


MATERIAL DECLARATION SHEET



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|-----------------|---------------|-----|-----|---|
| Material Number | 3501H-1-103L | | |  |
| Product Line | Precision Pot | | | |
| Compliance Date | | | | |
| RoHS Compliant | Yes | MSL | N/A | |

| No. | Construction Element (subpart) | Homogeneous Material | Material weight [g] | Homogeneous Material\ Substances | CASRN if applicable | Materials Mass % | Material Mass % of total unit wt. | Subpart mass of total wt. (%) |
|-----|--------------------------------|----------------------|---------------------|----------------------------------|------------------------|------------------|-----------------------------------|-------------------------------|
| 1 | Mandrel Wire | Copper | 1.00700 | Copper | 7440-22-4 | 100.00 | 1.007 | 4.2640 |
| | | Coating | 0.00010 | Polyamide | 6342-83-1 | 100.00 | 0.000 | 0.0004 |
| 2 | Resist Wire | Metal | 3.2950 | Nickel | 7440-02-0 | 74.00 | 2.438 | 13.9522 |
| | | | | Chromium | 7440-47-3 | 21.00 | 0.692 | |
| | | | | Manganese | 7439-96-5 | 1.00 | 0.033 | |
| | | | | Silicon | 7440-21-3 | 1.00 | 0.033 | |
| | | | | Aluminum | 7440-44-0 | 1.00 | 0.033 | |
| | | | | Copper | 7723-14-0 | 1.00 | 0.033 | |
| | | | | Cobalt | 7704-34-9 | 1.00 | 0.033 | |
| 3 | Epoxy | Epoxy BP-FRC | 0.00100 | Epoxy resin | 25085-99-8 | 49.00 | 0.00049 | 0.0042 |
| | | | | Antimony trioxide | 1309-64-4 | 11.00 | 0.00011 | |
| | | | | silicon dioxide | 7440-21-3 | 11.00 | 0.00011 | |
| | | | | aluminum oxide | 1344-28-1 | 11.00 | 0.00011 | |
| | | | | kaolin clay | 1332-58-7 | 9.00 | 0.00009 | |
| | | | | Mg alumino silicate | 1302-88-1 | 9.00 | 0.00009 | |
| 4 | Varnish | Insulating Varnish | 0.0970 | Phenolic Resin | 9039-25-2 | 100.00 | 0.097 | 0.4107 |

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| 5 | Housing | PBT | 4.5470 | PBT | 30965-26-5 | 49.00 | 2.228 | 19.2537 |
| | | | | glass fiber | 65997-17-3 | 35.00 | 1.591 | |
| | | | | brominated flame retardant | | 10.00 | 0.455 | |
| | | | | antimony trioxide | 1309-64-4 | 6.00 | 0.273 | |
| 6 | Tab | Silver solder Alloy | 0.0100 | Silver | 7440-22-4 | 56.00 | 0.006 | 0.0423 |
| | | | | copper | 7440-50-8 | 22.00 | 0.002 | |
| | | | | Zinc | 7440-66-6 | 17.00 | 0.002 | |
| | | | | Tin | 7440-31-5 | 5.00 | 0.001 | |
| | | | | Nickel | 7440-02-0 | 0.15 | 0.000 | |
| 7 | Terminal Cap | Nickel | 0.0046 | Nickel | 7440-02-0 | 100.00 | 0.0046 | 0.0195 |
| | | Plating | 0.0010 | Gold | 7440-57-5 | 100.00 | 0.0010 | 0.0042 |
| 8 | T.R Terminal X 3 | Brass | 0.3100 | Copper | 7440-50-8 | 97.47 | 0.302 | 1.3127 |
| | | | | Zinc | 7440-66-6 | 0.10 | 0.000 | |
| | | | | Phosphorus | 7723-14-0 | 0.03 | 0.000 | |
| | | | | Iron | 7439-98-7 | 2.40 | 0.007 | |
| | | Under Plating | 0.0057 | Nickel | 7440-02-0 | 100.00 | 0.006 | 0.0240 |
| Finish Plating | 0.0200 | Gold | 7440-57-5 | 100.00 | 0.020 | 0.0847 | | |
| 9 | Epoxy (Terminals) | Epoxy BP-8 | 0.0900 | epoxy resin | 25085-99-8 | 51.00 | 0.05 | 0.3811 |
| | | | | silicon dioxide | 7440-21-3 | 34.00 | 0.03 | |
| | | | | kaolin clay | 1332-58-7 | 15.00 | 0.01 | |
| 10 | Retaining Ring | Stain Steel | 0.07900 | Chromium | 7440-47-3 | 13.00 | 0.01027 | 0.3345 |
| | | | | Carbon | 7440-44-0 | 1.00 | 0.00079 | |
| | | | | Silicon | 7440-21-3 | 1.00 | 0.00079 | |
| | | | | Manganese | 7439-96-3 | 1.00 | 0.00079 | |
| | | | | Iron | 1309-37-1 | 84.00 | 0.06636 | |
| 11 | Lid Molded | PBT | 0.77000 | PBT | 30965-26-5 | 49.00 | 0.3773 | 3.2605 |
| | | | | glass fiber | 65997-17-3 | 35.00 | 0.2695 | |
| | | | | brominated flame retardant | | 10.00 | 0.0770 | |
| | | | | antimony trioxide | 1309-64-4 | 6.00 | 0.0462 | |

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| 12 | Bushing | Aluminum | 1.17600 | aluminum | 7429-90-5 | 50.000 | 0.588 | 4.9796 |
| | | | | copper | 7440-50-8 | 50.000 | 0.588 | |
| 13 | Rotor | PBT | 1.56200 | PBT | 30965-26-5 | 49.00 | 0.7654 | 6.6141 |
| | | | | glass fiber | 65997-17-3 | 35.00 | 0.5467 | |
| | | | | brominated flame retardant | | 10.00 | 0.1562 | |
| | | | | antimony trioxide | 1309-64-4 | 6.00 | 0.0937 | |
| 14 | Shaft | Stainless steel | 8.79800 | carbon | 7440-44-0 | 0.15 | 0.0132 | 37.2540 |
| | | | | manganese | 7439-96-5 | 2.00 | 0.1760 | |
| | | | | phosphorus | 7723-14-0 | 0.20 | 0.0176 | |
| | | | | sulfur | 7704-34-9 | 0.15 | 0.0132 | |
| | | | | silicon | 7440-21-3 | 0.90 | 0.0792 | |
| | | | | chromium | 7440-47-3 | 18.00 | 1.5836 | |
| | | | | nickel | 7440-02-0 | 9.00 | 0.7918 | |
| | | | | iron | 7439-89-6 | 69.00 | 6.0706 | |
| molybdenum | 7439-98-7 | 0.60 | 0.0528 | | | | | |
| 15 | Washer | Stainless steel | 0.0235 | carbon | 7440-44-0 | 0.15 | 0.00 | 0.0995 |
| | | | | manganese | 7439-96-5 | 2.00 | 0.00 | |
| | | | | phosphorus | 7723-14-0 | 0.05 | 0.00 | |
| | | | | sulfur | 7704-34-9 | 0.03 | 0.00 | |
| | | | | silicon | 7440-21-3 | 1.00 | 0.00 | |
| | | | | chromium | 7440-47-3 | 17.00 | 0.00 | |
| | | | | nickel | 7440-02-0 | 7.00 | 0.00 | |
| iron | 7439-89-6 | 72.78 | 0.02 | | | | | |
| 16 | Washer | Teflon | 0.0145 | Polytetrafluoroethylene | 9002-84-0 | 100.00 | 0.01 | 0.0614 |
| 17 | Slider | Polyamide | 0.14100 | Polyamide 66 | 32131-17-2 | 90.00 | 0.13 | 0.5970 |
| | | | | glass fiber | 65997-17-3 | 10.00 | 0.01 | |
| 18 | Contact Spring | Palmet | 0.01000 | Copper | 7440-50-8 | 16.00 | 0.0016 | 0.0423 |
| | | | | Nickel | 7440-02-0 | 1.00 | 0.0001 | |
| | | | | Palladium | 7440-05-3 | 1.00 | 0.0001 | |

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| | | | | Platinum | 7440-06-4 | 44.00 | 0.0044 | |
| | | | | Silver | 7440-22-4 | 38.00 | 0.0038 | |
| 19 | Collector Bar | Beryllium Copper | 0.02240 | Copper | 7440-50-8 | 98.10 | 0.0220 | 0.0948 |
| | | | | Silicon | 7440-21-3 | 0.20 | 0.0000 | |
| | | | | Beryllium | 7440-41-7 | 1.50 | 0.0003 | |
| | | | | Aluminum | 7429-90-5 | 0.20 | 0.0000 | |
| | | | | Under Plating | 0.00320 | Nickel | 7440-02-0 | |
| | | Finish Plating | 0.00320 | Gold | 7440-57-5 | 100.00 | 0.0032 | 0.0135 |
| 20 | Cover | PBT | 1.06600 | PBT | 30965-26-5 | 49.00 | 0.52234 | 4.5138 |
| | | | | glass fiber | 65997-17-3 | 35.00 | 0.37310 | |
| | | | | brominated flame retardant | | 10.00 | 0.10660 | |
| | | | | antimony trioxide | 1309-64-4 | 6.00 | 0.06396 | |
| 21 | Epoxy (Lid and Cover) | Epoxy BP-22 | 0.2320 | Epoxy resin | 25085-99-8 | 61.00 | 0.14 | 0.9824 |
| | | | | silicon dioxide | 7440-21-3 | 23.00 | 0.05 | |
| | | | | kaolin clay | 1332-58-7 | 16.00 | 0.04 | |
| 22 | Wiper Terminal | Brass | 0.32290 | Copper | 7440-50-8 | 94.80 | 0.30611 | 1.3673 |
| | | | | Tin | 7440-31-5 | 5.00 | 0.01615 | |
| | | | | Phosphorus | 7723-14-0 | 0.20 | 0.00065 | |
| | | Under Plating | 0.00075 | Nickel | 7440-02-0 | 100.00 | 0.00075 | 0.0032 |
| | | Finish Plating | 0.00165 | Gold | 7440-57-5 | 100.00 | 0.00165 | 0.0070 |
| 23 | Lube | Lube 799 | 0.00090 | Decanoic acid, mixed esters with heptanoic acid, octanoic acid | 68130-53-0 | 54.40 | 0.00049 | 0.0038 |
| | | | | Lithium 12-hydroxystearate | 7620-77-1 | 5.70 | 0.00005 | |
| | | | | Isohexadecylisooctadecanoate | 52006-45-8 | 33.70 | 0.00030 | |
| | | | | Polyisobutylene | 9003-27-4 | 6.20 | 0.00006 | |

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| 24 | Lube | Versilube G321 | 0.00090 | Siloxanes and Silicones, di-Me, di-Ph | 68038-14-7 | 68.9 | 0.00062 | 0.0038 |
| | | | | Lithium stearate | 4485-12-5 | 25.4 | 0.00023 | |
| | | | | Silane, dichlorodimethyl-reaction products with silica | 68611-44-9 | 4.8 | 0.00004 | |
| | | | | Diphenylamine | 122-39-4 | 0.9 | 0.00001 | |
| | | Total weight | 23.62 | | | | | |

This Document was updated on: September/03/14

Important remarks:

1. It is the responsibility of the user to verify they are accessing the latest version.
2. Please see RoHS Certificate of Compliance for exemptions used.