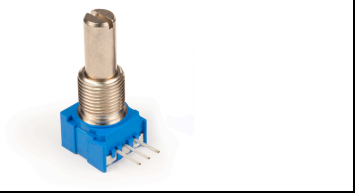
MATERIAL DECLARATION SHEET

BOURNS®

Material Number	51-L Cermet		
Product Line	Panel Controls		
Compliance Date	December 31, 2005		
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	Substrate	Ceramic	0.3	Aluminum Oxide	1344-28-1	95	2.698	2.840
				Silicon Oxide	1344-28-1	3	0.0852	
				Magnesium Oxide	7309-48-4	1	0.0284	
				Calcium Oxide	1305-78-8	1	0.0284	
2	Conductive Ink	Ink	0.003	Silver	7440-22-4	93.3	0.026124	0.028
				Palladium	7440-05-3	3.1	0.000868	
				Dibismuth-trioxide	1304-76-3	2.4	0.000672	
				Copper oxide	1317-39-1	1.2	0.000336	
3	Resistive Ink	Ink	0.005	Ruthenium(IV)oxide	12036-10-1	12.1	0.005687	0.047
				Silver	7440-22-4	10.1	0.004747	
				Palladium	7440-05-3	12.1	0.005687	
				Lead borosilicate glass*	65997-17-3	36.3	0.017061	
				Aluminum Oxide*	1344-28-1	3.1	0.001457	
				Calcium-oxide*	1305-78-8	1.1	0.000517	
				Dibismuth-trioxide*	1304-76-3	11.1	0.005217	
				Digadolinium-trioxide*	12064-62-9	14.1	0.006627	

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4	Resistive Ink	Ink	0.005	Ruthenium(IV)oxide	12036-10-1	15	0.00705	0.047
				Silver	7440-22-4	5	0.00235	
				Palladium	7440-05-3	5	0.00235	
				Lead borosilicate glass*	65997-17-3	43	0.02021	
				Aluminum Oxide*	1344-28-1	5	0.00235	
				Dibismuth-trioxide*	1304-76-3	13	0.00611	
				Digadolinium-trioxide*	12064-62-9	14	0.00658	
5	Terminal x 3	Phosphor bronze	0.152	Copper	7440-50-8	94.8	1.364172	1.439
				Tin	7440-31-5	5	0.07195	
				Phosphorus	7723-14-0	0.2	0.002878	
		Plating	0.0009	Tin	7440-31-5	100	0.009	0.009
6	Shaft	Brass	6.85	Copper	7440-50-8	61.5	39.88398	64.852
				Zinc	7440-66-6	35.5	23.02246	
				Lead	7439-92-1	3	1.94556	
		Plating	0.6256	Nickel	7440-02-0	100	5.923	5.923
7	Housing	PBT	0.659	Glass	65997-17-3	30	1.872	6.240
				Poly(butylene terephthalate)	30965-26-5	54.8	3.41952	
				Antimony Oxide	1309-64-4	4	0.2496	
				Brominated flame retardant	Trade secret	11	0.6864	
				Copper phthalocyanine	147-14-8	0.2	0.01248	
8	Bushing	Aluminum	1.036	Aluminum	7429-90-5	93.7	9.190096	9.808
				Copper	7440-50-8	5.5	0.53944	
				Bismuth	7440-69-9	0.4	0.039232	
				Lead	7439-92-1	0.4	0.039232	
		Plating	0.0032	Nickel	7440-02-0	100	0.030	0.030
9	Rotor	Nylon	0.1757	Nylon	32131-17-2	66	1.09758	1.663
				Glass	35997-17-3	32	0.53216	
				Molybdenum disulfide	1317-33-5	2	0.03326	
10	Contact Spring	Nickel Silver	0.029	Copper	7440-50-8	70	0.1925	0.275
				Nickel	7440-02-0	10	0.0275	
				Lead	7439-92-1	1	0.00275	
				Zinc	7440-66-6	19	0.05225	

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11	Bracket	Stainless Steel	0.3468	Carbon	7440-44-0	0.15	0.0049245	3.283
				Manganese	7439-96-5	2	0.06566	
				Iron	7439-89-6	72.85	2.3916655	
				Silicon	7440-21-3	1	0.03283	
				Nickel	7440-02-0	7	0.22981	
				Chromium	7440-47-3	17	0.55811	
		Plating	0.0032	Tin	7440-31-5	100	0.030	0.030
12	Rear Cover	PBT	0.2107	Glass	65997-17-3	30	0.5985	1.995
				Poly(butylene terephthalate)	30965-26-5	54.8	1.09326	
				Antimony Oxide	1309-64-4	4	0.0798	
				Brominated flame retardant	Trade secret	11	0.21945	
				Copper phthalocyanine	147-14-8	0.2	0.00399	
13	Lube	Grease	0.0015	Fluorosilicone	63148-56-1	100	0.014	0.014
14	Marking Ink	Ink	0.003	Epoxy Resin	25068-38-6	100	0.028	0.028
15	O Ring	Silicon	0.025	Silicon	7440-21-3	100	0.237	0.237
16	Epoxy	Epoxy	0.039	Epoxy Resin	25085-99-8	51	0.18819	0.369
				Silicon	7440-21-3	34	0.12546	
				Kaolin clay	1332-58-7	15	0.05535	
17	Epoxy	Epoxy	0.089	Epoxy Resin	25085-99-8	49	0.41307	0.843
				Silicon Dioxide	7440-21-3	11	0.09273	
				Magnesium alumino silicate	1302-88-1	9	0.07587	
				Antimony Trioxide	1309-64-4	11	0.09273	
				Aluminum oxide	1344-28-1	11	0.09273	
				Kaolin clay	1322-58-7	9	0.07587	
		Total weight	10.5626					

This Document was updated on: February 23, 2015

Notes:

1. It is the responsibility of the user to verify they are accessing the latest version.
2. * Oxides are melted together to form a glass matrix. Although reported as individual materials for disclosure purposes, the individual oxides are no longer present but part of the glass matrix.
3. RoHS exemptions used: 6b, 6c, 7c-I
4. Per Product Update Memo SC2436, this MDS is under revision. The updated version will be posted soon