

## Material Composition for SX-4487A

| Sub-component                  | Material               | % of Total Mass   | Substance Name                      | CAS #       | Substance Mass (grams) | Special Classification |
|--------------------------------|------------------------|-------------------|-------------------------------------|-------------|------------------------|------------------------|
| Housing                        | Glass Reinforced PPA   | 25.172%           | PPA                                 | 25776-72-1  | 1.52E+01               |                        |
|                                |                        |                   | Glass Fibber                        | 65997-17-3  | 7.49E+00               |                        |
| Rear Lid                       | PBT                    | 9.426%            | PBT                                 | 26062-94-2  | 8.33E+00               |                        |
|                                |                        |                   | Misc. Not to declare                | N/A         | 1.70E-01               |                        |
| Torque Array                   | PCB material           | 0.657%            | Glass Fiber                         | 65997-17-3  | 3.95E-01               |                        |
|                                |                        |                   | Copper                              | 7440-50-8   | 2.00E-02               |                        |
|                                |                        |                   | Nickel                              | 7440-02-0   | 5.55E-03               |                        |
|                                |                        |                   | Gold                                | 7440-57-5   | 2.31E-03               |                        |
|                                |                        |                   | Epoxy resing                        | N/A         | 1.69E-01               |                        |
|                                |                        |                   | Secret Formula                      | N/A         | 2.00E-01               |                        |
|                                | CP Paste               | 0.222%            |                                     |             |                        |                        |
| Position Element               | PCB material           | 6.777%            | Glass Fiber                         | 65997-17-3  | 4.16E+00               |                        |
|                                |                        |                   | Copper                              | 7440-50-8   | 1.15E-01               |                        |
|                                |                        |                   | Nickel                              | 7440-02-0   | 3.21E-02               |                        |
|                                |                        |                   | Gold                                | 7440-57-5   | 1.39E-02               |                        |
|                                |                        |                   | Epoxy resing                        | N/A         | 1.78E+00               |                        |
|                                |                        |                   | Secret Formula                      | N/A         | 2.00E-01               |                        |
|                                | CP Paste               | 0.222%            |                                     |             |                        |                        |
| Slip Ring Paste                | 0.222%                 |                   |                                     |             |                        |                        |
| Plasctic rotor                 | Glass Reinforced Nylon | 14.638%           | Glass Fiber                         | 65997-17-3  | 1.32E+00               |                        |
|                                |                        |                   | Nylon 6                             | 25038-54-4  | 6.60E+00               |                        |
|                                |                        |                   | Acrylonitrile, polymer with styrene | 9003-54-7   | 2.77E+00               |                        |
|                                |                        |                   | Poly-paraphenylene terephthalamide  | 26125-61-1  | 6.60E-01               |                        |
|                                |                        |                   | Polytetrafluoroethylene             | 9002-84-0   | 1.32E+00               |                        |
|                                |                        |                   | Misc. Not to declare                | N/A         | 5.28E-01               |                        |
|                                |                        |                   |                                     |             |                        |                        |
| LH3 Rotor Plastic              | Glass Reinforced Nylon | 14.128%           | Glass Fiber                         | 65997-17-3  | 1.27E+00               |                        |
|                                |                        |                   | Nylon 6                             | 25038-54-4  | 6.37E+00               |                        |
|                                |                        |                   | Acrylonitrile, polymer with styrene | 9003-54-7   | 2.68E+00               |                        |
|                                |                        |                   | Poly-paraphenylene terephthalamide  | 26125-61-1  | 6.37E-01               |                        |
|                                |                        |                   | Polytetrafluoroethylene             | 9002-84-0   | 1.27E+00               |                        |
|                                |                        |                   | Misc. Not to declare                | N/A         | 5.10E-01               |                        |
|                                |                        |                   |                                     |             |                        |                        |
| Star Rotor                     | Glass Reinforced Nylon | 0.311%            | Glass Fiber                         | 65997-17-3  | 1.47E-02               |                        |
|                                |                        |                   | Nylon 6                             | 25038-54-4  | 1.47E-01               |                        |
|                                |                        |                   | Acrylonitrile, polymer with styrene | 9003-54-7   | 6.19E-02               |                        |
|                                |                        |                   | Poly-paraphenylene terephthalamide  | 26125-61-1  | 1.47E-02               |                        |
|                                |                        |                   | Polytetrafluoroethylene             | 9002-84-0   | 2.95E-02               |                        |
|                                |                        |                   | Misc. Not to declare                | N/A         | 1.18E-02               |                        |
|                                |                        |                   |                                     |             |                        |                        |
| Contact spring                 | Palladium Alloy        | 0.001%            | Palladium                           | 7440-05-3   | 1.90E-04               |                        |
|                                |                        |                   | Nickel                              | 7440-02-0   | 3.81E-04               |                        |
|                                |                        |                   | Tin                                 | 7440-31-5   | 2.03E-04               |                        |
|                                |                        |                   | Silver                              | 7440-22-4   | 1.64E-04               |                        |
|                                |                        |                   | Copper                              | 7440-50-8   | 2.57E-04               |                        |
|                                |                        |                   |                                     |             |                        |                        |
| Star Drive                     | Glass Reinforced Nylon | 1.220%            | Glass fiber                         | 65997-17-3  | 3.74E-01               |                        |
|                                |                        |                   | PPA                                 | N/A         | 7.15E-01               |                        |
|                                |                        |                   | Misc. not to declare                | N/A         | 1.10E-02               |                        |
| Coupling                       | Stainless Steel        | 4.564%            | Iron                                | 7439-89-6   | 2.88E+00               |                        |
|                                |                        |                   | Chromium                            | 7440-47-3   | 7.41E-01               |                        |
|                                |                        |                   | Nickel                              | 7440-02-0   | 4.12E-01               |                        |
|                                |                        |                   | Misc. Not to declare                | N/A         | 8.23E-02               |                        |
| Hog ring                       | Stainless Steel        | 1.324%            | Iron                                | 7439-89-6   | 8.36E-01               |                        |
|                                |                        |                   | Chromium                            | 7440-47-3   | 2.15E-01               |                        |
|                                |                        |                   | Nickel                              | 7440-02-0   | 1.19E-01               |                        |
|                                |                        |                   | Misc. Not to declare                | N/A         | 2.39E-02               |                        |
| Grip Ring                      | Stainless Steel        | 1.324%            | Iron                                | 7439-89-6   | 8.36E-01               |                        |
|                                |                        |                   | Chromium                            | 7440-47-3   | 2.15E-01               |                        |
|                                |                        |                   | Nickel                              | 7440-02-0   | 1.43E-01               |                        |
| Contact                        | Palladium Alloy        | 0.144%            | Palladium                           | 7440-05-3   | 8.27E-03               |                        |
|                                |                        |                   | Nickel                              | 7440-02-0   | 1.66E-02               |                        |
|                                |                        |                   | Tin                                 | 7440-31-5   | 8.86E-03               |                        |
|                                |                        |                   | Silver                              | 7440-22-4   | 7.14E-03               |                        |
|                                |                        |                   | Copper                              | 7440-50-8   | 8.87E-02               |                        |
|                                |                        |                   |                                     |             |                        |                        |
| Wire harness                   | Wire                   | 7.827%            | Copper                              | 7440-40-8   | 3.20E+00               |                        |
|                                |                        |                   | Tin                                 | 7440-31-5   | 3.25E-01               |                        |
|                                |                        |                   | Polyvinylchloride                   | 9002-86-2   | 3.53E+00               |                        |
|                                | Terminal pin           | 1.956%            | Copper                              | 7440-40-8   | 1.73E+00               |                        |
|                                |                        |                   | Nickel                              | 7440-02-0   | 1.76E-02               |                        |
|                                |                        |                   | Tin                                 | 7723-31-5   | 8.82E-04               |                        |
|                                |                        |                   | Phosphorus                          | 7723-14-0   | 1.59E-02               |                        |
|                                |                        |                   | Copper                              | 7440-50-8   | 7.44E-01               |                        |
|                                | Machined terminal      | 1.535%            | Iron                                | 7439-89-6   | 8.09E-04               |                        |
|                                |                        |                   | Lead                                | 7439-92-1   | 1.62E-01               | RoHS exemption 6 ( c ) |
|                                |                        |                   | Tin                                 | 7440-31-5   | 4.77E-01               |                        |
|                                |                        |                   | Polypropylene                       | 106565-43-9 | 2.78E+00               |                        |
|                                | Tubinf iraxx           | Polyolefin resing | 1.031%                              | Hydrogen    | 1333-74-0              | 9.01E-01               |
| Carbon                         |                        |                   |                                     | 7440-44-0   | 2.79E-02               |                        |
| Teflon Wahser                  | Teflon                 | 0.960%            | PTFE                                | 9002-84-0   | 8.65E-01               |                        |
| Thermal potting componen Nylon | 3.216%                 |                   | Polyamide                           | 32131-17-2  | 2.61E+00               |                        |
|                                |                        |                   | Misc. Not to declare                | N/A         | 2.90E-01               |                        |
| Label                          | Polyester label        | 0.044%            | Polyethylene tereohthalate          | 25038-59-9  | 4.00E-02               |                        |
| <b>Total Mass</b>              |                        |                   |                                     |             | <b>90.18</b>           | <b>grams</b>           |