

## Material Composition for EN11-VSB1AQ20

| Sub-component            | Material        | % of Total Mass | Substance Name                  | CAS #                   | Substance Mass (grams) | Special Classification                        |
|--------------------------|-----------------|-----------------|---------------------------------|-------------------------|------------------------|-----------------------------------------------|
| Shaft                    | Al alloy        | 27.288%         | Si                              | 7440-21-3               | 0.0041                 | RoHS Exemption 6(h)                           |
|                          |                 |                 | Fe                              | 7439-89-6               | 0.0072                 |                                               |
|                          |                 |                 | Cu                              | 7440-50-8               | 0.0513                 |                                               |
|                          |                 |                 | Mn                              | 7439-96-5               | 5.13E-04               |                                               |
|                          |                 |                 | Mg                              | 7439-95-4               | 0.0051                 |                                               |
|                          |                 |                 | Pb                              | 7439-92-1               | 0.0021                 |                                               |
|                          |                 |                 | Al                              |                         |                        |                                               |
|                          |                 |                 | Bi                              | 7440-69-9               | 0.0021                 |                                               |
|                          |                 |                 | Zn                              | 7440-66-6               | 0.0031                 |                                               |
|                          |                 |                 | Al                              | 7429-90-5               | 0.9497                 |                                               |
| Switch base              | PBT blend       | 0.828%          | PBT polymer                     | 30965-26-5              | 0.0109                 | Halogenated epoxy, contains RPA Antimony fire |
|                          |                 |                 | Brominated epoxy resin          | 68928-70-1              | 0.0078                 |                                               |
|                          |                 |                 | Antimony oxide                  | 1309-64-4               | 0.0031                 |                                               |
|                          |                 |                 | Glass fiber                     | 65997-17-3              | 0.0093                 |                                               |
| Ring                     | Steel           | 3.281%          | C                               | 7440-44-0               | 0.0010                 |                                               |
|                          |                 |                 | Si                              | 7440-21-3               | 2.48E-04               |                                               |
|                          |                 |                 | Mn                              | 7439-96-5               | 5.33E-04               |                                               |
|                          |                 |                 | P                               | 7723-14-0               | 1.20E-05               |                                               |
|                          |                 |                 | S                               | 7704-34-9               | 1.20E-05               |                                               |
|                          |                 |                 | Cu                              | 7440-50-8               | 2.50E-05               |                                               |
|                          |                 |                 | Fe                              | 7439-89-6               | 0.1222                 |                                               |
|                          |                 |                 | C                               | 231-153-3               | 0.0017                 |                                               |
|                          |                 |                 | Mn                              | 231-105-1               | 0.0017                 |                                               |
|                          |                 |                 | P                               | 231-768-7               | 3.34E-04               |                                               |
| Frame                    | SPTE            | 22.210%         | S                               | 231-722-6               | 3.34E-04               |                                               |
|                          |                 |                 | Si                              | 231-130-8               | 0.0025                 |                                               |
|                          |                 |                 | Al                              | 231-072-3               | 3.67E-04               |                                               |
|                          |                 |                 | Fe                              |                         |                        |                                               |
|                          |                 |                 | Fe                              | 231-096-4               | 0.8281                 |                                               |
|                          |                 |                 | Calcium sulfonate               | 61789-86-4              | 0.00048                |                                               |
|                          |                 |                 | Octadecyl 3,5-Di(tert)-butyl-4- | 2082-79-3               | 0.00002                |                                               |
|                          |                 |                 | Al                              | 7429-90-5               | 0.0532                 |                                               |
|                          |                 |                 | Cu                              | 7440-50-8               | 0.0066                 |                                               |
|                          |                 |                 | Mg                              | 7439-95-4               | 6.65E-04               |                                               |
| Fe                       | 7439-89-6       | 1.33E-04        |                                 |                         |                        |                                               |
| Pb                       | 7439-92-1       | 1.30E-05        | RoHS Exemption 6(b)             |                         |                        |                                               |
| Cd                       | 7440-43-9       | 1.00E-06        |                                 |                         |                        |                                               |
| Sn                       | 7440-31-5       | 1.00E-06        |                                 |                         |                        |                                               |
| Zn                       | 7440-66-6       | 1.2684          |                                 |                         |                        |                                               |
| Conductor base           | POM             | 0.000%          | Acetal polymer Stabilizer       | 9002-81-7<br>70624-18-9 | 0.0382<br>7.79E-04     |                                               |
| Click                    | Steel           | 1.100%          | C                               | 7440-44-0               | 1.70E-05               |                                               |
|                          |                 |                 | Si                              | 7440-21-3               | 1.43E-04               |                                               |
|                          |                 |                 | Mn                              | 7439-96-5               | 5.17E-04               |                                               |
|                          |                 |                 | P                               | 7723-14-0               | 1.30E-05               |                                               |
|                          |                 |                 | S                               | 7704-34-9               | 4.00E-06               |                                               |
|                          |                 |                 | Cr                              | 7440-47-3               | 0.0076                 |                                               |
|                          |                 |                 | Ni                              | 7440-02-0               | 0.0034                 |                                               |
|                          |                 |                 | Fe                              | 7439-89-6               | 0.0303                 |                                               |
|                          |                 |                 | Acetal polymer Stabilizer       | unknown                 | 0.0137                 |                                               |
|                          |                 |                 |                                 | unknown                 | 0.0003                 |                                               |
| Spacer                   | Steel           | 1.363%          | C                               | 7440-44-0               | 7.00E-06               |                                               |
|                          |                 |                 | Si                              | 7440-21-3               | 5.00E-06               |                                               |
|                          |                 |                 | Mn                              | 7439-96-5               | 1.14E-04               |                                               |
|                          |                 |                 | P                               | 7723-14-0               | 3.00E-06               |                                               |
|                          |                 |                 | S                               | 7704-34-9               | trace                  |                                               |
|                          |                 |                 | Cr                              | 7440-47-3               | 0.0018                 |                                               |
|                          |                 |                 | Ni                              | 7440-02-0               | 8.31E-04               |                                               |
|                          |                 |                 | Fe                              | 7439-89-6               | 0.0072                 |                                               |
|                          |                 |                 | Acetal polymer Stabilizer       | unknown                 | 0.0402                 |                                               |
|                          |                 |                 |                                 | unknown                 | 0.0008                 |                                               |
| Conductor                | Phosphor bronze | 1.249%          | Cu                              | 7440-50-8               | 0.0431                 |                                               |
|                          |                 |                 | Sn                              | 7440-31-5               | 0.0038                 | RoHS exemption 6(c)                           |
|                          |                 |                 | Zn                              | 7440-66-6               | 9.40E-05               |                                               |
|                          |                 |                 | Pb                              | 7439-92-1               | 5.00E-06               |                                               |
|                          |                 |                 | Fe                              | 7439-89-6               | 1.90E-05               |                                               |
|                          |                 |                 | P                               | 7723-14-0               | 2.40E-05               |                                               |
|                          |                 |                 | Ag                              | 506-64-9                | 0.0110                 |                                               |
|                          |                 |                 | Cu                              | 7440-50-8               | 0.0459                 |                                               |
|                          |                 |                 | Sn                              | 7440-31-5               | 0.0040                 |                                               |
|                          |                 |                 | Zn                              | 7440-66-6               | 1.00E-04               |                                               |
|                          |                 |                 | Pb                              | 7439-92-1               | 5.00E-06               |                                               |
| Switch conductor         | Phosphor bronze | 1.329%          | Fe                              | 7439-89-6               | 2.00E-05               |                                               |
|                          |                 |                 | P                               | 7723-14-0               | 2.50E-05               |                                               |
|                          |                 |                 | Ag                              | 506-64-9                | 0.0140                 |                                               |
|                          |                 |                 | Ag plating                      |                         |                        |                                               |
|                          |                 |                 | 0.293%                          |                         |                        |                                               |
|                          |                 |                 | 0.293%                          |                         |                        |                                               |
|                          |                 |                 | PAO lubricant                   | 9003-27-4               | 3.60E-04               |                                               |
|                          |                 |                 | PAO                             | 68037-01-4              | 0.0016                 |                                               |
|                          |                 |                 | Fumed silica                    | 68611-44-9              | 4.00E-05               |                                               |
|                          |                 |                 | Slider                          | Phosphor bronze         | 1.140%                 |                                               |
| PAO                      | 68037-01-4      | 7.00E-04        |                                 |                         |                        |                                               |
| Fumed silica             | 68611-44-9      | 1.00E-04        |                                 |                         |                        |                                               |
| PAO                      | 68037-01-4      | 0.0012          |                                 |                         |                        |                                               |
| PAO                      | 68037-01-4      | 7.00E-04        |                                 |                         |                        |                                               |
| Fumed silica             | 68611-44-9      | 1.00E-04        |                                 |                         |                        |                                               |
| PAO                      | 68037-01-4      | 0.0012          |                                 |                         |                        |                                               |
| PAO                      | 68037-01-4      | 7.00E-04        |                                 |                         |                        |                                               |
| Fumed silica             | 68611-44-9      | 1.00E-04        |                                 |                         |                        |                                               |
| PAO                      | 68037-01-4      | 0.0012          |                                 |                         |                        |                                               |
| Electric conduction rail | PAO lubricant   | 0.043%          | PAO                             | 68037-01-4              | 0.0016                 |                                               |
|                          |                 |                 | PAO                             | 68037-01-4              | 7.00E-04               |                                               |
|                          |                 |                 | Fumed silica                    | 68611-44-9              | 1.00E-04               |                                               |
|                          |                 |                 | PAO                             | 68037-01-4              | 0.0012                 |                                               |
|                          |                 |                 | PAO                             | 68037-01-4              | 7.00E-04               |                                               |
|                          |                 |                 | Fumed silica                    | 68611-44-9              | 1.00E-04               |                                               |
|                          |                 |                 | PAO                             | 68037-01-4              | 0.0012                 |                                               |
|                          |                 |                 | PAO                             | 68037-01-4              | 7.00E-04               |                                               |
|                          |                 |                 | Fumed silica                    | 68611-44-9              | 1.00E-04               |                                               |
|                          |                 |                 | PAO                             | 68037-01-4              | 0.0012                 |                                               |
| Axes oil                 | PAO lubricant   | 0.032%          | PAO                             | 68037-01-4              | 0.0016                 |                                               |
|                          |                 |                 | PAO                             | 68037-01-4              | 7.00E-04               |                                               |
|                          |                 |                 | Fumed silica                    | 68611-44-9              | 1.00E-04               |                                               |
|                          |                 |                 | PAO                             | 68037-01-4              | 0.0012                 |                                               |
|                          |                 |                 | PAO                             | 68037-01-4              | 7.00E-04               |                                               |
|                          |                 |                 | Fumed silica                    | 68611-44-9              | 1.00E-04               |                                               |
|                          |                 |                 | PAO                             | 68037-01-4              | 0.0012                 |                                               |
|                          |                 |                 | PAO                             | 68037-01-4              | 7.00E-04               |                                               |
|                          |                 |                 | Fumed silica                    | 68611-44-9              | 1.00E-04               |                                               |
|                          |                 |                 | PAO                             | 68037-01-4              | 0.0012                 |                                               |
| Total Mass               |                 |                 |                                 |                         | 3.7699                 | grams                                         |