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| Document name: Management Standard for Environment-related Substances | | | Document no. 10000-0162 | |
| Dept.: DEIC CE | Author: DEIC CE | Date:2022.05.19 | Page: 1 of 19 | Rev.:29 |

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Annex 1: Materials Compliance Declaration (Template)

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1 Purpose

The purposes of this Technical Standard are as follows:

- ✧ To clarify the banned substances included in the parts and devices constituting Delta products, or substances used for Delta products.
- ✧ To thoroughly notify the above-mentioned matters to both the whole Delta and parts/ devices suppliers.
- ✧ To improve the environmental quality of the products.

2 Scope


This Technical Standard applies to the following parts/ devices constituting Delta products: electrical parts, mechanical parts, semiconductor devices, printed wiring boards (PWBs), and packaging materials/ packaging parts.

- ✧ Including assemblies such as functional units, modules, and board assemblies.
- ✧ Including attachments such as the accessories procured as parts.
- ✧ Including composing materials such as the subsidiary parts and materials managed by parts specifications.
- ✧ Including the substances used in the production processes of parts.

This Management Standard will be entered into enforcement 30 days after being published officially, unless elsewhere be stated its enforced date.

3 Definitions of terms

- ✧ Homogeneous materials:
Homogeneous materials are defined as materials that cannot be mechanically disjointed into different materials and are "of uniform composition throughout." Examples are plastics, laminates, alloys, molding compounds, finishes, ceramics, plating materials, etc. that are presented in the finished parts and products.
- ✧ Contained:
"Contained" means that a substance remains in parts, devices, or their materials because of addition, filling, blending, or adhesion, whether intended or not. When a substance is unintentionally contained in, or added to a product in a processing process, this situation is also regarded as "Contained." Dopants (Doping Agents) for production of semiconductor devices, etc. are not treated as "Intentionally added" if present in the devices in a very small amount.

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✧ Intentionally added:

"Intentionally added" means a situation where a substance is contained in the parts, devices, or their materials because of deliberate addition, filling, blending, or adhesion, in order to provide a specific characteristic, appearance, property, attribute or equality. (One contained in a natural material, which cannot be completely removed by in a refining process by adequate technical means (i.e. natural impurities); and one generated in a synthesis process, which cannot be completely removed by adequate technical means.)

✧ Banned substances:

Among the substances included in the parts and devices (refer to the SCOPE) or the ones used at the time of manufacturing, banned substances are those hazardous substances that are not allowed to be added intentionally and to be contaminated accidentally. The threshold limits of those banned substances are specified in any applicable test methods that are regulated in any related regulations and laws.

✧ MDL: Method Detection Limit.

✧ N.D.: Not detected/ not detectable.

✧ PPM, ppm: Parts per million, unit of measurement for weight percentage.

✧ Threshold limit:

The maximum concentration threshold of the regulated environment-related substance is allowed to be contained in homogenous level of the parts or materials constituting to Delta products due to technically irremovability of the regulated substance.

✧ Packaging:

Materials used to protect products from damage due to storage or transportation (e.g., boxes, shipping supplies, cushioning & foam, bags, shrink wrap, tape/ adhesives), including inks and dyes used to label packages. Reusable or returnable packaging under the control of traders or suppliers is out of this scope.

✧ Mechanical Plastic Part:

Plastic parts that do not internally carry an electrical signal such as housings, brackets, bezels, latches, etc. that form the basic structure of the product and/ or have mechanical functions.

4 Management standards for environment-related substances

4-1 Delta mandatory banned substances

The following restrictions are applicable to all parts, components, materials that are in scopes, except for the listed exemptions.

Table 4-1 List of Delta banned substances

| Banned substances | CAS No. | Scope | Threshold Limit | Exemptions | References |
|---|-------------|-------------------------------------|-----------------|--------------------|---------------------------------|
| Cadmium and cadmium compounds | - | -Plastics, rubbers, paints and inks | N.D. | EU RoHS exemptions | Directive 2011/65/EU |
| | | -Solders | 20 ppm | | Directive (EU) 2018/736 |
| | | -Other homogeneous materials | 50 ppm | | Directive (EU) 2018/737 |
| Lead and lead compounds | - | -Plastics, rubbers, paints and inks | 50 ppm | EU RoHS exemptions | Directive (EU) 2018/738 |
| | | -Other homogeneous materials | 800 ppm | | Directive (EU) 2018/739 |
| Mercury and mercury compounds | - | All parts | N.D. | EU RoHS exemptions | Directive (EU) 2018/740 |
| Hexavalent chromium compounds | - | -Metallic parts | N.D. | EU RoHS exemptions | Directive (EU) 2018/741 |
| | | -Other homogeneous materials | 100 ppm | | Directive (EU) 2018/742 |
| | | | | | China RoHS GB/T 26125 |
| | | | | | Directive (EU)2022/279 |
| | | | | | Directive (EU)2022/280 |
| | | | | | Directive (EU)2022/281 |
| | | | | | Directive (EU)2022/283 |
| | | | | | Directive (EU)2022/287 |
| | | | | | Directive (EU)2022/275 |
| | | | | | Directive (EU)2022/282 |
| | | | | | Directive (EU)2022/274 |
| | | | | | Directive (EU)2022/278 |
| Sum of cadmium/lead/ mercury/ hexavalent chromium compounds | - | Package material | 100 ppm | | Directive 94/62/EC |
| Polybrominated biphenyls (PBBs) | See Table 2 | All parts | 100 ppm | | Directive 2011/65/EU GB/T 26125 |

| Banned substances | CAS No. | Scope | Threshold Limit | Exemptions | References |
|---|-------------|-------------------------------------|---|--|---|
| Polybrominated diphenyl ethers (PBDEs) | See Table 3 | All parts | 100 ppm | | Directive 2011/65/EU GB/T 26125 TSCA section 6(h) |
| Bis (2-ethylhexyl)phthalate(DEHP) Dioctyl phthalate(DOP) | 117-81-7 | All parts | 1000 ppm | | Directive(EU) 2015/863 EU REACH Annex XVII |
| Benzylbutyl Phthalate(BBP) | 85-68-7 | All parts | 1000 ppm | | Directive (EU) 2015/863 EU REACH Annex XVII |
| Dibutyl Phthalate (DBP) | 84-74-2 | All parts | 1000 ppm | | Directive (EU) 2015/863 EU REACH Annex XVII |
| Di-iso-butyl Phthalate (DIBP) | 84-69-5 | All parts | 1000 ppm | | Directive (EU) 2015/863 EU REACH Annex XVII |
| Antimony trioxide | 1309-64-4 | Halogen-free part See 10000-2003 | 1000 ppm as Antimony | | Delta policy |
| Arsenic | 7440-38-2 | -Solder and metal alloy | 300 ppm | Arsenic and its compounds used for semiconductors, magnet filters and battery cells. | Delta policy |
| | | -Packaging material (include woods) | 50 ppm | | |
| | | -Other homogeneous materials | 50 ppm | | |
| Asbestos | - | All parts | Not used | | EU REACH Annex XVII |
| Bisphenol A | 80-05-7 | External plastics parts | 1000 ppm | | EU REACH Annex XVII Proposition 65 |
| Benzenamine, N-phenyl-, Reaction Products with Styrene and 2,4,4- Trimethylpentene (BNST) | 68921-45-9 | All parts | Not used, not intentionally added | | Prohibition of Certain Toxic Substances Regulations, 2012 |
| Benzidine-Based Dyes | See Table 4 | All parts | Not used | | U.S. TSCA EU REACH Annex XVII |
| Beryllium | 7440-41-7 | All parts | 1000 ppm | Alloy used in relay and breaker for electrical contact and spring. | Delta policy |
| Beryllium oxide | 1304-56-9 | All parts | 100 ppm | Ceramics in components | Delta policy |
| Brominated Flame Retardants | Various | -All enclosed plastic for adaptors | Not used | | Delta policy |

| Banned substances | CAS No. | Scope | Threshold Limit | Exemptions | References |
|---|--------------------------|-------------------------------------|-----------------|------------|--|
| | | -Halogen-free parts. See 10000-2003 | | | |
| Chlorinated flame retardant | Various | All parts | Not used | | Delta policy |
| Chlorinated paraffin (Short-chain) (C ₁₀₋₁₃ , Cl _{≥50} wt%) (SCCPs) | Various | All parts | Not used | | EU REACH Annex XVII; Stockholm Convention |
| Chlorinated paraffin (Medium-chain) (C ₁₄₋₁₇ , Cl _{≥50} wt%) (MCCPs) | Various | All parts | Not used | | Delta policy |
| Cobalt dichloride | 7646-79-9 7791-13-1 | Package material (Desiccant) | Not used | | EU REACH Annex XVII |
| Diarsenic trioxide | 1327-53-3 | All parts | 1000ppm | | EU REACH Annex XIV |
| Diarsenic pentaoxide | 1303-28-2 | All parts | 1000ppm | | EU REACH Annex XIV |
| Dibutyltin (DBT) compounds | See Table 5 | All parts | 1000 ppm as tin | | EU REACH Annex XVII |
| Bis(2-propylheptyl) phthalate (DPHP) | 53306-54-0 | All parts | 1000 ppm | | Delta policy |
| Bis(2-methoxyethyl) phthalate | 117-82-8 | All parts | 1000 ppm | | EU REACH Annex XIV |
| Dicyclohexyl Phthalate (DCHP) | 84-61-7 | All parts | 1000 ppm | | Delta policy |
| Diethyl phthalate (DEP) | 84-66-2 | All parts | 1000 ppm | | Delta policy |
| Diisodecyl Phthalate (DIDP) | 26761-40-0 68515-49-1 | All parts | 1000 ppm | | EU REACH Annex XVII |
| Diisononyl Phthalate (DINP) | 28553-12-0 68515-48-0 | All parts | 1000 ppm | | EU REACH Annex XVII |
| Diisooctyl Phthalate(DIOP) | 27554-26-3 | All parts | 1000 ppm | | Delta policy |
| Diisopentyl phthalate (DIPP) | 605-50-5 | All parts | 1000 ppm | | EU REACH Annex XIV |
| Dimethyl Phthalate (DMP) | 131-11-3 | All parts | 1000 ppm | | Delta policy |
| Di-n-Octyl Phthalate (DnOP) | 117-84-0 | All parts | 1000 ppm | | EU REACH Annex XVII |
| Dinheptyl Phthalate | 3648-21-3 | All parts | 1000 ppm | | Delta policy |
| Di-n-hexyl phthalate (DnHP) | 84-75-3 | All parts | 1000 ppm | | Delta policy |
| Dinonyl Phthalate (DNP) | 84-76-4 | All parts | 1000 ppm | | Delta policy |
| Dipentyl phthalate (DPP) | 131-18-0 | All parts | 1000 ppm | | EU REACH Annex XIV |

| Banned substances | CAS No. | Scope | Threshold Limit | Exemptions | References |
|--|-------------|--|-----------------------------|--|--|
| Diphenyl Phthalate | 84-62-8 | All parts | 1000 ppm | | Delta policy |
| Di-propyl Phthalate | 131-16-8 | All parts | 1000 ppm | | Delta policy |
| DEHP+DBP +BBP | - | Toys | 500 ppm | | Directive 2005/84/EC |
| DINP+DIDP+DnOP | - | Toys | 500 ppm | | Directive 2005/84/EC |
| Dimethylfumarate (DMF) | 624-49-7 | All parts | 0.1 ppm | | EU 2009/251/EC; EU REACH Annex XVII |
| Formaldehyde | 50-00-0 | Plywood board | 0.05 ppm | | Delta policy |
| | | Wood shaving block | 0.5 ppm | | |
| Monomethyldibromodiphenyl-methane (DBBT) | 99688-47-8 | All parts | Not used | | EU REACH Annex XVII |
| Musk Xylene | 81-15-2 | All parts | Not used | | EU REACH Annex XIV |
| Musk Ketone | 81-14-1 | All parts | Not used | | Delta policy |
| Musk lactone | 3391-83-1 | All parts | Not used | | Delta policy |
| Nickel and its compounds | - | External chassis/ case and parts frequently handled by the user. | 0.5µg/cm ² /week | -Nickel in stainless steel. -Parts do not contact human skin. | EU REACH Annex XVII |
| Natural rubber or natural latex | - | External mechanical parts | Not used | | Delta policy |
| Pentachlorothiophenol | 133-49-3 | All parts | Not used | | TSCA section 6(h) |
| Perchlorate | 14797-73-0 | All parts | 0.006 ppm | | JIG-101 |
| Long-chain perfluoroalkyl carboxylate (LCPFAC) | - | All parts | Not used | | TSCA section 5(a)(2) |
| Perfluoroalkyl sulfonate (PFAS) | - | All parts | Not used | | TSCA section 5(a)(2) |
| Perfluorooctanoic acid (PFOA) and Perfluorooctane sulfonic acid (PFOS) compounds | See Table 6 | All parts | 25 ppb | | EU REACH Annex XVII |
| Phenol, Isopropylated phosphate (3:1) (PIP 3:1) | 68937-41-7 | All parts | Not used | | TSCA section 6(h) |
| Polychlorinated terphenyls (PCTs) | - | All parts | Not used | | EU REACH Annex XVII |

| Banned substances | CAS No. | Scope | Threshold Limit | Exemptions | References |
|---|--|--|-----------------------------|---|---|
| Polycyclic Aromatic Hydrocarbons (PAHs) | See Table 7 | Plastic and rubber material used for external mechanical parts | 1 ppm (Sum of 15 PAHs) | Parts that do not contact human skins continuously. | EU REACH Annex XVII HJ 2536-2014 |
| Polyvinyl chloride (PVC) and PVC blends | 9002-86-2 & Various | All parts | Not used | - Wire and cable assemblies. - Plastic parts less than 25 grams. | Delta policy |
| Persistent Organic Pollutants (POPs) | See Table 6 | All parts | Not used | | Stockholm Convention EU Regulation 850/2004 TSCA section 6(h) |
| Radioactive materials | - | All parts | Not above background levels | | Delta policy |
| Red phosphorous | 7723-14-0 | Used as plastic flame retardants | Not used | | Delta policy |
| Specific benzotriazole: UV-320 UV-327 UV-328 UV-350 | 3846-71-7 3864-99-1 25973-55-1 36437-37-3 | All parts | Not used | | Japan CSCL EU REACH Annex XVII |
| Substances depleting the ozone layer (ODS) | Various | All parts and manufacturing process material | Not used | | Annexes A, B, C, E of Montreal Protocol |
| Selenium and its compounds | Various | All parts | Not used | | Delta policy |
| Specific azo dyes | See Table 4 | All parts | Not present | | EU REACH Annex XVII |
| Tetrabromobisphenol A (TBBPA) | 79-94-7 | All parts | Not used | Used as reactive flame retardant. | Delta policy |
| Tributyltin oxide (TBTO) | 56-35-9 | All parts | Not used | | EU REACH Annex XVII |
| Triphenyltin compounds (TPT) | See Table 5 | All parts | Not used | | EU REACH Annex XVII |
| Tris(2-chloroethyl) phosphate (TCEP) | 115-96-8 | Used as plastic flame retardants | Not used | | EU REACH Annex XIV |
| Trixylenyl phosphate (TXP) | 25155-23-1 | Used as plastic flame retardants | Not used | | Delta policy |
| Tris(2,3-dibromopropyl) phosphate (TDBPP) | 126-72-7 | Used as plastic flame retardants | Not used | | Delta policy |



| Banned substances | CAS No. | Scope | Threshold Limit | Exemptions | References |
|---|------------|----------------------------------|-----------------|------------|---------------------|
| Tri-1-aziridinylphosphine oxide (TEPA) | 545-55-1 | Used as plastic flame retardants | Not used | | Delta policy |
| Tris(1,3-dichloro-2-propyl) phosphate (TDCPP) | 13674-87-8 | Used as plastic flame retardants | Not used | | Delta policy |
| Triphenyl phosphate (TPP) | 115-86-6 | Used as plastic flame retardants | Not used | | Delta policy |
| Tris (1-chloro-2-propyl) phosphate (TCPP) | 13674-84-5 | Used as plastic flame retardants | Not used | | EU REACH Annex XVII |
| Triethyl arsenate | 15606-95-8 | All parts | Not used | | EU REACH Annex XVII |
| 2,4,6-Tris(tert-butyl)phenol | 732-26-3 | All parts | Not used | | Delta policy |
| Ugilec 121 | 81161-70-8 | All parts | Not used | | EU REACH Annex XVII |
| Ugilec 141 | 76253-60-6 | All parts | Not used | | EU REACH Annex XVII |

4-2 Restrictions for batteries

| Restrictions on Content of Batteries Used in Products | | |
|---|---|--------------------|
| Targets | | Implement date |
| Cadmium | - Batteries and battery packs whose cadmium content, in proportion to each unit weight, is 0.002% or more. Exemptions: (a) emergency and alarm systems, including emergency lighting (b) medical equipment | Banned immediately |
| Lead | -All batteries whose lead content, in proportion to their weight, is 0.004% or more. | Banned immediately |
| Mercury | - All battery types whose mercury content, in proportion to their weight, is 0.0005% or more. | Banned immediately |

4-3 Chemical substances information –REACH requirement

Based on REACH (Registration, Evaluation, Authorization and restriction of Chemicals EC 1907/2006), suppliers must have communication of information about substances identified by the European Chemical Agency (ECHA) known as the list of Substance of Very High Concern (SVHC). Suppliers must disclosure detail information for SVHC in delivered products.

REACH Article 67 stated that a substance on its own, in a preparation or in an article, for which Annex XVII contains a restriction, shall not be manufactured, placed on the market or used.

All material delivered to Delta were not allow contain Annex XVII substances, furthermore, if suppliers delivered parts to Delta contain any SVHC that is over the report threshold of 1000 ppm (substance weight/ article weight) in weight. There are several required information for communication: a) substance name, b) CAS number, c) weight of substance, and d) concentration and applications of substance.

Please visit the website for the latest information about REACH regulated substances.

SVHC << <https://echa.europa.eu/candidate-list-table>>>

REACH Annex XVII << <https://echa.europa.eu/substances-restricted-under-reach>>>

5 Other design requirements

- Avoided Gluing or soldering of different material.
- Plastic materials in covers / housing had better not be surface coated.
- All the thermoplastic parts $\geq 25g$ or $\geq 200 \text{ mm}^2$ and packaging material, have to be marked in accordance to ISO 11469, and ISO 1043 -1, -2, -3, -4.

6 Requirements for Test Report

6-1 Items to be stated in Reports

(1). Pre-treatment method

Please indicate that the sample had been totally digested and dissolved. If this entry is not clear, Delta will ask the new report. Delta will not accept any "in-house" pre-treatment.

(2). Test method.

(3). Name of analysis institution and corresponding signature.

The tests must be done by 3rd party labs and have its own test lab with ISO 17025 certification.

When customers have requirements for reports tested by specific test laboratories, Delta will ask you to resubmit the report again if the report was tested by other laboratories.

(4). Test date

(5). Test result (must state the detection limit)

(6). Test flowchart

(7). Photographs of the samples

(8). Accepted test methods

| Banned substances | Test methods |
|---|------------------------|
| Cadmium and cadmium compounds | IEC 62321 |
| Lead and lead compounds | IEC 62321 |
| Mercury and mercury compounds | IEC 62321 |
| Hexavalent chromium compounds | IEC 62321 |
| Polybrominated biphenyls (PBBs) | IEC 62321 |
| Polybrominated diphenyl ethers (PBDEs) | IEC 62321 |
| Phthalates | IEC 62321 |
| Polycyclic Aromatic Hydrocarbons (PAHs) | AfPS GS 2019:01 PAK |
| BFR&CFR (As bromine and chlorine) | BS EN 14582 |
| Nickel and its compounds | EN 1811 |
| Red phosphorous | Pyrolyzer-GC/MS |
| Formaldehyde | ASTM E1333/ ASTM D6007 |

7 Banned substances table

Table 2. List of Polybrominated biphenyls (PBBs)

| Substances | CAS No. |
|-----------------------|------------------------------------|
| Bromobiphenyl Ether | 101-55-3 |
| Dibromobiphenyl Ether | 2050-47-7 |
| Tribromobiphenyl | 64258-03-3 |
| Tetrabromobiphenyl | 40088-45-7 |
| Pentabromobiphenyl | 563070-79-0; 67888-97-5 |
| Hexabromobiphenyl | 59080-40-9, 36355-01-8, 67774-32-7 |
| Heptabrombiphenyl | 6355-01-8 |
| Octabrombiphenyl | 61288-13-9 |
| Nonabromobiphenyl | 27753-52-2 |
| Decabromobiphenyl | 13654-09-6 |

Table 3. List of Polybrominated diphenyl ethers (PBDEs)

| Substances | CAS No. |
|--------------------------|------------|
| Bromobiphenyl Ether | 101-55-3 |
| Dibromobiphenyl Ether | 2050-47-7 |
| Tribromobiphenyl Ether | 49690-94-0 |
| Tetrabromobiphenyl Ether | 40088-47-9 |
| Pentabromobiphenyl Ether | 32534-81-9 |
| Hexabromobiphenyl Ether | 36483-60-0 |
| Heptabromobiphenyl Ether | 68928-80-3 |
| Octabromobiphenyl Ether | 32536-52-0 |
| Nonabromobiphenyl Ether | 63936-56-1 |
| Decabromobiphenyl Ether | 1163-19-5 |

Table 4. List of banned Specific azo and Benzidine-based compounds

| Substances | CAS No. |
|--|------------|
| 4-aminodiphenyl and its chlorides | 92-67-1 |
| 4-chloro-o-toluidine | 95-69-2 |
| 2-naphthylamine and its chlorides | 91-59-8 |
| o-aminoazotoluene | 97-56-3 |
| 2-amino-4-nitrotoluene | 99-55-8 |
| p-chloroaniline | 106-47-8 |
| 2, 4-diaminoanisole | 615-05-4 |
| 4, 4'-diaminodiphenylmethane; 4,4'-methylenebisbenzeneamine | 101-77-9 |
| 3, 3'-dichlorobenzidine | 91-94-1 |
| 3, 3'-dimethylbenzidine; | 119-90-4 |
| 3, 3'-dimethylbenzidine; | 119-93-7 |
| 3,3'-dimethyl-4,4'-diaminodiphenylmethane | 838-88-0 |
| p-cresidine | 120-71-8 |
| 4, 4'-methylene-bis- (2-chloro aniline); | 101-14-4 |
| 4, 4'-oxideaniline | 101-80-4 |
| 4, 4'-thiodianiline | 139-65-1 |
| o-toluidine | 95-53-4 |
| 2, 4-tolluylenediamine | 95-80-7 |
| 2, 4, 5-trimethylaniline | 137-17-7 |
| 4-aminoazobenzene | 60-09-3 |
| 4-chloro-2-methylaniline | 95-69-2 |
| 5-Nitro-ortho-toluidine | 99-55-8 |
| 4-methoxy-m-phenyldiamine | 615-05-4 |
| o-Dianisidine | 119-90-4 |
| 4,4'-Methylene-bis(2-methylaniline) | 838-88-0 |
| 5-Methyl-o-Anisidine | 120-71-8 |
| 4,4'-Methylenebis-(2-Chlorobenzenamine) | 101-14-4 |
| 4,4'-thiobisbenzenamine | 139-65-1 |
| Toluene-2,4-Diamine | 95-80-7 |
| 2,4,5-Trimethylaniline | 137-17-7 |
| o-Anisidine | 90-04-0 |
| 1,3-Naphthalenedi-sulfonic acid, 7-hydroxy-8-[2-[4'-[2-(4- hydroxyphenyl) diazenyl][1,1'-biphenyl]-4-yl]diazanyl]- | 117-33-9 |
| 1,3,6-Naphthalenetri-sulfonic acid, 8-hydroxy-7-[2-[4'-[2-(2- hydroxy-1-naphthalenyl)diazanyl][1,1'-biphenyl]-4- yl]diazanyl]-, lithium salt (1:3) | 65150-87-0 |
| 2,7-Naphthalenedi-sulfonic acid,5-amino-3-[2-[4'-[2-(7-amino-1-hydroxy-3-sulfo-2 -naphthalenyl) diazenyl][1,1'- biphenyl]-4-yl]diazanyl]-4-hydroxy-, sodium salt (1:2) | 68214-82-4 |

| Substances | CAS No. |
|---|---|
| 2,7-Naphthalenedi-sulfonic acid, 4-amino-5-hydroxy-3-[2-[4'- [2-[2-hydroxy-4- [(2-methylphenyl)amino] phenyl]diazonyl][1,1'-biphenyl]-4-yl]diazonyl]-6-(2- phenyldiazonyl)- | 72379-45-4 |
| 2,7-Naphthalenedi-sulfonic acid, 4-amino-5-hydroxy [[[(substituted phenylamino)] substituted phenylazo] diphenyl]azo-, phenylazo-, disodium salt. | Accession No. 21808 CAS No. CBI (NA) |
| 4-(Substituted naphthalenyl)azo diphenyl azo-substituted carbopolycycle azo benzene-sulfonic acid, sodium salt | Accession No. 24921 CAS No. CBI (NA) |
| 4-(Substituted phenyl)azo biphenyl azo-substituted carbopolycycloazo benzene-sulfonic acid, sodium salt | Accession No. 26256 CAS No. CBI (NA) |
| 4-(Substituted phenyl)azo biphenyl azo—substituted carbo- polycycle azo benzene-sulfonic acid, sodium salt | Accession No. 26267 CAS No. CBI (NA) |
| Phenylazoamino-hydroxynaphthalenylazobiphenylazo substituted benzene sodium sulfonate | Accession No. 26701 CAS No. CBI (NA) |
| [1,1'-Biphenyl]-4,4'-diamine | 92-87-5 |
| [1,1'-Biphenyl]-4,4'-diamine, dihydrochloride | 531-85-1 |
| C.I. Direct Red 28 | 573-58-0 |
| C.I. Direct Black 38 | 1937-37-7 |
| C.I. Direct Red 44 | 2302-97-8 |
| C.I. Direct Blue 2 | 2429-73-4 |
| C.I. Direct Orange 8 | 2429-79-0 |
| C.I. Direct Brown 31 | 2429-81-4 |
| C.I. Direct Brown 2 | 2429-82-5 |
| Direct Black 4 | 2429-83-6 |
| C.I. Direct Red 1 | 2429-84-7 |
| C.I. Direct Brown 1:2 | 2586-58-5 |
| C.I. Direct Blue 6 | 2602-46-2 |
| C.I. Direct Brown 6 | 2893-80-3 |
| C.I. Direct Red 37 | 3530-19-6 |
| C.I. Acid Red 85 | 3567-65-5 |
| C.I. Direct Green 1 | 3626-28-6 |
| C.I. Direct Brown 1 | 3811-71-0 |
| C.I. Direct Green 6 | 4335-09-5 |
| C.I. Acid Black 94 | 6358-80-1 |
| C.I. Direct Brown 27 | 6360-29-8 |
| C.I. Direct Brown 154 | 6360-54-9 |
| C.I. Direct Brown 74 | 8014-91-3 |
| C.I. Direct Brown 95 | 16071-86-6 |

Table 5. list of banned Organiostannic (organotin) compounds


| Substances | CAS No. |
|---|---|
| Dibutyltin oxide (TBTO) | 818-08-6 |
| Dibutyltin diacetate | 1067-33-0 |
| Dibutyltin dilaurate | 77-58-7 |
| Dibutyltin maleate | 78-04-6 |
| Diocetyl tin oxide | 870-08-6 |
| Diocetyl tin dilaurate | 3648-18-8 |
| Bis(tri-n-butyltin) oxide | 56-35-9 |
| Triphenyltin N,N'-dimethyldithiocarbamate | 1803-12-9 |
| Triphenyltin fluoride | 379-52-2 |
| Triphenyltin acetate | 900-95-8 |
| Triphenyltin chloride | 639-58-7 |
| Triphenyltin hydroxide | 76-87-9 |
| Triphenyltin fattyacid ((9-11) salt) | 18380-71-7, 18380-72-8,47672-31-1; 94850-90-5 |
| Triphenyltin chloroacetate | 7094-94-2 |
| Tributyltin methacrylate | 2155-70-6 |
| Bis(tributyltin) fumarate | 6454-35-9 |
| Tributyltin fluoride | 1983-10-4 |
| Bis(tributyltin) 2,3-dibromosuccinate | 31732-71-5 |
| Tributyltin acetate | 56-36-0 |
| Tributyltin laurate | 3090-36-6 |
| Bis(tributyltin) phthalate | 4782-29-0 |
| Tributyltin sulfamate | 6517-25-5 |
| Bis(tributyltin) maleate | 14275-57-1 |
| Tributyltin chloride | 1461-22-9 |

Table 6. List of banned POPs substances

| Substance name | CAS |
|---|--|
| Perfluorooctanoic acid (PFOA), its salts and PFOA-related compounds | 335-67-1 (and others) |
| Tetrabromodiphenyl ether | 40088-47-9 (and others) |
| Pentabromodiphenyl ether | 32534-81-9 (and others) |
| Hexabromodiphenyl ether | 36483-60-0 (and others) |
| Heptabromodiphenyl ether | 68928-80-3 (and others) |
| Bis(pentabromophenyl)ether (decabromodiphenyl ether; decaBDE) | 1163-19-5 |
| Perfluorooctane sulfonic acid and its derivatives (PFOS) | 307-35-7; 1691-99-2; 1763-23-1; 2795-39-3; 4151-50-2 24448-09-7; 29081-56-9; 29457-72-5; 31506-32-8 56773-42-3; 70225-14-8; 251099-16-8 (and others) |
| DDT | 50-29-3 |
| Chlordane | 57-74-9 |
| Hexachlorocyclohexanes, including lindane | 58-89-9; 319-84-6; 319-85-7; 608-73-1 |
| Dieldrin | 60-57-1 |
| Endrin | 72-20-8 |
| Heptachlor | 76-44-8 |
| Endosulfan | 115-29-7;959-98-8;33213-65-9 |
| Hexachlorobenzene | 118-74-1 |
| Chlordecone | 143-50-0 |
| Aldrin | 309-00-2 |
| Pentachlorobenzene | 608-93-5 |
| Polychlorinated Biphenyls (PCB) | 1336-36-3 (and others) |
| Mirex | 2385-85-5 |
| Toxaphene | 8001-35-2 |
| Hexabromobiphenyl | 36355-01-8 |
| Hexabromocyclododecane (HBCDD) | 25637-99-4; 3194-55-6; 134237-50-6; 134237-51-7 134237-52-8 |
| Hexachlorobutadiene | 87-68-3 |
| Pentachlorophenol and its salts and esters | 87-86-5 (and others) |
| Polychlorinated naphthalenes | 70776-03-3 (and others) |
| Alkanes C10-C13, chloro (short-chain chlorinated paraffins) (SCCPs) | 85535-84-8 |
| Polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDD/PCDF) | - |

Table 7. List of banned PAHs

| Substances | | CAS No. | | |
|----------------------------|-------|----------|--------------|----|
| Naphthalene | Nap | 91-20-3 | HJ 2536-2014 | GS |
| Acenaphthylene | AcPy | 208-96-8 | HJ 2536-2014 | |
| Acenaphthene | Acp | 83-32-9 | HJ 2536-2014 | |
| Fluorene | Flu | 86-73-7 | HJ 2536-2014 | |
| Phenanthrene | PA | 85-01-8 | HJ 2536-2014 | GS |
| Anthracene | Ant | 120-12-7 | HJ 2536-2014 | GS |
| Fluoranthene | FL | 206-44-0 | HJ 2536-2014 | GS |
| Pyrene | Pyr | 129-00-0 | HJ 2536-2014 | GS |
| Chrysene | CHR | 218-01-9 | HJ 2536-2014 | GS |
| Benzo[a]anthracen | BaA | 56-55-3 | HJ 2536-2014 | GS |
| Benzo[b]fluoranthene | BbF | 205-99-2 | HJ 2536-2014 | GS |
| Benzo[k]fluoranthene | BkF | 207-08-9 | HJ 2536-2014 | GS |
| Benzo[a]pyrene | BaP | 50-32-8 | HJ 2536-2014 | GS |
| Dibenzo[a · h]anthrancene | DBA | 53-70-3 | HJ 2536-2014 | GS |
| Indeno[1 · 2 · 3-cd]pyrene | IND | 193-39-5 | HJ 2536-2014 | GS |
| Benzo[g · h · i]perylene | BghiP | 191-24-2 | HJ 2536-2014 | GS |
| Benzo(e)pyrene | BeP | 192-97-2 | | GS |
| Benzo(j)fluoranthene | BjF | 205-82-3 | | GS |

| | | | | | |
|---|--|-----------------|-----------------|----------------------------|---------|
|  Delta Electronics, Inc. | Document name: Management Standard for Environment-related Substances | | | Document no. 10000-0162 | |
| | Dept.: DEIC CE | Author: DEIC CE | Date:2022.05.19 | Page: 18 of 19 | Rev.:29 |

8 References

1. Directive 2011/65/EU, restriction of the use of certain hazardous substances (RoHS), amended by Directive 2014/1/EU, Directive (EU) 2015/863, Directive (EU) 2018/736, Directive (EU) 2018/737, Directive (EU) 2018/738, Directive (EU) 2018/739, Directive (EU) 2018/740, Directive (EU) 2018/741, Directive (EU) 2018/742, , Directive (EU)2022/279, Directive (EU)2022/280, Directive (EU)2022/281, Directive (EU)2022/283, Directive (EU)2022/287, Directive (EU)2022/275, Directive (EU)2022/282, Directive (EU)2022/274 and Directive (EU)2022/278.
2. IEC 62321
3. Directive 2006/66/EC, batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC, amended by Directive 2008/12/EC, Directive 2008/103/EC, Directive 2013/56/EU.
4. Directive 94/62/EC on packaging and packaging waste, amending by Directive 2004/12/EC, Directive 2005/20/EC, Regulation (EC) No 219/2009, Directive 2013/2/EU.
5. Regulation (EC) No 1907/2006, Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)
6. Stockholm Convention on Persistent Organic Pollutants.
7. Montreal Protocol on Substances that Deplete the Ozone Layer.
8. REGULATION (EC) No 2037/2000 on substances that deplete the ozone layer.
9. Regulation (EU) No 528/2012, making available on the market and use of biocidal products.
10. Proposition 65, the Safe Drinking Water and Toxic Enforcement Act of 1986.
11. EU Decision 2009/251/EC, requiring Member States to ensure that products containing the biocide dimethylfumarate are not placed or made available on the market.
12. REGULATION (EC) No 842/2006 on certain fluorinated greenhouse gases.
13. EN 1811:2011+A1:2015
14. AfPS GS 2019:01 PAK (PAH)
15. Toy Safety Directive 2009/48/EC
16. Persistent organic pollutants (POPs) RECAST REGULATION (EU) 2019/1021.
17. GB/T 26125 Electrical and electronic products Restriction of Hazardous Substances Management Measures
18. SJ/T 11364-2014 Marking for the restriction of hazardous substances in electrical and electronic products.
19. Toxic Substances Control Act (TSCA)

Revision history

| REV. | Description | Date |
|------|--|------------|
| 25 | <ol style="list-style-type: none"> 1. Add requirement for enclosed plastic for adapters. 2. Updated RoHS exemptions expiry dates base on Directive (EU) 2018/736, Directive (EU) 2018/737, Directive (EU) 2018/738, Directive (EU) 2018/739, Directive (EU) 2018/740, Directive (EU) 2018/741, and Directive (EU) 2018/742. 3. Renew requirement for formaldehyde in plywood. 4. Move restriction on surfactants, trichloroethylene, and tetrachloroethylene to 10000-2009. 5. Add restriction on Di(2-propylheptyl) phthalate (DPHP). 6. Editorial changes. | 10/05/2018 |
| 25.1 | <ol style="list-style-type: none"> 1. Typo correction. 2. Modify PVC exemptions. 3. Reorganized POPs substance table. 4. Remove arsenic exemption for copper foils. 5. Modify scope for plastic case halogen free plan to exclude wall mount adaptors due to safety regulation. | 11/12/2018 |
| 26 | <ol style="list-style-type: none"> 1. Update RoHS exemptions expiry dates to the latest status. 2. Renew control threshold of PFOA to 25 ppb, move PFOS substances to POPs list. 3. Renew restrictions on batteries. 4. Renew POPs substances list. 5. Modify formaldehyde threshold limit to 0.5 ppm for pallets and wooden boxes. 6. Add banned substances 2,4,6-Tri-tert-butylphenol and specific benzotriazole UV absorbers. 7. Update banned PAHs from 18 substances to 15. | 08/20/2020 |
| 27 | Added attachment. | 09/01/2020 |
| 28 | <ol style="list-style-type: none"> 1. Typo correction. 2. Modify formaldehyde threshold for plywood board and wood shaving block. 3. Update table 6 for latest EU POPs regulation. (Combined PFOA and POPs table) | 09/28/2020 |
| 29 | <ol style="list-style-type: none"> 1. RoHS exemption update. 2. Remove restriction on antimony, only apply to 10000-2003. 3. Update TSCA substances 4. Renew EU POPs list. 5. Adapt to new frame. | 05/18/2022 |

Annex 1: Materials Compliance Declaration (Template) Total 3pages

Materials Compliance Declaration 零件環保符合性聲明書

● **Compliance Declaration 環境符合性宣告**

Instruction: Please fill in the information and check the following boxes of the declared parts(s).

填寫說明: 請勾選此次宣告料號/型號可符合的台達環境要求項目(可複選).

| | | |
|--------------------|---------------|----------------------|
| Responding Company | | |
| Delta Vendor Code | | |
| Delta Part Number | Supplier Name | Supplier Part Number |
| | | |
| | | |
| | | |

1. Meet Delta's Management Standards for Environment-related Substances (Delta Doc. No. 10000-0162).

符合台達環境關聯物質管理規範 (台達文件編號: 10000-0162)。

1.1 If item(s) uses one or more of the RoHS exemptions, please mark below.

零件適用RoHS 排外項目的，請勾選對應資訊。

| | | |
|--------------------------|---------|---|
| <input type="checkbox"/> | 6 (c) | Copper alloy containing up to 4 % lead by weight. 銅合金中的鉛含量不超過 4%。 |
| <input type="checkbox"/> | 7 (a) | Lead in high melting temperature type solders. 高熔點錒錫中的鉛。 |
| <input type="checkbox"/> | 7(c)-I | Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors. 電子電氣元件中玻璃或陶瓷材料 (電容中陶瓷介質除外) 所含的鉛。 |
| <input type="checkbox"/> | 7(c)-II | Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher 適用於 125V 交流電或 250V 直流電壓以上的電容陶瓷產品中的鉛。 |
| <input type="checkbox"/> | Others | Other exemptions 適用其它排外條款。 其它 : _____ |

1.2 SVHC information SVHC 宣告資訊

Not contain. 不含有。

Contain SVHC, substances information listed below: 含有 SVHC，宣告資訊如下。

| Substance name | Substance CAS No. | Substance concentration (ppm) |
|----------------|-------------------|-------------------------------|
| | | |
| | | |
| | | |

2. Meet Delta's Halogen Free Guideline (Delta Doc. No. 10000-2003). **(Halogen-Free parts only)**

符合台達無鹵規範(台達文件編號: 10000-2003). (僅適用於無鹵材料，有鹵材料不需勾選)

3. None of statements listed above can describe the environmental compliance of your declared subject.

Please describe your non-compliance restrictions here:

以上皆不符合，請敘述原因：

- **DECLARATION SIGNATURE 簽核欄位**

This Declaration is designed for Delta to gather information so that Delta can ensure that its products comply with status. Delta must be informed in writing of any change to the information provided in the declaration that might affect the compliance status of the above mentioned manufacturer part number(s).

By your signature below, suppliers verify that you have completed the Declaration above accurately.

此聲明書是台達用以收集廠商材料的符合性資訊，任何簽署料號的符合性的變動都必須要以書面通知台達。

依以下的簽名，供應商確認以上聲明事項正確無誤。

Signature (Authorized representative of the company) 代表簽名

| | |
|-------------------------|--|
| Company Name 公司名稱: | |
| Printed Name 簽署人姓名(印刷): | |
| Title 簽署人職稱: | |
| Email: | |
| Phone 連絡電話: | |
| Address 連絡地址: | |