 6 (1) (b) applies. 2. If the concentrations of tetra-, penta-, hexa-, hepta- and decaBDE in the mixture or article are less than or equal to 500 mg / kg in total, Article 6 (1) (b) applies. 3.As an exception, the production, use and placing on the market is permitted: (a) Electrical and electronic devices within the scope of the Waste Electrical and Electronic Equipment Control Regulation published in the Official Gazette dated

			22/05/2012 and numbered 28300. 4. The use of articles containing Heptabromodiphenyl ether, in use before the effective date of this regulation, is permitted. Article 6 (2), the third sentence, applies to these articles
5	Decabromdiphenylether	1163-19-5	1. Where the amount of decabromodiphenyl ether in the substance is in a concentration equal to or less than 10 mg / kg (0.001% by weight), Article 6 (1) (b) applies. 2. If the concentrations of tetra-, penta-, hexa-, hepta- and decaBDE in the mixture or article are less than or equal to 500 mg / kg in total, Article 6 (1) (b) applies. 3. As an exception, the use of decaBDE is permitted until the specified dates in the production, placing on the market and use of: (a) Until 18 December 2023, if there is a need for continuity, the production of aircraft that have been applied for type approval before March 2, 2019 and received before December 2022, or until March 2, 2027 (b) Production of spare parts for any of the following; i) Aircraft that received type approval before March 2, 2019 and were produced before December 2022, or if the need to continue the production of aircraft before December 18, 2023 is approved, until the service life of the aircraft is completed before March 2, 2027. ii) Until the service life of motor vehicles within the scope of the Regulation on the Type Approval and Market Surveillance and Inspection of Motor Vehicles and Trailers and Their Parts, Systems and Separate Technical Units published in the Official Gazette dated 19/04/2020 and numbered 31104 or until 2036 (whichever comes first) (c) Electrical and electronic devices within the scope of the Regulation on the Control of Waste Electrical and Electronic Equipment published in the Official Gazette dated 22/05/2012 and numbered 28300. 4. For the production and use of commercial decaBDEs in one or more of the following systems, the exemption criteria set out in paragraph 3 (b) (ii) are applied for uses in spare parts of motor vehicles: (a) powertrain and underhood systems (such as battery cables, battery connection cables, portable air conditioning pipes (MAC), powertrain, exhaust pipe bushing, under hood insulation, underhood wiring and power lines (such as engine power lines) , speed sensors, hoses, fan parts and knock sensor) (b) fuel systems (such as fuel hose, fuel tank and under vehicle fuel tank) (c) pyrotechnic materials and systems affected by pyrotechnic materials (e.g. airbag trigger cables, seat cover / fabric (if relevant to the airbag only) and airbag (front and side)) 5. The use of articles containing decabromodiphenyl ether, in use before the effective date of this regulation, is permitted. The third sentence of Article 6 (2) applies in relation to these articles. 6. Without prejudice to the Regulation on Classification, Labeling and Packaging of Substances and Mixtures published in the Official Gazette dated 11.12.2013 and numbered 28848, the items in which the decaBDE has been used must be identifiable throughout their life cycle with a label attached to them. 7. The placing on the market and the use of articles containing decaBDE imported within the scope of the exemptions specified in the third paragraph are permitted until the end of the specified exemption date. The sixth paragraph applies to articles manufactured in accordance with the exemptions in the third paragraph. It is allowed to use items that were in use before the exemption date. 8. For the purposes of this entry, aircraft: (a) Type certificate issued in accordance with the Aircraft and Related Product, Part and Device Airworthiness and Environmental Certification Regulation published in

			the Official Gazette dated 20/08/2013 and numbered 28741 or the national legislation of one of the member countries of the International Civil Aviation Organization (ICAO) Civil aircraft manufactured in accordance with the ICAO design approval or with the airworthiness certificate issued by ICAO member countries in accordance with the International Civil Aviation Agreement Annex-8 (b) Military aircraft
6	Perfluorooctane sulfonic acid and its derivatives (PFOS)	1763-23-1 2795-39-3 29457-72-5 29081-56-9 70225-14-8 56773-42-3 251099-16-8 4151-50-2 31506-32-8 1691-99-2 24448-09-7 and others	1. Article 6 (1) (b) applies where the amount of PFOS in the substance or mixture is in concentrations equal to or less than 10 mg / kg (0.001% by weight). 2. According to calculations made by reference to the weights of structural and microstructural parts of different parts containing PFOS, in semi-finished products, articles or parts thereof or textiles or other coated materials containing PFOS at concentrations of 0.1% or less by weight, the amount of PFOS is less than 1µg / m2. in concentrations, Article 6 (1) (b) applies. 3. The use of articles containing PFOS in use before the effective date of this regulation is allowed. The third sentence of Article 6 (2) applies in relation to these articles. 4. If the amount released to the environment is minimized, the production and placing on the market of PFOS is permitted until 7 September 2025 in order to be able to use it in the production of powder suppressor or non-decorative hard chrome (VI) paints in closed system. In the exception stated in the above paragraph, the Guidance document published by the Ministry regarding the implementation of the best available techniques for minimizing PFOS emissions is taken into consideration. 5. Compliance of substances, mixtures and articles with paragraphs 1 and 2 is determined by using the analytical test method for "PFOS Determination", which is the TS 15968 standard. However, all analytical methods whose equivalence to TS standards can be proven can be used as an alternative.
7	Polychlorinated Biphenyls (PCB)	1336-36-3 and others	1. Without prejudice to the provisions of the Regulation on Control of Polychlorinated Biphenyls and Polychlorinated Terphenyls published in the Official Gazette dated 27/12/2007 and numbered 26739, the use of articles in use on the date of entry into force of this Regulation is permitted.
8	Hexabromocyclododecane (HBCD)	25637-99-4 3194-55-6 134237-50-6 134237-51-7 134237-52-8	1. Hexabromocyclododecane; Article 6 (1) (b) applies where the substance, mixture, article or flame-retardant components of articles are in a concentration equal to or less (0.01% by weight) of 100 mg / kg. 2. The use of expanded polystyrene articles containing hexabromocyclododecane and compressed polystyrene articles currently in use in existing buildings is permitted and the third sentence of Article 6 (2) applies in relation to these articles.
9	Hexachlorobutadiene	87-68-3	1. The placing on the market and use of articles containing Hexachlorobutadine in use on or before the date of entry into force of this regulation is permitted and the third sentence of Article 6 (2) is applied for these articles. The placing on the market and use of articles containing Hexachlorobutadine in use on or before the date of entry into force of this regulation is permitted, and the third sentence of Article 6 (2) applies to these articles
10	Polychlorinated naphthalenes (Polychlorinated naphthalenes means chemical compounds based on the naphthalene ring system, where one or more hydrogen atoms have been replaced by chlorine atoms.)	70776-03-3 and others	1. The placing on the market and use of articles that are in use on or before the date of entry into force of this regulation and containing polychlorinated naphthalene are permitted and the third sentence of Article 6 (2) applies to these articles.
11	Alkanes C10-C13, chloro	85535-84-8	1. As an exception, the production, placing on the market and use of substances or

	(short-chain chlorinated paraffins) (SCCPs)	and others	mixtures containing SCCP at concentrations less than 1% by weight or articles containing SCCP at concentrations less than 0.15% by weight is allowed. 2. Usage is allowed for the following: (a) Conveyor belts containing SCCP and dam sealing materials containing SCCP in the mining sector that were in use on or before the publication date of the Regulation, (b) Articles containing SCCP other than those mentioned in (a) that were in use on or before 1 January 2014 3. Article 6 (2), the third sentence is applied in relation to the goods specified in paragraph 2.
12	Perfluorooctanoic acid (PFOA), its salts and PFOA related compounds Perfluorooctanoic acid (PFOA), its salts and compounds associated with PFOA have the following meanings: (i) perfluorooctanoic acid containing all its branched isomers (ii) its salts (iii) For the purposes of any convention, compounds associated with PFOA, containing (C7F15) C as the structural element substances with a linear or branched group of perfluorooctanoic acids that degrade to PFOA, including their salts and polymers The following compounds are not considered to be associated with PFOA: (i) C8F17-X, X is F, Cl, Br; (ii) Fluoropolymers containing CF3 [CF2] n-R '	335-67-1 and others	1. If PFOA or PFOA salts are present in the substance, mixture or article in a concentration equal to or less than 0.025 mg / kg (0.0000025% by weight), Article 6 (1) (b) applies. 2. If the compounds associated with PFOA or any combination of these compounds are present in the substance, mixture or article in concentrations equal to or less (0.0001% by weight) of 1 mg / kg, Article 6 (1) (b) applies. 3. If PFOA-related compounds or any combination of these compounds are in concentrations equal to or less than 20 mg / kg (0.002% by weight) in substances used in the portable intermediate used for the production of fluorochemicals with 6 or less carbon chains. The criteria defined in the first paragraph (ii) of Article 4 of the Regulation on the Registration Evaluation and Restriction of Chemicals published in the Official Gazette dated 2017.7.23 and numbered 30105 and the strict control specified in sub-paragraphs (a) to (e) of Article 18 of the same regulation. 6 (1) (b) applies, provided that it meets its requirements. 4. PFOA or PFOA salts equal to 1 mg / kg (0.0001% by weight) in polytetrafluoroethylene microdusters (PTFE) produced by ionizing radiation emission or thermal degradation up to 400 kilograms and in mixtures and articles containing PTFE microdusts used for professional and industrial purposes. In the case of concentrations of or less, Article 6 (1) (b) applies. All releases of PFOA should be prevented during the production and use of PTFE micrpowder. If this cannot be implemented, emissions should be minimized as much as possible. 5. Exceptionally, the production, placing on the market and use of PFOA, PFOA salts and PFOA-related compounds is permitted until the specified dates for the following criteria: (a) in photolithography or etching processes in the semiconductor manufacturing process, until 4 July 2025; (b) for photographic coatings applied to films by 4 July 2025, (c) by 4 July 2023 for oil or water-repellent textile materials used to protect workers from hazardous liquids that pose a health or safety threat. (d) Until 4 July 2025 for invasive or implantable medical supplies, (e) Until 4 July 2023 for the production of Polytetrafluoroethylene (PTFE) and polyvinylidene fluoride (PVDF) for the manufacture of: (i) high performance, corrosion resistant gas filter membranes, water filter membranes and membranes used in medical textiles (ii) industrial waste heat exchanger equipment (iii) industrial sealants that prevent leakage of volatile organic compounds and 2.5PM particles. 6. As an exception, the use of PFOA, PFOA salt and / or PFOA related compounds in fire fighting foams used for suppression of liquid fuel vapor and liquid fuel fires (Class B fires) in already installed systems, including portable and stationary systems, until 4 July 2025. until the following situations are taken into account: (a) Fire fighting foams that contain or are likely to contain PFOA, PFOA salt and / or PFOA-related compounds cannot be used in training. (b) If there are any releases and they cannot be contained, fire fighting foams that

			contain or are likely to contain PFOA, PFOA salt and / or PFOA related compounds cannot be used for trial purposes. (c) As of January 1, 2023, the use of fire fighting foams containing or likely to contain PFOA, PFOA salt and / or PFOA-related compounds is permitted only in areas where all emissions can be contained. (d) Fire extinguisher foam stocks that contain or may contain PFOA, PFOA salt and / or PFOA related compounds are managed in accordance with Article 7. 7. As an exception, it is allowed to use perfluorooctylbromide containing perfluorooctyl iodide for the manufacture of pharmaceutical products. 8. The use of Perfluorooctanoic acid (PFOA), its salts and PFOA-related compounds in use prior to the effective date of this regulation is permitted. The third sentence of Article 6 (2) applies with regard to the aforementioned articles. 9.As an exception, the production, placing on the market and use of PFOA, PFOA salts and PFOA-related compounds in the following uses is permitted until 31 December 2023: (a) In medical devices other than implants covered by the Medical Device Regulation published in the Official Gazette No. 27957 dated 07/06/2011 (b) in latex printing inks (c) in plasma nano-coatings

* For tetra-, penta-, hexa-, hepta- and decaBDE, the total amount of mixture and product shall not exceed 500 mg/kg.
* In the case of deca BDE No. 5, it is necessary to check the details as some service parts in production are allowed to be used for each purpose.
* No. 8 HBCD shall not be used in excess of 0.01 wt % as a flame retardant in materials, solutions, and products.
* In case of SCCP No. 11, it is prohibited to use more than 0.15 wt % of the product.
* In case of PFOA No. 13, no more than 0.025 mg/kg (0.0000025 wt %) of substances, mixtures is prohibited and In case of products and PFOA compounds, 1 mg/kg (0.0001 wt %) is prohibited.

Table 4-1. List of Persistent organic pollutants restriction in Vietnam

- Contents : should use the regulated chemicals below the maximum regulation value

No	Chemical name	CAS No.	Specific use	Regulation value (max)
1	Tetrabromodiphenyl ether and Pentabromodiphenyl ether (PBDE)	-	Raw material, material, article and product in the industry : 1. leather/artificial leather, insulating polymer and electronic product in vehicle 2. Interior in vehicle (parts in vehicle, seat, dashboard mold and foam board) 3. insulating polymer in furniture and furniture coating, foamed part 4. shock absorber, protection suit, carpet, curtain, house-furnishing goods, furniture and tent 5. filter, insulating board, insulator, plastic insulator for pipe and hard polyurethane foam 6. polyurethane foam for packaging	chemical or mixture : 10mg/kg (0.001wt%)
	Tetrabromodiphenyl ether (C12H6Br4O)	40088-47-9		
	Pentabromodiphenyl ether (C12H5Br5O)	32534-81-9		

2	Hexabromodiphenyl ether and heptabromodiphenyl ether (HBDE) *	-	Raw material, material, article and product in the industry : 1. flame retardant 2. transportation(parts made by plastic or parts with plastic insulator and polyurethane foam for seat/cushion in transportation) 3. Ingredient of polymer, especially ABS (Acrylonitrile-Butadiene-Styrene) or additive	chemical or mixture : 10mg/kg (0.001wt%)
	Hexabromodiphenyl ether (C12H4Br6O)	36483-60-0, 446255-03-4		
	Hexabromodiphenyl ether (C12H4Br6O)	68928-80-3, 446255-20-5		
3	Decabromodiphenyl ether (DBDE)	1163-19-5	Raw material, material, article and product in the industry: 1. flame retardant : plastic, polymer, composite material, textile, glue and coating material 2. an insulating material in plastic of computer, TV, wire, cable and non-metallic pipe 3. additive in plastic used in household electrical appliance(heater, iron, fan and water heater with coil) and electric/electronic product(computer and TV) 4. polyurethane foam for building insulation 5. parts for vehicles (insulator, wire, interior material)	chemical or mixture : 10mg/kg (0.001wt%)
4	Perfluorooctane sulfonic acid (PFOS) and its salts, and perfluorooctane sulfonyl fluoride (PFOSF) (C8F17SO2X)	1763-23-1, 2795-39-3, 29457-72-5, 29081-56-9, 70225-14-8, 56773-42-3, 251099-16-8, 4151-50-2, 31506-32-8, 1691-99-2, 24448-09-7, 307-35-7	Raw material, material, article and product in the industry and agriculture , medical treatment : 1. insecticide for the white and red ants 2. insect baits as an active ingredient for control of ants from Atta and Acromyrmex 3. additives contained PFOS 4. fire fighting foam 5. aviation hydraulic fluids 6. metal plating (hard metal plating) 7. coating material 8. textile 9. leather and carpet 10. rubber and plastic 11. coating 12. printing ink 13. household electrical appliance : office electronic equipment and its part, semiconductor, photo 14. food container and paper packaging	1. chemical or mixture : 10mg/kg (0.001wt%) 2. half-finished products, raw material, material, article or product : 0.1wt% 3. textile product, coating material or its raw material < 1 μg/m2
5	Hexabromocyclododecane (HBCDD)	25637-99-4, 3194-55-6, 134237-50-6, 134237-51-7 134237-52-8	Raw material, material, article and product in the industry: 1. foaming and insulator(polystyrene - EPS and XPS), insulation board for construction and building 2. plastic insulating material of electric/electronic equipment	chemical or mixture or compound or raw material, material, article or product : 100 mg/kg (0.01wt%)

6	Short-chain chlorinated paraffins (SCCPs)	85535-84-8, 68920-70-7, 71011-12-6, 85536-22-7, 85681-73-8, 108171-26-2	Raw material, material, article and product in the industry : 1. additive of plywood, industrial plywood, rubber, ink, coating and adhesive 2. surface treatment for leather tanning 3. additive of a lubricant or cutting oil in metal processing 4. ingredient of fire-proof and water-proof paint 5. tubes for outdoor decoration bulbs 6. secondary plasticizers in flexible polyvinyl chloride, except in toys and children's products.	1. chemical or mixture < 1wt% 2. raw material, material , article or product < 0.15wt%
7	Perfluorooctanoic acid (PFOA) and its salts, and PFOA derivatives	829 chemicals PFOA	Raw material, material, article and product in the industry : 1. fire-fighting foam 2. material of textile, high voltage cable and photo for fire / fouling resistance and oil / water repellency 3. food container and paper packaging 4. material contained polytetrafluoroethyllene(PTFE) or polyvinylidene fluoride(PVDF) 5. material contained polyfluoroethylene propylene(FEP) 6. material contained fluoroelastomers for O-ring, belts and plastic accessories for vehicle interiors 7. embeded medical device 8. medicine and medical supplies	1. PFOA and its salts : chemical or mixture or raw material, material , article or product ≤ 0.025mg/kg (0.0000025wt%) 2. PFOA derivatives : chemical or mixture or raw material, material , article or product ≤ 1 mg/kg(0.0001wt%) 3. PFOA derivatives used additive or intermediate product : chemical or mixture ≤ 20mg/kg(0.002wt%)

* Should not use the total concentration over 500mg/kg in case of using one and more chemicals among hexabromodiphenyl ether and heptabromodiphenyl ether(HBDE), tetrabromodiphenyl ether, pentabromodiphenyl ther(PBDE), decabromodiphenyl ether(DBDE)

Table 4_2. 5 types of POPs prohibited from importing to Vietnam

No.	물질명	CAS No.	GADSL #
1	Hexabromodiphenyl ether and Heptabromodiphenyl ether	68631-49-2 and others	216 (PBDE group)
2	Tetrabromodiphenyl ether and Pentabromodiphenyl ether	5436-43-1 and others	216 (PBDE group)
3	Hexabromocyclododecane (HBCDD)	3194-55-6 and others	70 (HBCD group)
4	Polychlorinated naphthalenes (PCN)	70776-03-3 and others	219 (PCN group)
5	Perfluorohexane sulfonic acid (PFHxS), its salts and PFHxS-related compounds	355-46-4 and others	185 & 186 (PFHxS group)

Table 4_3. Four types of POPs allowed for import according to Vietnam exemption registration

No.	물질명	CAS No.	GADSL #
1	Perfluorooctane sulfonic acids, their salts (PFOS) and perfluorooctane sulfonyl fluoride (PFOSF)	1763-23-1 and others	183 (PFOS group)
2	Decabromodiphenyl ether (Deca-BDE)	1163-19-5 and others	216 (PBDE group)
3	Short-chain chlorinated paraffins (SCCP)	85535-84-8 and others	60 (SCCP & MCCP group)
4	Perfluorooctanoic acid (PFOA), its salts and PFOA-related compounds	335-67-1 and others	177 & 178 (PFOA group)

Table 5. Canada PFOS regulation

NO	Chemical name	Requirement	Exception
1	Perfluorooctane sulfonic acid and its derivatives (PFOS)	. Compound containing one or more below chemicals : C8F17SO2 / C8F17SO3 / C8F17SO2N	1. Purpose of Research & Development 2. Used as mist suppressants or anti-smoking agent for below work 1) Electroplating of chromium 2) Electroless nickel-polytetrafluoroethylene plating 3) Plastic substrate etching

Table 6. List of Singapore Persistent Organic Pollutants Regulations for Use and Maximum Allowable Limits

No.	물질명	CAS No.	GADSL #
1	Decabromodiphenyl ether	1163-19-5 and others	216 (PBDE group)
2	Perfluorooctanoic acid (PFOA), its salts and PFOA-related compounds	335-67-1 and others	177 & 178 (PFOA group)
3	UV-328 *	25973-55-1 and others	129
4	Dechlorane plus **	13560-89-9 and others	99 (DP group)
5	Methoxychlor	72-43-5 30667-99-3 76733-77-2 255065-25-9 255065-26-0 59424-81-6 1348358-72-4	
6	Perfluorohexane sulfonic acid (PFHxS), its salts and PFHxS-related compounds	355-46-4 and others	185 & 186 (PFHxS group)
7	Hexabromocyclododecane (HBCD)	25637-99-4 and others	70 (HBCD group)
8	Polychlorinated naphthalenes (PCN)		

9	Short-chain chlorinated paraffins (SCCP)	85535-84-8 and others	60 (SCCP & MCCP group)
10	Dicofol	115-32-2 10606-49-9	

Table 7. List of Brazilian Persistent Organic Pollutants Regulations for Use and Maximum Allowable Limits

No.	물질명	CAS No.	GADSL #
1	Aldrin	309-00-2	
2	Chlordane	57-74-9	
3	Dieldrin	60-57-1	
4	Endrin	72-20-8	
5	Heptachlor	76-44-8	
6	Hexachlorobenzene	118-74-1	119
7	Mirex	2385-85-5	98
8	Toxaphene	8001-35-2	
9	Polychlorinated Biphenyls (PCBs)	1336-36-3 and others	218
10	Chlordecone	143-50-0	
11	Hexabromobiphenyl	36355-01-8	215
12	Hexachlorobutadiene (HCBD)	87-68-3	120
13	Hexabromocyclododecane (HBCD)	25637-99-4 and others	70
14	Hexabromodiphenyl ether and heptabromodiphenyl ether	68631-49-2 and others	216
15	Lindane	58-89-9	121
16	Pentachlorobenzene	608-93-5	167
17	Pentachlorophenol and its salts and esters (PCP)	87-86-5 131-52-2 27735-64-4 3772-94-9 1825-21-4	169
18	Polychlorinated naphthalenes (PCN)	70706-03-3 and others	219
19	SCCP	85535-84-8 and others	60
20	Technical endosulfan and its related isomers	115-29-7 959-98-8 33213-65-9	
21	endosulfan sulfate	1031-07-8	
22	Tetrabromodiphenyl ether and pentabromodiphenyl ether	40088-47-9 and others	216
23	Dicofol	115-32-2 10606-49-9	
24	Decabromodiphenyl ether	1163-19-5	216
25	Perfluorooctanoic acid (PFOA) and its salt,	335-67-1 and others	177
26	PFOA-related compounds	376-27-2 and others	178
27	Perfluorohexane sulfonic acid (PFHxS), its salts	355-46-4 and others	185
28	PFHxS-related compounds	111393-39-6 and others	186
29	UV-328	25973-55-1 and others	129
30	Dechlorane plus	13560-89-9 and others	99
31	Methoxychlor	72-43-5	

		30667-99-3 76733-77-2 255065-25-9 255065-26-0 59424-81-6 1348358-72-4	

Table 8. South African List of Persistent Organic Pollutants Regulations Use and Maximum Allowable Limits

No.	물질명	CAS No.	GADSL #
1	Hexabromocyclododecane (HBCD)	25637-99-4 and others	70
2	Hexachlorobutadiene (HCBD)	87-68-3	120
3	Polychlorinated naphthalenes (PCN)	70706-03-3 and others	219
4	Decabromodiphenyl ether	1163-19-5	216
5	SCCP	85535-84-8 and others	60
6	Perfluorooctanoic acid (PFOA), its salts and PFOA-related compounds	335-67-1 and others	177 & 178 (PFOA group)
7	UV-328*	25973-55-1 and others	129
8	Dechlorane plus**	13560-89-9 and others	99
9	Methoxychlor	72-43-5 30667-99-3 76733-77-2 255065-25-9 255065-26-0 59424-81-6 1348358-72-4	

Table 9. UK Persistent Organic Pollutants Regulatory List Uses and Maximum Allowable Limits

No.	물질명	CAS No.	구체적인 면제항목
1	Tetrabromodiphenyl ether C12H6Br4O	40088-47-9 and others	1. The concentration of each substance in the substance shall not exceed 10 mg/kg (0.001%). 2. Allow the total consensus concentration of tetra-, penta-, hexa-, hepta- and decaBDE in the mixture or product to be 500 mg/kg or less. (to be reviewed by July 16, 2021) 3. Exceptionally, each substance is permitted to be manufactured and used in the market if: - provided in the Electrical and Electronic Equipment Regulations 2012 restrictions on the use of certain hazardous materials 4. Allow products used by Union prior to August 25, 2010 to contain such substances. but shall comply with the provisions 4(2),(3) and (4) relating to the product.
2	Pentabromodiphenyl ether C12H5Br5O	32534-81-9 and others	
3	Hexabromodiphenyl ether C12H4Br6O	36483-60-0 and others	
4	Heptabromodiphenyl ether C12H3Br7O	68928-80-3 and others	

5	Decabromdiphenylether	1163-19-5	1. The concentration of each substance in the substance is allowed to be 10 mg/kg (0.001%) or less. 2. Allow the total consensus concentration of tetra-, penta-, hexa-, hepta- and decaBDE in the mixture or product to be 500 mg/kg or less. (to be reviewed by July 16, 2021) 3. Exceptionally, the manufacturing and market use of Deca BDE is permitted in the following cases. (a) for the manufacture of aeroplanes, the application for type approval prior to 2 March 2019 has been granted type approval by 18 December 2022 or has been granted continuity until 2 March 2027; or (b) Where manufacturing a spare part: (i) for aeroplanes which have applied for type approval prior to 2 March 2019 and have been granted type approval by 18 December 2022 or which have been granted continuity until 2 March 2027, the period of service expires; (ii) in the case of motor vehicles (motor vehicles as defined in 2007/46/EC), produced before 15 July 2019, or when the service period of the motor vehicle expires, or when it arrives first, in 2036; (c) provided for in the Act 2012 prohibiting the use of hazardous materials in electrical and electronic products; and 4. Exceptional permits for the use and manufacture of Deca BDE of the above 3(b)(ii) Spare parts of automobiles. (a) Power transmission and applications under the bonnet: battery connections, inter-battery connections, removable air conditioning (MAC) pipes, power transmission, exhaust manifold bushings, insulation under the bonnet, wiring under the bonnet and harnesses (engine wiring, etc.), speed sensors, hoses, fan modules, knock sensors. (b) Fuel system applications: Fuel hoses, fuel tanks, underbody fuel tanks. (c) Applications relating to ignition devices and ignition devices: airbag ignition cables, seat covers/fabrics (only in relation to airbags), airbags (front and side). 5. Products used by Union prior to July 15, 2019 shall be permitted to contain Deca BDE. but shall comply with the provisions 4(2),(3) and (4) relating to the product. 6. If Deca BDE is used without contradicting Union regulations on the classification, packaging and labeling of substances and mixtures, it shall be labelled or otherwise. 7. In the case of product use and market release containing Deca BDE imported for the purpose of exemption condition 3 above, Exemption validity period is applied. Products manufactured according to the exemption conditions corresponding to No. 3 above must comply with No. 6. If the product is used until the end of the relevant exemption conditions, use may continue. 8. Items related to aircraft are as follows. a) a civil aircraft b) a military aircraft.

6	Perfluorooctane sulfonic acid and its derivatives (PFOS) C8F17SO2X (X = OH, Metal salt (O-M+), halide, amide, and other derivatives including polymers)	1763-23-1 2795-39-3 29457-72-5 29081-56-9 70225-14-8 56773-42-3 251099-16-8 4151-50-2 31506-32-8 1691-99-2 24448-09-7 307-35-7 and others	1. The concentration of PFOS in the substance and mixture is allowed to be 10 mg/kg (0.001% wt) or less. 2. PFOS concentration in semi-finished products, products, or parts shall be 0.1% wt or less. If the fiber or material is coated, the PFOS content in the coating material is allowed to be less than 1 μg / ㎡. 3.Application of the Regulations on the Permit to Use of Products Including PFOS already in use within the EU before 25 August 2010. Applies to the third and fourth items of Article 4(2). 4. Extension of the time limit to permit manufacture and market release as a mist suppressant for closed-loop systems used in non-decorative hexavalent chromium plating, under conditions of minimizing the amount released into the environment. Regulations for the extension to 7 September 2025. Member States using PFOS shall submit to the Commission a report on the progress of PFOS removal and the continued need for this use by 7 September 2024. The Commission shall review the need for an additional five-year extension of the PFOS Use Exceptions Regulations by 7 September 2025. Where it relates to production or use in facilities within the scope of Directive 2008/1/EC(4) of the European Parliament and of the Council, optimal available technologies are applied to prevent and minimise PFOS emissions. The optimal available technologies are those specified in Article 17(2) of Directive 2008/1/EC, pursuant to the second item, in the information published by the Commission. 5. Once a standard is adopted by the European Committee for Standardization (CEN), the standard is intended to be used as an analytical test method to demonstrate that substances, mixtures and products meet the criteria in paragraphs 1 and 2. Other analytical methods that allow users to demonstrate performance equivalent to the CEN standard are available as alternatives to the CEN standard
7	DDT (1,1,1-trichloro-2,2-bis (4-chlorophenyl)ethane	50-29-3	
8	Chlordane	57-74-9	
9	Hexachlorocyclohexanes, including lindane	58-89-9 319-84-6 319-85-7 608-73-1	
10	Dieldrin	60-57-1	
11	Endrin	72-20-8	
12	Heptachlor	76-44-8	
13	Endosulfan	115-29-7 959-98-8 33213-65-9	1. Allow the market release and use of products already in use before July 10, 2012. 2. Products falling under No. 1 above shall comply with Clause 4(2), (3) (4).
14	Hexachlorobenzene	118-74-1	

15	Chlordecone	143-50-0	
16	Aldrin	309-00-2	
17	Pentachlorobenzene	608-93-5	
18	Polychlorinated Biphenyls (PCB)	1336-36-3 and others	Under conditions that do not affect PCB regulations, products already in use are allowed at the time this regulation enters into force. The agency shall identify and remove equipment (e.g. transformers, capacitors or other containers including liquid storage containers) containing not less than 0.005% PCB and with a capacity exceeding 0.05 dm^3. The deadline for removal of such equipment shall be completed as soon as possible, but no later than 31 December 2025.
19	Mirex	2385-85-5	
20	Toxaphene	8001-35-2	
21	Hexabromobiphenyl	36355-01-8	
22	1 Hexabromocyclododecane 'Hexabromocyclododecane' means: hexabromocyclododecane, 1,2,5,6,9,10-hexabromocyclododecane and its main diastereoisomers: alpha-hexabromocyclododecane; beta-hexabromocyclododecane; and gamma-hexabromocyclododecane	25637-99-4, 3194-55-6, 134237-50-6, 134237-51-7, 134237-52-8	1. For the purposes of this item, Article 4(1)(b) applies where the concentration of hexabromocyclododecane contained as a substance, mixture, product or component of a flame retardant product is not more than 100 mg/kg (0.01% by weight). 2.Foamed styrene resin (styrofoam) containing the substance for construction purposes prior to February 21, 2018 and extruded polystyrene products used in construction materials prior to June 23, 2016 may continue to be used. Provided, That Articles 4(2), (3) (4) shall be observed. 3. In the case of foamed styrene containing the substance after 23 March 2016 without violating Union regulations on the classification, packaging and labelling of substances and mixtures, it shall be labelled or otherwise.
23	Hexachlorobutadiene	87-68-3	1. Products containing the substance are already in use before July 10, 2012. Products are allowed to be released and used in the market. 2. Products falling under No. 1 above shall comply with Clause 4(2),(3) (4).
24	Pentachlorophenol and its salts and esters	87-86-5 and others	
25	Polychlorinated naphthalenes	70776-03-3 and others	1. Products containing the substance are already in use before July 10, 2012. Products are allowed to be released and used in the market. 2. Products falling under No. 1 above shall comply with Clause 4(2),(3) (4).
26	Alkanes C10-C13, chloro (short-chain chlorinated paraffins) (SCCPs)	85535-84-8 and others	**1. Exceptionally, when preparing or marketing a mixture or substance containing SCCP, a concentration of not more than 1% shall be observed. For products containing SCCP, a concentration of not more than 0.15% shall be permitted.** **2.Use is permitted in the following cases:** **(a) conveyor belts in the mining industry and dam sealants containing SCCPs already in use before or on 4 December 2015;**

			(b) articles containing SCCPs other than those referred to in point (a) already in use before or on 10 July 2012. **3. Products falling under No. 2 above shall comply with Clause 4(2), (3) (4).**
27	"Perfluorooctanoic acid (PFOA), its salts and PFOA-related compounds Perfluorooctanoic acid (PFOA), its salts and PFOA-related compounds"means the following: (i) perfluorooctanoic acid, including any of its branched isomers; (ii) its salts; (iii) PFOA-related compounds which, for the purposes of the Convention, are any substances that degrade to PFOA, including any substances (including salts and polymers) having a linear or branched perfluoroheptyl group with the moiety (C7F15)C as one of the structural elements. The following compounds are not included as PFOA-related compounds: (i) C8F17-X, where X= F, Cl, Br; (ii) fluoropolymers that are covered by CF3[CF2]n-R', where R'=any group, n>16; (iii) perfluoroalkyl carboxylic acids (including their salts, esters, halides and anhydrides) with ≥8 perfluorinated carbons; (iv) perfluoroalkane sulfonic acids and perfluoro phosphonic acids (including their salts, esters, halides and anhydrides) with ≥9 perfluorinated carbons; (v) perfluorooctane sulfonic acid and its derivatives (PFOS), as listed in this Annex.	335-67-1 and others	Applies when the concentration of PFOA or its salt contained in a substance, mixture or product is 0.025 mg/kg (weight ratio: 0.0000025%) or less. 2. Applies when the concentration of individual PFOA-related compounds or PFOA-related compounds contained in a substance, mixture or product is not more than 1 mg/kg (0.0001% by weight). 3. Used as a separation intermediate transported as defined in Articles 3 and 15(c) of REACh No 1907/2006, and where the strictly controlled conditions specified in Articles 18(4)(a) to (f) of the applicable Regulations are met, the concentration of PFOA-related compounds contained in the substance is not more than 20 mg/kg (weight ratio 0.002%). This condition is intended for the production of fluorochemicals with a perfluorocarbon chain consisting of no more than six atoms; this exemption rule must be reviewed and evaluated by the Commission by 25 August 2023. 4. Applies until August 18, 2023, when the concentration of PFOA and its salts contained in industrial and professional mixtures and products, including PTFE micropowder produced by ionizing radiation treatment or thermal decomposition of up to 400 kg, and the corresponding PTFE micropowder, is less than 1 mg/kg (0.0001% by weight). PFOA emissions during the manufacture and use of PTFE fine powder shall be completely prevented and, if impossible, shall be reduced as much as possible. 5. Pursuant to the Exceptions, the preparation, market release and use of PFOA (perfluorooctanic acid), its salts and PFOA-related compounds are permitted for the following purposes: (a) photolithography or etching process in semiconductor manufacturing, permitted by 4 July 2025; (b) a photographic coating applied to the film, permitted by 4 July 2025. (c) fibres with oil-repellent and water-repellent functions to protect against dangerous liquids which pose a risk to the health and safety of the operator, permitted by December 2025. (d) invasive and implantable medical devices, permitted by 4 July 2025. (e) Preparation of polytetrafluoroethylene (PTFE) and polyvinylidene fluoride (PVDF) for the production of the following products: by 4 July 2023 (i) high-performance, corrosion-resistant gas filter membranes,

			purified filter membranes and medical textile membranes; (ii) industrial waste heat exchanger equipment; (iii) industrial sealants capable of preventing leakage of volatile organic compounds and PM2.5 particulates; 6. Exceptions stipulate that fire-fighting foams containing perfluorooctanic acid (PFOA), its salts and PFOA-related compounds are permitted to be used by July 4, 2025 in systems already installed (including mobile and stationary systems) for the purpose of suppressing liquid fuel vapor and for liquid fuel fires (Class B fires) provided that the following conditions are met: (a) Fire-fighting foam containing or likely to contain PFOA, its salts and/or PFOA-related compounds shall not be used for training purposes; (b) Fire-fighting foam containing or likely to contain PFOA, its salts and/or PFOA-related compounds shall be permitted for testing purposes only if all emissions are completely controlled. (c) from 1 January 2023, fire-fighting foams containing or likely to contain PFOA, its salts and/or PFOA-related compounds shall be permitted for use only in places where all emissions may be controlled (d) Inventories of fire-fighting foam containing or likely to contain PFOA, its salts and/or PFOA-related compounds shall be managed in accordance with Article 5. 7. In accordance with the Exception Regulations, the use of perfluorooctyl bromide containing perfluorooctyl iodide is permitted for the purpose of manufacturing medicines. The Regulations shall be reviewed and evaluated by the relevant authorities until 31 December 2026, reviewed every four years thereafter, and shall apply until 31 December 2036. 8. Regulations permitting the use of products containing PFOA, its salts and/or PFOA-related compounds already in use within the EU before 4 July 2020. In this regard, the third and fourth items of Article 4(2) apply. 9. Pursuant to the Exceptions, the preparation, market release and use of PFOA, its salts and PFOA-related compounds shall be permitted by December 3, 2020 for the following purposes: (a) non-implantable medical devices included within the scope of Regulation (EU) 2017/745(8); (b) latex printed ink. (c) Plasma nano-coating.
28	Dicofol	115-32-2	

29	Perfluorohexane sulfonic acid (PFHxS), its salts and PFHxS-related compounds Perfluorohexane sulfonic acid (PFHxS), its salts and PFHxS-related compounds' means the following: (i) perfluorohexane sulfonic acid, including any of its branched isomers; (ii) its salts; (iii) PFHxS-related compounds which, for the purposes of the Convention, are any substance that contains the chemical moiety C6F13Sas one of its structural elements and that degrades to PFHxS.	355-46-4 and others	1. Article 4(1)(b) applies where the concentration of PFHxS or its salts contained in a substance, mixture or product is not more than 0.025 mg/kg (weight ratio: 0.0000025%). 2. Article 4(1)(b) applies when the total concentration of all PFHxS-related compounds contained in a substance, mixture or product is not more than 1 mg/kg (0.0001% by weight). 3. Article 4(1)(b) applies when the concentration of PFHxS, its salts and PFHxS-related compounds contained in a concentrated mixture of fire-fighting foam used or to be used in the production of other fire-fighting foam mixtures is not more than 0.1 mg/kg (weight ratio 0.00001%).
30	Dechlorane Plus*	13560-89-9 135821-03-3 135821-74-8	1. Subsection 4(1)(b) applies where the concentration of Dechlorane Plus in a substance, mixture or product is not more than 10 mg/kg (0.001% by weight) 2. The market launch and use of Dechlorane Plus is permitted for the following purposes: (a) aerospace, by 26 February 2030; (b) in the field of space and defence, until 26 February 2030; (c) medical imaging and radiotherapy apparatus and facilities, by 26 February 2030; (d) Replacement parts and repairs for the following products for which Dechlorane Plus was originally used in the manufacture of the product: 1) Aerospace 2) Universe; 3) Defense; 4) Land vehicles; 5) stationary industrial machinery used in agriculture, forestry or construction; 6) marine, garden, forestry and outdoor power equipment; (1) Analysis, measurement, control, monitoring, testing, production or inspection; (a) the end date of the service life of the product, or (b) December 31, 2044, until the earlier of the following: (e) Replacement parts and repairs for the following products for which Dechlorane Plus was originally used in the manufacture of the product: (i). Medical devices; (ii) Until the end of service life of in vitro diagnostic devices and products.

31	Methoxychlor. “Methoxychlor” means any possible isomer of dimethoxydiphenyltrichloroethane or any combination thereof.	72-43-5 30667-99-3 76733-77-2 255065-25-9 255065-26-0 59424-81-6 1348358-72-4 and others	Article 4(1)(b) applies when the concentration of methoxychlor contained in a substance, mixture or product is not more than 0.01 mg/kg (weight ratio: 0.000001%).
32	UV-328	25973-55-1	1. Paragraph 4(1)(b) applies if the concentration of UV-328 in a substance, mixture or product is not more than 10 mg/kg (0.001% by weight). 2. Manufacturing, marketing and use of the UV-328 is permitted for the following purposes: (a) land vehicles, by 26 February 2030; (b) the application of industrial coatings for engineering machinery and rail transport vehicles, and heavy load coatings for large steel structures, until 26 February 2030; (c) a mechanical separator of blood collection tubes, to 26 February 2030; (d) Triacetyl cellulose (TAC) film of polarizing plates, to 26 February 2030; (e) photographic paper, to 26 February 2030; (f) aerospace and defence applications, to 26 February 2030; (g) if the UV-328 was originally used in the manufacture of the following products, the replacement part articles for the products in the following applications — (i). Land vehicles; (ii). Fixed industrial machinery used in agriculture, forestry or construction; (iii) the liquid crystal display of the device for analysis, measurement, control, monitoring, testing, production or inspection other than medical purposes; By the earliest of the following dates (aa) the end date of service life of the article; or (bb) 31 December 2044; (h) Where a UV-328 was originally used in the manufacture of a product in the aerospace and defense industries, replacement parts and repairs for that product are permitted by the earliest of the following: (i) the end date of the product's service life; or (ii). 31 December 2044 3. If the UV-328 was originally used in the manufacture of the product, the UV-328 is allowed to be marketed and used for replacement parts of the product used in the following applications for medical purposes: (i) Liquid crystal display of medical and in vitro diagnostic devices; (ii) until the end of service life of the liquid crystal display product of the device for analysis, measurement, control, monitoring, test, production or inspection;

Table 10. New Zealand Persistent Organic Pollutants Regulatory List Uses and Maximum Allowable Limits

No.	Material	CAS No.	GADSL #
1	Aldrinvvv	309-00-2	
2	Chlordane	57-74-9	
3	Dieldrin	60-57-1	
4	Endrin	72-20-8	
5	Heptachlor	76-44-8	
6	Hexachlorobenzene	118-74-1	119
7	Mirex	2385-85-5	98
8	Toxaphene	8001-35-2	
9	DDT	50-29-3	
10	Polychlorinated dibenzo-p-dioxins (PCDD)	110-00-9	
11	Polychlorinateddibenzofurans (PCDF)	-	
12	Polychlorinated Biphenyls (PCBs)	1336-36-3 and others	218
13	Alpha hexachlorocyclohexane	319-84-6	
14	Beta hexachlorocyclohexane	319-85-7	
15	BHC (mixture of hexachlorocyclohexanes)	608-73-1	
16	Chlordecone	143-50-0	
17	Hexabromobiphenyl	36355-01-8	215
18	Hexachlorobutadiene (HCBD)	87-68-3	120
19	Hexabromocyclododecane (HBCD)	25637-99-4 and others	70
20	Hexabromodiphenyl ether and heptabromodiphenyl ether	68631-49-2 and others	216
21	Lindane	58-89-9	121
22	Pentachlorobenzene	608-93-5	167
23	Pentachlorophenol and its salts and esters (PCP)	87-86-5 131-52-2 27735-64-4 3772-94-9 1825-21-4	169
24	Polychlorinated naphthalenes (PCN)	70706-03-3 and others	219
25	SCCP	85535-84-8 and others	60
26	Technical endosulfan and its related isomers	115-29-7 959-98-8 33213-65-9	
27	endosulfan sulfate	1031-07-8	
28	Tetrabromodiphenyl ether and pentabromodiphenyl ether	40088-47-9 and others	216
29	Dicofol	115-32-2 10606-49-9	
30	Decabromodiphenyl ether	1163-19-5	216
31	Perfluorooctanoic acid (PFOA) and its salt,	335-67-1 and others	177
32	PFOA-related compounds	376-27-2 and others	178
33	Perfluorohexane sulfonic acid (PFHxS), its salts	355-46-4 and others	185
34	PFHxS-related compounds	111393-39-6 and others	186
35	UV-328*	25973-55-1 and others	129

36	Dechlorane plus**	13560-89-9 and others	99
37	Methoxychlor	72-43-5 30667-99-3 76733-77-2 255065-25-9 255065-26-0 59424-81-6 1348358-72-4	

Table 11. Comparison of UV-328 Exemption Conditions by Country

Classification	Stockholm Convention	EU	Singapore	New Zealand	United Kingdom	Republic of South Africa
Time of introduction of regulation	2024.2.26	2024.6.5	2024.5/6(Prohibition) 2024.11/12(Exemption requirements)	2025.3.10	2025.3.11	2023.11.30
Effective date	2025.2.26	2025.2.26	2025.2.26	2025.3.14	2025.4.1	2025.2.26
Suspension period	5 years and stated period	5 years and stated period	5 years and stated period	5 years and stated period	5 years and stated period	5 years and stated period
생산	Prohibition (25.2/26~) Suspension: Exception: Parties who notify the Secretariat of their intention to produce and/or use	Do not exceed 1 mg/kg (0.0001 wt%) in the product (25.2/26~)	Prohibition (25.2/26~)	Prohibition (25.2/26~)	Prohibition (25.2/26~)	Prohibition (25.2/26~) Suspension: Exception: Parties who notify the Secretariat of their intention to produce and/or use
사용	Specific exemption Land-based vehicles (~ '30.2/26) Date of application of the Service Parts Ban: End of life or early in 2044	Specific exemption Land-based vehicles (~ '30.2/26) Date of application of the Service Parts Ban: End of life or early in 2044	Specific exemption Allow land-based vehicles, no 5-year grace period) Point of application of prohibition on service parts: end of life	Specific exemption Land-based vehicles (~ '30.2/26) Date of application of the Service Parts Ban: End of life or early in 2044	Specific exemption Land-based vehicles (~ '30.2/26) Date of application of the Service Parts Ban: End of life or early in 2044	Date of application of prohibition on service parts: End of life or early in 2044

Substance	CAS No.
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1

* Regulations on DP (DECHLORANE PLUS) materials

: Spare parts: Dechlorane Plus was originally used in the manufacture of the product, at the end of the product's service life, or as soon as it arrives in 2044

(i) Aerospace

(ii) Space

(iii) Defense Applications

(iv) Cars (including all land vehicles such as automobiles, motorcycles, agricultural and construction vehicles, and industrial trucks; including cables, wire harnesses, connectors and insulating tape);

(v) Fixed industrial machinery used in agriculture, forestry and construction

(vi) marine, garden, forestry and outdoor power equipment;;

(vii) Instruments for analysis, measurement, control, monitoring, testing, production and inspection..

Substance	CAS No.
Dechlorane Plus	13560-89-9 135821-03-3 135821-74-8

Defined countries: Singapore, South Africa, New Zealand, United Kingdom

Scheduled to be finalized: EU