

Group of managed substances at Topcon Group

(Attachment-2)

Management standards

A: Prohibited Substances

- Prohibited substances (A) are ones which must not be contained in products, and their uses are prohibited in principle (except when there is an exemption based on laws and regulations).
- If each regulation has a threshold, follow those conditions.
- Delivery of Dechlorane Plus (A40) and UV-328 (A41) will be prohibited after January 1, 2025. However, the date of ban on delivery may be changed depending on the situation.

B: Managed Substances

- Managed substances (B) are ones which conform to "JAMP declarable substances" given by "Joint Article Management Promotion-consortium" (JAMP).

Although it is not limited to contain these substances in products intentionally, whether any product contains these substances or not should be understood and reported and, if they are contained, the amount of the contained substances should also be understood and reported.

As of March 29, 2024

A: Prohibited Substances

No.	Substance/Substance Group	Examples (CAS RN®) (Not all substances are included, but give only examples.)	Threshold Level	Major Applicable Laws and Regulations								
				Chemical Substances Control Law	EU-RoHS	POPs	REACH SVHC	REACH Annex XVII	IEC 62474 Reported Substance	TSCA PBT	Others	
A 0 1	Asbestos	Asbestos (1332-21-4) Actinolite (77536-66-4) Amosite (12172-73-5) etc.	Intentionally added					○	○			
A 0 2	Polybrominated biphenyls (PBBs)	Polybrominated biphenyls (1336-36-3) Pentachlorobiphenyls (25429-29-2) etc.	Intentionally added	○		○				○		
A 0 3	Cadmium/Cadmium compounds	Cadmium (7440-43-9) Cadmium oxide (1306-19-0) Cadmium sulfide (1306-23-6) etc.	Conditional prohibition		○		○	○	○			
A 0 4	Lead/Lead compounds	Lead (7439-92-1) Lead (IV) oxide (1309-60-0) Lead (II) carbonate (598-63-0) etc.	Conditional prohibition		○		○	○	○			
A 0 5	Mercury/Mercury compounds	Mercury (7439-97-6) Mercury chloride (II) (7487-94-7) Mercuric (II) oxide (21908-53-2) etc.	Conditional prohibition		○			○	○			
A 0 6	Chromium (VI) Compounds	Chromium trioxide (1333-82-0) Calcium chromate (13765-19-0) etc.	Conditional prohibition		○			○	○			
A 0 7	Polybrominated diphenylethers (PBDEs)	Monobromodiphenyl ether (101-55-3) Dibromodiphenyl ether (2050-47-7) Tribromodiphenyl ether (49690-94-0) Tetrabromodiphenyl ether (40088-47-9) Pentabromodiphenyl ether (32534-81-9) Hexabromodiphenyl ether (36483-60-0) Heptabromodiphenyl ether (68928-80-3) Octabromodiphenyl ether (32536-52-0) Nonabromodiphenyl ether (63936-56-1) etc.	Conditional prohibition		○					○		
A 0 8	Polybrominated biphenyls (PBBs)	Monobromobiphenyl (2052-07-5) Dibromobiphenyl (92-86-4) Tribromobiphenyl (59080-34-1) Tetrabromobiphenyl (40088-45-7) Pentabromobiphenyl (56307-79-0) Hexabromobiphenyl (59080-40-9) Heptabromobiphenyl (35194-78-6) Octabromobiphenyl (61288-13-9) Nonabromobiphenyl (27753-52-2) Decabromobiphenyl (13654-09-6) etc.	Conditional prohibition		○			○	○			
A 0 9	Perfluorooctane sulfonates (PFOS)	Perfluorooctane sulfonate (1763-23-1) Perfluorooctane sulfonate fluoride (307-35-7) etc.	Intentionally added	○		○				○		
A 1 0	Polychlorinated naphthalenes(PCNs)	Polychloronaphthalenes (70776-03-3) Pentachloronaphthalene (1321-64-8) etc.	Intentionally added	○		○				○		
A 1 1	Arsenic/Arsenic compounds (Prohibition of use on wood, clothing or accessories, footwear, etc.)	Arsenic (7440-38-2) Arsenic pentoxide (1303-28-2) etc.	Intentionally added					○	○			
A 1 2	Tri-substituted organostannic compounds (including tributyltin (TBT) and triphenyltin (TPT))	Tributyltinacetate (56-36-0) Triphenyltinfluoride (379-52-2) etc.	Intentionally added					○	○			
A 1 3	Ozone depleting substances (ODS)	Trichlorofluoromethane (CFC-11) (75-69-4) Chloromethane (methyl chloride) (74-87-3) etc.	Intentionally added							○		
A 1 4	Alkanes, C10-13, chloro (Short chain chlorinated paraffins)	Alkanes, C10-13, chloro (85535-84-8) Alkanes, C10-12, chloro (108171-26-2) etc.	Intentionally added	○		○	○			○		
A 1 5	Polychlorinated terphenyls (PCTs)	Polychlorinated terphenyls (61788-33-8) etc.	Intentionally added					○	○			
A 1 6	Dimethyl fumarate (DMF)	Dimethyl fumarate (624-49-7)	Intentionally added					○	○			
A 1 7	Bis (2-ethylhexyl) phthalate (DEHP)	Bis (2-ethylhexyl) phthalate (117-81-7)	Conditional prohibition		○		○	○	○			
A 1 8	Dibutyl phthalate (DBP)	Dibutyl phthalate (84-74-2)	Conditional prohibition		○		○	○	○			
A 1 9	Butyl benzyl phthalate (BBP)	Butyl benzyl phthalate (85-68-7)	Conditional prohibition		○		○	○	○			
A 2 0	Diisobutyl phthalate (DIBP)	Diisobutyl phthalate (84-69-5)	Conditional prohibition		○		○	○	○			
A 2 1	Hexabromocyclododecane (HBCD/HBCDD)	Hexabromocyclododecane (25637-99-4) α-Hexabromocyclododecane (134237-50-6) etc.	Intentionally added	○		○	○			○		
A 2 2	Azocolourants and azodyes which form certain aromatic amines	Biphenyl-4-ylamine (92-67-1) Benzidine (92-87-5) etc.	Intentionally added					○	○			
A 2 3	Cobalt dichloride	Cobalt dichloride (7646-79-9)	Intentionally added				○	○	○			
A 2 4	2-(2H-1,2,3-benzotriazol-2-yl)-4,6-di-tert-butylphenol	2-(2H-1,2,3-benzotriazol-2-yl)-4,6-di-tert-butylphenol (3846-71-7)	Intentionally added	○			○			○		
A 2 5	Perfluorooctanoic acid (PFOA), its salts and PFOA-related substances	Perfluorooctanoic acid (335-67-1) Sodium salt of Perfluorooctanoic acid (335-95-5) Methyl perfluorooctanoate (376-27-2) etc.	Intentionally added	○		○	○			○		
A 2 6	Radioactive substances	Uranium (7440-61-1) Radon (10043-92-2) etc.	Intentionally added							○		
A 2 7	Bis(tributyltin)oxide (TBTO)	Bis(tributyltin)oxide (56-35-9)	Intentionally added	○				○	○			
A 2 8	Dibutyltin (DBT) compounds	Dibutyltin oxide (818-08-6) Dibutyltin diacetate (1067-33-0) etc.	Conditional prohibition					○	○			
A 2 9	Diocetyl tin (DOT) compounds	Diocetyl tin oxide (87-08-6) Diocetyl tin dilaurate (3648-18-8) etc.	Conditional prohibition					○	○			

No.	Substance/Substance Group	Examples (CAS RN <sup>®</sup> ) (Not all substances are included, but give only examples.)	Threshold Level	Major Applicable Laws and Regulations								
				Chemical Substances Control Law	EU-RoHS	POPs	REACH SVHC	REACH Annex XVII	IEC 62474 Reported Substance	TSCA PBT	Others	
A 3 0	Perfluorohexanesulphonic acid (PFHxS), its salts and PFHxS-related substances	Perfluorohexanesulphonic acid (355-46-4 ) Sodium perfluorohexanesulfonate (82382-12-5 ) etc.	Intentionally added	○		○	○					
A 3 1	Perfluorocarboxylic acids (PFCAs) C9-C14, its salts and PFCAs-related substances	Perfluorononanoic acid (375-95-1 ) Perfluorodecanoic acid (335-76-2 ) etc.	Intentionally added					○	○			
A 3 2	Decabromodiphenyl ether (DecaBDE)	Decabromodiphenyl ether (1163-19-5)	Intentionally added	○	○	○	○		○	○		
A 3 3	Phenol, Isopropylated, Phosphate (3:1) (PIP (3:1))	Phenol, Isopropylated, Phosphate (3:1) (68937-41-7)	Intentionally added						○	○		
A 3 4	2,4,6-Tris(tert-butyl)phenol (TTBP)	2,4,6-Tris(tert-butyl)phenol (732-26-3)	Conditional prohibition	○							○	
A 3 5	Hexachlorobutadiene (HCBd)	Hexachlorobutadiene (87-68-3)	Intentionally added	○		○					○	
A 3 6	Pentachlorothiophenol (PCTP)	Pentachlorothiophenol (133-49-3)	Conditional prohibition								○	
A 3 7	Polyvinyl chloride (PVC) /PVC compounds (Prohibition of use for packaging and cases)	Polyvinyl chloride (9002-86-2)	Intentionally added									○*1
A 3 8	Mineral oil aromatic hydrocarbons (MOAH) comprising 1 to 7 aromatic rings (Prohibition of mineral oils on packaging and printing)	Toluene (95-47-6) Xylene (108-88-3) Anthracene (120-12-7) etc.	Conditional prohibition									○*2
A 3 9	Hexachlorobenzene	Hexachlorobenzene (118-74-1)	Conditional prohibition	○		○		○				
A 4 0	Dechlorane Plus	Dechlorane Plus (13560-89-9) Anti-isomers (135821-74-8) Syn-isomers (135821-03-3)	Intentionally added	<sup>(1)</sup> Scheduled for enforcement		○	○					
A 4 1	2-(2H-1,2,3-Benzotriazol-2-yl)-4,6-di-tert-pentylphenol (UV-328)	2-(2H-1,2,3-Benzotriazol-2-yl)-4,6-di-tert-pentylphenol (25973-55-1)	Intentionally added	<sup>(1)</sup> Scheduled for enforcement		○	○					

(1) Designation as a Class 1 Specified Substance for Chemical Substances Control Law has been decided and is scheduled to take effect after winter 2024.

#### B: Managed Substances

No.	Substance/Substance Group	Examples (CAS RN <sup>®</sup> ) (Not all substances are included, but give only examples.)	Major Applicable Laws and Regulations									
			Chemical Substances Control Law	EU-RoHS	POPs	REACH SVHC	REACH Annex XVII	IEC 62474 Reported Substance	TSCA PBT	Others		
B 0 1	Antimony/Antimony compounds (including alloy)	Antimony (7440-36-0) Sodium antimonate (15432-85-6) etc.										
B 0 2	Beryllium/Beryllium compounds (including alloy)	Beryllium (7440-41-7) Beryllium oxide (1304-56-9) etc.					○	○				
B 0 3	Brominated flame retardants (other than PBBs, PBDEs or HBCDDs)	TBBA-(2,3-dibromopropyl ether) (21850-44-2) etc.						○				
B 0 4	Nickel/Nickel compounds	Nickel (7440-02-0) Nickel (II) sulfate hexahydrate (10101-97-0) Nickel oxide (11099-02-8) etc.					○	○				
B 0 5	Polyvinyl chloride (PVC)/PVC compounds (other than packaging and cases)	Polyvinyl chloride (9002-86-2)										
B 0 6	Selenium/Selenium compounds (including alloy)	Selenium (7782-49-2) Selenic acid (7783-00-8) etc.							○			
B 0 7	Perchlorates	Lithium perchlorate (7791-03-9) etc.							○			
B 0 8	Fluorinated greenhouse gases (PFC, HFC, SF6)	Carbon tetrafluoride (PFC) (75-73-0) Trifluoromethane (HFC) (75-46-7) Sulfur hexafluoride (SF6) (2551-62-4) etc.							○			
B 0 9	Chlorinated flame retardants	Tetrakis(2-chloroethyl) dichloroisopentylidiphosphate (38051-10-4) Tris(1-chloro-2-propyl) phosphate (13674-84-5) etc.							○			
B 1 0	Formaldehyde	Formaldehyde (50-00-0)						○	○			
B 1 1	Restricted substances of REACH Regulation (Annex XVII)	—						○				
B 1 2	SVHCs of REACH Regulation (Annex XIV (Approved substances) + Candidate substances for authorization)	—					○					
B 1 3	IEC62474	—							○			
B 1 4	JAMP controlled substances (chemSHERPA)	—										
B 1 5	Perfluoroalkyl substances (PFAS)	1,1,2-trichloro-1,2,2-trifluoroethane (76-13-1) Perfluorobutanesulfonyl fluoride (375-72-4) etc.										○*3
B 1 6	Tetrabromobisphenol A (TBBPA)	Tetrabromobisphenol A (79-94-7)		candidate								
B 1 7	Alkanes, C14-17, chloro (Medium chain chlorinated paraffins)	Alkanes, C14-17, chloro (85535-85-9) etc.			candidate							
B 1 8	Long-chain perfluorocarboxylic acids (LC-PFCAs), their salts and LC-PFCAs-related substances	Perfluorodecanoic Acid (335-76-2) Perfluorododecanoic Acid (307-55-1) etc.			candidate							
B 1 9	Decabromodiphenylethane	Decabromodiphenylethane (84852-53-9)										candidate*4

#### Others

\*1 Korea ; Act on the Promotion of Saving and Recycling of Resource

\*2 France ; French Circular Economy Law

\*3 [USA] State of Maine ; An Act to Stop Perfluoroalkyl and Polyfluoroalkyl Substances Pollution

\*4 Canada ; Prohibition of Certain Toxic Substances Regulations