

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.

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 April 1, 2023

A: Prohibited Substances

| No. | Substance/Substance Group | 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 | Intentionally added | | | | | ○ | ○ | | |
| A 0 2 | Polybrominated biphenyls (PBBs) | Intentionally added | ○ | | ○ | | | ○ | | |
| A 0 3 | Cadmium/Cadmium compounds | Conditional prohibition | | ○ | | ○ | ○ | ○ | | |
| A 0 4 | Lead/Lead compounds | Conditional prohibition | | ○ | | ○ | ○ | ○ | | |
| A 0 5 | Mercury/Mercury compounds | Conditional prohibition | | ○ | | | ○ | ○ | | |
| A 0 6 | Chromium (VI) Compounds | Conditional prohibition | | ○ | | | ○ | ○ | | |
| A 0 7 | Polybrominated diphenylethers (PBDEs) | Conditional prohibition | | ○ | | | | ○ | | |
| A 0 8 | Polybrominated biphenyls (PBBs) | Conditional prohibition | | ○ | | | ○ | ○ | | |
| A 0 9 | Perfluorooctane sulfonates (PFOS) | Intentionally added | ○ | | ○ | | | ○ | | |
| A 1 0 | Polychlorinated naphthalenes(PCNs) | Intentionally added | ○ | | ○ | | | ○ | | |
| A 1 1 | Arsenic/Arsenic compounds | Intentionally added | | | | ○ | ○ | ○ | | |
| A 1 2 | Tri-substituted organostannic compounds (including tributyltin (TBT) and triphenyltin (TPT)) | Intentionally added | | | | | ○ | ○ | | |
| A 1 3 | Ozone depleting substances (ODS) | Intentionally added | | | | | | ○ | | |
| A 1 4 | Alkanes, C10-13, chloro (Short chain chlorinated paraffins) | Intentionally added | ○ | | ○ | ○ | | ○ | | |
| A 1 5 | Polychlorinated terphenyls (PCTs) | Intentionally added | | | | | ○ | ○ | | |
| A 1 6 | Dimethyl fumarate (DMF) | Intentionally added | | | | | ○ | ○ | | |
| A 1 7 | Bis (2-ethylhexyl) phthalate (DEHP) | Conditional prohibition | | ○ | | ○ | ○ | ○ | | |
| A 1 8 | Dibutyl phthalate (DBP) | Conditional prohibition | | ○ | | ○ | ○ | ○ | | |
| A 1 9 | Butyl benzyl phthalate (BBP) | Conditional prohibition | | ○ | | ○ | ○ | ○ | | |
| A 2 0 | Diisobutyl phthalate (DIBP) | Conditional prohibition | | ○ | | ○ | ○ | ○ | | |
| A 2 1 | Hexabromocyclododecane (HBCD/HBCDD) | Intentionally added | ○ | | ○ | ○ | | ○ | | |
| A 2 2 | Azocolourants and azodyes which form certain aromatic amines | Intentionally added | | | | | ○ | ○ | | |
| A 2 3 | Cobalt chloride | Intentionally added | | | | ○ | ○ | ○ | | |
| A 2 4 | 2-(2H-1,2,3-benzotriazol-2-yl)-4,6-di-tert-butylphenol | Intentionally added | ○ | | | ○ | | ○ | | |
| A 2 5 | Perfluorooctanoic acid (PFOA), its salts and PFOA-related substances | Intentionally added | ○ | | ○ | ○ | | ○ | | |
| A 2 6 | Radioactive substances | Intentionally added | | | | | | ○ | | |
| A 2 7 | Bis(tributyltin) oxide (TBTO) | Intentionally added | ○ | | | | ○ | ○ | | |
| A 2 8 | Dibutyltin (DBT) compounds | Intentionally added | | | | | ○ | ○ | | |
| A 2 9 | Diocetyl tin (DOT) compounds | Intentionally added | | | | | ○ | ○ | | |
| A 3 0 | Perfluorohexanesulphonic acid (PFHxS), its salts and PFHxS-related substances | Intentionally added | | | ○ | ○ | | | | |
| A 3 1 | Perfluorocarboxylic acids (PFCAs) C9-C14, its salts and PFCAs-related substances | Intentionally added | | | | | ○ | ○ | | |
| A 3 2 | Decabromodiphenyl ether (DecaBDE) | Intentionally added | ○ | ○ | ○ | ○ | | ○ | ○ | |
| A 3 3 | Phenol, Isopropylated, Phosphate (3:1) (PIP (3:1)) | Intentionally added | | | | | | ○ | ○ | |
| A 3 4 | 2,4,6-Tris(tert-butyl)phenol (TTBP) | Conditional prohibition | ○ | | | | | | ○ | |
| A 3 5 | Hexachlorobutadiene (HCBD) | Intentionally added | ○ | | ○ | | | | ○ | |
| A 3 6 | Pentachlorothiophenol (PCTP) | Conditional prohibition | | | | | | | ○ | |
| A 3 7 | Polyvinyl chloride (PVC) (Prohibition of use for packaging and cases) | 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) | Intentionally added | | | | | | | | ○*2 |
| A 3 9 | Hexachlorobenzene | Conditional prohibition | ○ | | ○ | | ○ | | | |

B: Managed Substances

| No. | Substance/Substance Group | 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) | | | | | ○ | | | |
| B 0 2 | Beryllium/Beryllium compounds (including alloy) | | | | | ○ | ○ | | |
| B 0 3 | Brominated flame retardants (other than PBBs, PBDEs or HBCDDs) | | | | | | ○ | | |
| B 0 4 | Nickel/Nickel compounds | | | | | ○ | ○ | | |
| B 0 5 | Polyvinyl chloride (PVC) (other than packaging and cases) | | | | | | | | |
| B 0 6 | Selenium/Selenium compounds (including alloy) | | | | | | | | |
| B 0 7 | Perchlorates | | | | | | ○ | | |
| B 0 8 | Perfluorocarbon | | | | | | ○ | | |
| B 0 9 | Chlorinated flame retardants | | | | | | ○ | | |
| B 1 0 | Formaldehyde | | | | | ○ | ○ | | |
| B 1 1 | Fluorinated greenhouse gases | | | | | | ○ | | |
| B 1 2 | Restricted substances of REACH Regulation (Annex XVII) | | | | | ○ | | | |
| B 1 3 | SVHCs of REACH Regulation (Annex XIV (Approved substances) + Candidate substances for authorization) | | | | ○ | | | | |
| B 1 4 | IEC62474 | | | | | | ○ | | |
| B 1 5 | JAMP controlled substances (chemSHERPA) | | | | | | | | |
| B 1 6 | Hydrofluorocarbon (HFC) | | | | | | ○ | | |
| B 1 7 | Sulfur hexafluoride | | | | | | ○ | | |
| B 1 8 | Perfluoroalkyl substances (PFAS) | | | | | | | | ○*3 |

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