

# Material Composition for 7600 STD Potentiometer

| Sub-component              | Material                       | % of Total Mass     | Substance Name                           | CAS #                       | Substance Mass (mg)                    | Special Classification |                                        |  |
|----------------------------|--------------------------------|---------------------|------------------------------------------|-----------------------------|----------------------------------------|------------------------|----------------------------------------|--|
| Housing                    | DAP Resin                      | 22.654%             | diallyl ortho phthalate                  | 131-17-9                    | 31.893165                              |                        |                                        |  |
|                            |                                |                     | Glass Fiber                              | 60997-17-3                  | 21.262110                              |                        |                                        |  |
|                            | Marking Ink                    | 0.000%              | Talc                                     | 14807-96-6                  | 17.711000                              |                        |                                        |  |
|                            |                                |                     | Carbon Black                             | 1333-86-4                   | 0.007000                               |                        |                                        |  |
|                            |                                |                     | cobalt naphthalene                       | 61789-51-3                  | 0.000008                               |                        |                                        |  |
|                            |                                |                     | cobalt nedicacronate                     | 27253-31-2                  | 0.000008                               |                        |                                        |  |
|                            | Epoxy                          | 0.001%              | Hexahydro-1, -3 isobenzofur trade secret | 85-42-7                     | 0.000038                               | non-hazardous          |                                        |  |
|                            |                                |                     | n/a                                      | n/a                         | 0.000248                               |                        |                                        |  |
|                            |                                |                     | Epoxy Resin                              | 25085-99-8                  | 0.001413                               |                        |                                        |  |
|                            |                                |                     | Polyoxypropyleneamine                    | 9046-10-0                   | 0.000304                               |                        |                                        |  |
| Nonylphenol                |                                |                     | 84852-15-3                               | 0.000121                    |                                        |                        |                                        |  |
| Ethyleneamine              |                                |                     | 140-31-8                                 | 0.000097                    |                                        |                        |                                        |  |
| Phenol, dinonyl-           |                                |                     | 1323-65-5                                | 0.000001                    |                                        |                        |                                        |  |
| Phenol, 2-nonyl-, branched |                                |                     | 91972-41-2                               | 0.000001                    |                                        |                        |                                        |  |
| Housing                    | Cosmic D-33 BLACK              | 22.654%             | Glycerol                                 | 56-81-5                     | 0.000024                               |                        |                                        |  |
|                            |                                |                     | Siloxanes and Silicones di.Me            | 67762-90-7                  | 0.000040                               |                        |                                        |  |
|                            | Resin to DAP (diallyl ortho ph | 22.654%             | Glass Fiber                              | 60997-17-3                  | 21.262110                              |                        |                                        |  |
|                            |                                |                     | Talc                                     | 14807-96-6                  | 17.718425                              |                        |                                        |  |
|                            | Marking Ink                    | 0.000%              | cobalt naphthalene                       | 61789-51-3                  | 0.000008                               |                        |                                        |  |
|                            |                                |                     | cobalt nedicacronate                     | 27253-31-2                  | 0.000008                               |                        |                                        |  |
|                            |                                |                     | Hexahydro-1, -3 isobenzofur trade secret | 85-42-7                     | 0.000038                               |                        |                                        |  |
|                            |                                |                     | n/a                                      | n/a                         | 0.000248                               | non-hazardous          |                                        |  |
|                            | Epoxy                          | 0.001%              | Epoxy Resin                              | 25085-99-8                  | 0.001413                               |                        |                                        |  |
|                            |                                |                     | Polyoxypropyleneamine                    | 9046-10-0                   | 0.000304                               |                        |                                        |  |
|                            |                                |                     | Nonylphenol                              | 84852-15-3                  | 0.000121                               |                        |                                        |  |
|                            |                                |                     | Ethyleneamine                            | 140-31-8                    | 0.000097                               |                        |                                        |  |
|                            |                                |                     | Phenol, dinonyl-                         | 1323-65-5                   | 0.000001                               |                        |                                        |  |
|                            |                                |                     | Phenol, 2-nonyl-, branched               | 91972-41-2                  | 0.000001                               |                        |                                        |  |
|                            |                                |                     | Glycerol                                 | 56-81-5                     | 0.000024                               |                        |                                        |  |
|                            |                                |                     | Siloxanes and Silicones di.Me            | 67762-90-7                  | 0.000040                               |                        |                                        |  |
| Coil Resistor              | NiCo alloy                     | 22.914%             | Ni                                       | 7440-02-0                   | 3.225495                               |                        |                                        |  |
|                            |                                |                     | Cr (I)                                   | 7440-47-3                   | 0.769621                               |                        |                                        |  |
|                            | Cu core                        | 0.000%              | Fe                                       | 7429-90-5                   | 0.118403                               |                        |                                        |  |
|                            |                                |                     | Si                                       | 7440-21-3                   | 0.029112                               |                        |                                        |  |
|                            |                                |                     | Mn                                       | 7439-96-5                   | 0.088802                               |                        |                                        |  |
|                            |                                |                     | Cu                                       | 7440-50-8                   | 64.026576                              |                        |                                        |  |
|                            | Insulation                     | 0.000%              | 7440-50-8                                | 3.374494                    |                                        | non-hazardous          |                                        |  |
|                            |                                |                     | 25038-81-7                               | 0.001000                    |                                        |                        |                                        |  |
|                            | Lubricant                      | 0.000%              | n/a                                      | n/a                         | 0.001000                               |                        |                                        |  |
|                            |                                |                     | n/a                                      | n/a                         | 0.001000                               |                        |                                        |  |
| Drive Source               | Stainless Steel                | 0.022%              | Fe                                       | 7439-89-6                   | 0.048219                               |                        |                                        |  |
|                            |                                |                     | C                                        | 7440-44-0                   | 0.000077                               |                        |                                        |  |
|                            | Cr (I)                         | 0.000%              | 7440-47-3                                | 0.013217                    |                                        |                        |                                        |  |
|                            |                                |                     | 7439-96-5                                | 0.000077                    |                                        |                        |                                        |  |
|                            |                                |                     | Mo                                       | 7439-98-7                   | 0.000348                               |                        |                                        |  |
|                            |                                |                     | P                                        | 7723-14-0                   | 0.000077                               |                        |                                        |  |
|                            | S                              | 0.000%              | 7704-34-9                                | 0.000278                    |                                        |                        |                                        |  |
|                            |                                |                     | Ni                                       | 7440-02-0                   | 0.000990                               |                        |                                        |  |
|                            | Si                             | 0.000%              | 7440-21-3                                | 0.000348                    |                                        |                        |                                        |  |
|                            |                                |                     | 7440-50-8                                | 0.809588                    |                                        |                        |                                        |  |
| Slip Ring                  | Beryllium Copper Al            | 0.265%              | Be                                       | 7440-41-7                   | 0.014900                               |                        |                                        |  |
|                            |                                |                     | Co                                       | 7440-41-7                   | 0.003311                               |                        |                                        |  |
|                            | Alloy A380                     | 4.561%              | 7429-90-5                                | 12.974747                   |                                        |                        |                                        |  |
|                            |                                |                     | Si                                       | 7440-21-3                   | 1.305869                               |                        |                                        |  |
|                            |                                |                     | Mg                                       | 7439-95-4                   | 0.071351                               |                        |                                        |  |
|                            |                                |                     | Mn                                       | 7439-96-5                   | 0.142702                               |                        |                                        |  |
|                            | Fe                             | 0.285404            | 7439-89-6                                | 0.285404                    |                                        |                        |                                        |  |
|                            |                                |                     | Ni                                       | 7440-02-0                   | 0.071351                               |                        |                                        |  |
|                            | Cu                             | 0.578908            | 7440-50-8                                | 0.578908                    |                                        |                        |                                        |  |
|                            |                                |                     | Zn                                       | 7440-66-6                   | 0.428106                               |                        |                                        |  |
|                            | Cr                             | 0.014270            | 7440-47-3                                | 0.014270                    |                                        |                        |                                        |  |
|                            |                                |                     | Other metal traces                       | n/a                         | 0.045948                               |                        |                                        |  |
| Shaft                      | Stainless Steel 303            | 11.422%             | Fe                                       | 7439-89-6                   | 23.575978                              |                        |                                        |  |
|                            |                                |                     | Cr                                       | 6000-53                     | 6.789327                               |                        |                                        |  |
|                            | Ni                             | 0.000%              | 7440-02-0                                | 3.573330                    |                                        |                        |                                        |  |
|                            |                                |                     | Mn                                       | 7439-96-5                   | 0.714966                               |                        |                                        |  |
|                            |                                |                     | Si                                       | 7440-21-3                   | 0.357333                               |                        |                                        |  |
|                            |                                |                     | Mo                                       | 7439-98-7                   | 0.071407                               |                        |                                        |  |
|                            | P                              | 0.288000            | 7723-14-0                                | 0.288000                    |                                        |                        |                                        |  |
|                            |                                |                     | 7704-34-9                                | 0.053600                    |                                        |                        |                                        |  |
|                            | C                              | 0.053600            | 7440-44-0                                | 0.053600                    |                                        |                        |                                        |  |
|                            |                                |                     | n/a                                      | n/a                         | 0.053600                               |                        |                                        |  |
| Roll pin                   | Steel 420                      | 0.090%              | Fe                                       | 7439-89-6                   | 0.276716                               |                        |                                        |  |
|                            |                                |                     | C                                        | 7440-44-0                   | 0.001681                               |                        |                                        |  |
|                            | Mn                             | 0.001962            | 7439-96-5                                | 0.001962                    |                                        |                        |                                        |  |
|                            |                                |                     | P                                        | 7723-14-0                   | 0.000096                               |                        |                                        |  |
|                            |                                |                     | Cr                                       | 7440-47-3                   | 0.000084                               |                        |                                        |  |
|                            |                                |                     | 7440-21-3                                | 0.000700                    |                                        |                        |                                        |  |
|                            | Si                             | 0.000700            | 7440-02-0                                | 0.000700                    |                                        |                        |                                        |  |
|                            |                                |                     | 7440-21-3                                | 0.000700                    |                                        |                        |                                        |  |
|                            | Insulator                      | DUAL 52-20-30       | 0.896%                                   | Diallyl Iso-Phthalate resin | 29035-78-3                             | 2.862800               |                                        |  |
|                            |                                |                     |                                          | Cu                          | 7440-50-8                              | 0.514901               |                                        |  |
| Beryllium Copper C         |                                | 0.167%              | Be                                       | 7440-41-7                   | 0.003127                               |                        |                                        |  |
|                            |                                |                     | Al                                       | 7429-90-5                   | 0.003549                               |                        |                                        |  |
|                            |                                |                     | Co                                       | 7440-48-4                   | 0.000104                               |                        |                                        |  |
|                            |                                |                     | 7440-21-3                                | 0.000196                    |                                        |                        |                                        |  |
| Pd                         |                                | 0.017850            | 7440-05-3                                | 0.017850                    |                                        |                        |                                        |  |
|                            |                                |                     | Ag                                       | 7440-22-4                   | 0.018300                               |                        |                                        |  |
| Cu                         |                                | 0.007140            | 7440-50-8                                | 0.007140                    |                                        |                        |                                        |  |
|                            |                                |                     | Au                                       | 7440-57-5                   | 0.005100                               |                        |                                        |  |
| Pt                         |                                | 0.005100            | 7440-06-4                                | 0.005100                    |                                        |                        |                                        |  |
|                            |                                |                     | 7440-66-6                                | 0.005100                    |                                        |                        |                                        |  |
| Wheel                      | Brass                          | 0.034%              | Zn                                       | 7440-66-6                   | 0.005100                               |                        |                                        |  |
|                            |                                |                     | 7440-50-8                                | 0.017426                    |                                        |                        |                                        |  |
|                            | Fe                             | 0.000078            | 7440-66-6                                | 0.000078                    |                                        |                        |                                        |  |
|                            |                                |                     | 7439-96-5                                | 0.000043                    |                                        |                        |                                        |  |
|                            |                                |                     | Pb                                       | 7439-92-1                   | 0.000054                               |                        | Ph in copper alloy (E. U. RoHS exempt) |  |
|                            |                                |                     | 7440-50-8                                | 0.143494                    |                                        |                        |                                        |  |
|                            | Ag plating                     | 0.051%              | Ag                                       | 7440-22-4                   | 0.014538                               |                        |                                        |  |
|                            |                                |                     | Insulation                               | 63394-02-5                  | 0.005000                               |                        |                                        |  |
|                            | Aluminum 2024-135              | 0.002%              | Al                                       | 7429-90-5                   | 19.865029                              |                        |                                        |  |
|                            |                                |                     | Mg                                       | 7439-95-4                   | 0.393174                               |                        |                                        |  |
|                            | Fe                             | 0.102015            | 7439-89-6                                | 0.102015                    |                                        |                        |                                        |  |
|                            |                                |                     | Cu                                       | 7440-50-8                   | 0.107030                               |                        |                                        |  |
|                            | Zn                             | 0.054608            | 7440-66-6                                | 0.054608                    |                                        |                        |                                        |  |
|                            |                                |                     | Mn                                       | 7439-96-5                   | 0.218430                               |                        |                                        |  |
|                            | Si                             | 0.109215            | 7440-21-3                                | 0.109215                    |                                        |                        |                                        |  |
|                            |                                |                     | Cr                                       | 7440-47-3                   | 0.001962                               |                        |                                        |  |
| Pin-Strip                  | Stainless Steel                | 0.082%              | Fe                                       | 7439-89-6                   | 0.171776                               |                        |                                        |  |
|                            |                                |                     | C                                        | 7440-44-0                   | 0.000272                               |                        |                                        |  |
|                            | Cr (I)                         | 0.000272            | 7440-47-3                                | 0.000272                    |                                        |                        |                                        |  |
|                            |                                |                     | Mo                                       | 7439-98-7                   | 0.000272                               |                        |                                        |  |
|                            |                                |                     | P                                        | 7723-14-0                   | 0.000272                               |                        |                                        |  |
|                            |                                |                     | 7704-34-9                                | 0.000272                    |                                        |                        |                                        |  |
|                            | S                              | 0.001018            | 7440-02-0                                | 0.001018                    |                                        |                        |                                        |  |
|                            |                                |                     | Ni                                       | 7440-02-0                   | 0.000000                               |                        |                                        |  |
|                            | Si                             | 0.001290            | 7440-21-3                                | 0.001290                    |                                        |                        |                                        |  |
|                            |                                |                     | 7440-02-0                                | 1.430108                    |                                        |                        |                                        |  |
|                            | Brass 70-30                    | 0.653%              | Cu                                       | 7440-50-8                   | 1.430108                               |                        |                                        |  |
|                            |                                |                     | Zn                                       | 7440-66-6                   | 0.672900                               |                        |                                        |  |
| Clamp                      | Stainless Steel                | 1.193%              | Fe                                       | 7439-89-6                   | 2.560034                               |                        |                                        |  |
|                            |                                |                     | C                                        | 7440-44-0                   | 0.004106                               |                        |                                        |  |
|                            | Cr (I)                         | 0.000272            | 7440-47-3                                | 0.000272                    |                                        |                        |                                        |  |
|                            |                                |                     | Mo                                       | 7439-98-7                   | 0.000272                               |                        |                                        |  |
|                            |                                |                     | P                                        | 7723-14-0                   | 0.000272                               |                        |                                        |  |
|                            |                                |                     | S                                        | 7704-34-9                   | 0.000272                               |                        |                                        |  |
|                            | Ni                             | 0.000272            | 7440-02-0                                | 0.000272                    |                                        |                        |                                        |  |
|                            |                                |                     | Si                                       | 7440-21-3                   | 0.000272                               |                        |                                        |  |
|                            | Epoxy                          | 0.001%              | Epoxy Resin                              | 25085-99-8                  | 0.001413                               |                        |                                        |  |
|                            |                                |                     | Polyoxypropyleneamine                    | 9046-10-0                   | 0.000304                               |                        |                                        |  |
|                            | Nonylphenol                    | 0.000121            | 84852-15-3                               | 0.000121                    |                                        |                        |                                        |  |
|                            |                                |                     | Ethyleneamine                            | 140-31-8                    | 0.000097                               |                        |                                        |  |
|                            | Phenol, dinonyl-               | 0.000001            | 1323-65-5                                | 0.000001                    |                                        |                        |                                        |  |
|                            |                                |                     | Phenol, 2-nonyl-, branched               | 91972-41-2                  | 0.000001                               |                        |                                        |  |
| Terminal                   | Brass 70-30                    | 0.219%              | Cu                                       | 7440-50-8                   | 0.476380                               |                        |                                        |  |
|                            |                                |                     | Zn                                       | 7440-66-6                   | 0.203530                               |                        |                                        |  |
|                            | Brass                          | 0.287%              | 7440-50-8                                | 0.494924                    |                                        |                        |                                        |  |
|                            |                                |                     | 7439-92-1                                | 0.119105                    |                                        |                        |                                        |  |
|                            |                                |                     | 7440-31-5                                | 1.098800                    |                                        |                        |                                        |  |
|                            |                                |                     | 7440-44-0                                | 0.187215                    |                                        |                        |                                        |  |
|                            | Fe                             | 0.023480            | 7439-89-6                                | 0.023480                    |                                        |                        |                                        |  |
|                            |                                |                     | Other metal traces                       | n/a                         | 0.634800                               |                        |                                        |  |
|                            | Washer                         | Stainless Steel 301 | 0.004%                                   | Fe                          | 7439-89-6                              | 0.010029               |                                        |  |
|                            |                                |                     |                                          | Cr (I)                      | 7440-47-3                              | 0.002348               |                                        |  |
| Ni                         |                                | 0.000986            | 7440-02-0                                | 0.000986                    |                                        |                        |                                        |  |
|                            |                                |                     | Mn                                       | 7439-96-5                   | 0.000276                               |                        |                                        |  |
|                            |                                |                     | C                                        | 7440-21-3                   | 0.000198                               |                        |                                        |  |
|                            |                                |                     | P                                        | 7727-37-9                   | 0.000021                               |                        |                                        |  |
| S                          |                                | 0.000014            | 7727-37-9                                | 0.000014                    |                                        |                        |                                        |  |
|                            |                                |                     | 7723-14-0                                | 0.000017                    |                                        |                        |                                        |  |
| Si                         | 0.000017                       | 7727-37-9           | 0.000017                                 |                             |                                        |                        |                                        |  |
|                            |                                | 7704-34-9           | 0.000021                                 |                             |                                        |                        |                                        |  |
| Washer                     | Stainless Steel 301            | 0.012%              | Fe                                       | 7439-89-6                   | 0.021644                               |                        |                                        |  |
|                            |                                |                     | Cr (I)                                   | 7440-47-3                   | 0.002626                               |                        |                                        |  |
|                            | Ni                             | 0.002576            | 7440-02-0                                | 0.002576                    |                                        |                        |                                        |  |
|                            |                                |                     | Mn                                       | 7439-96-5                   | 0.000738                               |                        |                                        |  |
|                            |                                |                     | C                                        | 7440-21-3                   | 0.000055                               |                        |                                        |  |
|                            |                                |                     | S                                        | 7723-14-0                   | 0.000017                               |                        |                                        |  |
|                            | Si                             | 0.000017            | 7727-37-9                                | 0.000017                    |                                        |                        |                                        |  |
|                            |                                |                     | 7704-34-9                                | 0.000021                    |                                        |                        |                                        |  |
|                            | Washer                         | Stainless Steel 301 | 0.003%                                   | Fe                          | 7439-89-6                              | 0.051527               |                                        |  |
|                            |                                |                     |                                          | Cr (I)                      | 7440-47-3                              | 0.012203               |                                        |  |
| Ni                         |                                | 0.004963            | 7440-02-0                                | 0.004963                    |                                        |                        |                                        |  |
|                            |                                |                     | Mn                                       | 7439-96-5                   | 0.001418                               |                        |                                        |  |
|                            |                                |                     | S                                        | 7723-14-0                   | 0.000032                               |                        |                                        |  |
|                            |                                |                     | C                                        | 7440-44-0                   | 0.000106                               |                        |                                        |  |
| Si                         |                                | 0.000071            | 7727-37-9                                | 0.000071                    |                                        |                        |                                        |  |
|                            |                                |                     | 7704-34-9                                | 0.000021                    |                                        |                        |                                        |  |
| Un-lubricator              |                                | Spring Steel        | 0.095%                                   | C                           | 0.00                                   | 0.018332               |                                        |  |
|                            |                                |                     |                                          | Fe                          | 0.32                                   | 0.290298               |                                        |  |
|                            | Ni Plating                     | 0.00                | Mn                                       | 0.00                        | 0.001832                               |                        |                                        |  |
|                            |                                |                     | Fe                                       | 0.00                        | 0.000098                               |                        |                                        |  |
|                            |                                |                     | Ni                                       | 0.00                        | 0.000098                               |                        |                                        |  |
|                            |                                |                     | Ni                                       | 0.00                        | 0.000098                               |                        |                                        |  |
|                            | Brass                          | 0.009%              | 7440-02-0                                | 0.003900                    |                                        |                        | Can be external nickel                 |  |
|                            |                                |                     | 7440-50-8                                | 0.763331                    |                                        |                        |                                        |  |
|                            | Zn or Ni plating               | 0.409%              | Cu                                       | 7440-66-6                   | 0.448980                               |                        |                                        |  |
|                            |                                |                     | 7439-92-1                                | 0.041098                    |                                        |                        | Ph in copper alloy (E. U. RoHS exempt) |  |
| Cap Terminal               | Brass                          | 0.012%              | 7440-50-8                                | 1440-45-6 or 7440-82-6      | 6.898                                  |                        | Can be external nickel                 |  |
|                            |                                |                     | 7440-66-6                                | 0.013519                    |                                        |                        |                                        |  |
| TOTAL mass                 |                                |                     | 314.448                                  |                             |                                        |                        |                                        |  |
|                            |                                |                     | 7439-92-1                                |                             | Ph in copper alloy (E. U. RoHS exempt) |                        |                                        |  |