MATERIAL DECLARATION

BOURNS®

Material Number	95A1D-Z28-EA0/300L Thru 330L		
Product Line	Panel Controls		
Compliance Date	March 25, 2014		
RoHS2 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	0.953	Aluminum Oxide	1344-28-1	96	6.2401	6.5001
				Silicon Oxide	7631-86-9	2	0.1300	
				Magnesium Oxide	1309-48-4	1	0.0650	
				Calcium Oxide	1305-78-8	1	0.0650	
2	Silver conductor	Ink	0.003	Silver	7440-22-4	76	0.01558	0.0205
				Palladium	7440-05-3	10	0.00205	
				Disbismuth-trioxide	1304-76-3	10	0.00205	
				Ruthenium(IV)oxide	12036-10-1	1	0.000205	
				Silicon dioxide	7631-86-9	1	0.000205	
				Nickel-monoxide	1313-99-1	1	0.000205	
				Lead-monoxide*	1317-36-8	1	0.000205	
3	Resistive Ink 1	Ink	0.005	Ruthenium dioxide	12036-10-1	12.11	0.00413	0.0341
				Silver	7440-22-4	10.11	0.00345	
				Palladium	7440-05-3	12.11	0.00413	
				Boron oxide*	1303-86-2	1.056	0.00036	
				Aluminum oxide	1344-28-1	3.056	0.00104	
				Lead monoxide*	1317-36-8	19.11	0.00652	
				Silicon dioxide	7631-86-9	14.11	0.00481	
				Calcium oxide	1305-78-8	1.056	0.00036	
				Dibismuth trioxide	1304-76-3	11.11	0.00379	

				Digadolinium trioxide	12064-62-9	14.11	0.00481	
				Proprietary ingredients	Trade secret	2.062	0.00070	
4	Resistive Ink 2	Ink	0.005	Ruthenium dioxide	12036-10-1	14.125	0.00482	0.0341
				Silver	7440-22-4	4.0625	0.00138	
				Palladium	7440-05-3	4.0625	0.00138	
				Boron oxide*	1303-86-2	2.0625	0.00070	
				Aluminum oxide	1344-28-1	4.0625	0.00138	
				Lead monoxide*	1317-36-8	25.125	0.00857	
				Silicon dioxide	7631-86-9	15.0625	0.00514	
				Dibismuth trioxide	1304-76-3	12.125	0.00414	
				Digadolinium trioxide	12064-62-9	13.125	0.00448	
				Proprietary ingredients	Trade secret	6.1875	0.00211	
5	Terminal Wire	Copper	0.03	Copper	7440-50-8	100	0.2046	0.2046
		Plating	0.00003	Tin	7440-31-5	100	0.0002	0.0002
6	Solder Lug Terminal	Brass	0.625	Copper	7440-50-8	68	2.89884	4.2630
				Zinc	7440-66-6	28	1.19364	
		Plating		Nickel	7440-02-0	1	0.04263	
		Plating		Tin	7440-31-5	3	0.12789	
7	Contact	Strip Laminated	0.05	Copper	7440-50-8	70	0.2387	0.3410
				Zinc	7440-66-6	30	0.1023	
		Spacer Strip	0.04	Nickel	7440-02-0	18	0.049104	0.2728
				Copper	7440-50-8	55	0.15004	
				Zinc	7440-66-6	27	0.073656	
		Solder Inlay	0.0015	Tin	7440-31-5	94.2	0.00961	0.0102
				Silver	7440-22-4	5	0.00051	
				Bismuth	7440-69-9	0.3	0.00003	
				Impurities		0.5	0.00005	
		Wire	0.03	Copper	7440-50-8	61.5	0.12583	0.2046
				Zinc	7440-66-6	35.4	0.07243	
				Lead	7439-92-1	3.1	0.00634	
8	Brass Shaft	Brass	4.797	Copper	7440-50-8	61.5	19.91240	32.7189
				Zinc	7440-66-6	35.4	11.46178	

				Lead	7439-92-1	3.1	1.00372	
9	Rotor	PBT	1.5	Glass	65997-17-3	30	3.06933	10.2311
				Poly(butylene terephthalate)	30965-26-5	55	5.627105	
				Brominated flame retardant	Trade secret	11	1.125421	
				Antimony Oxide	1309-64-4	4	0.409244	
10	Body	PBT	1.551	Glass	65997-17-3	30	3.17367	10.5789
				Poly(butylene terephthalate)	30965-26-5	55	5.81839	
				Brominated flame retardant	Trade secret	11	1.16368	
				Antimony Oxide	1309-64-4	4	0.42316	
11	Bushing	Brass	3.591	Copper	7440-50-8	61.5	15.0633	24.4932
				Zinc	7440-66-6	35.4	8.6706	
				Lead	7439-92-1	3.1	0.7593	
12	Rear Cover	PBT	0.681	Glass	65997-17-3	30	1.3935	4.6449
				Poly(butylene terephthalate)	30965-26-5	55	2.5547	
				Brominated flame retardant	Trade secret	11	0.5109	
				Antimony Oxide	1309-64-4	4	0.1858	
13	Drive Pin (4)	Carbon Steel	0.05	Carbon	7440-44-0	0.2	0.00068	0.3410
				Manganese	7439-96-5	0.8	0.00273	
				Phosphorus	7723-14-0	0.03	0.00010	
				Sulfur	7704-34-9	0.05	0.00017	
				Silicon	7440-21-3	0.35	0.00119	
				Aluminum	7429-90-5	0.05	0.00017	
				Iron	7439-89-6	98.52	0.33596	

		Plating	0.0001	Zinc	7440-66-6	100	0.0007	0.0007
14	Washer	Teflon	0.007	Polytetrafluoroethylene	9002-84-0	15	0.00717	0.0478
				1-Dichloro-1-fluoroethane	1717-00-6	85	0.04063	
15	Washer	Teflon	0.0036	Polytetrafluoroethylene	9002-84-0	15	0.00369	0.0246
				1-Dichloro-1-fluoroethane	1717-00-6	85	0.02091	
16	Spring Washer	Beryllium Copper	0.031	Copper	7440-50-8	98.1	0.20748	0.2115
				Silicon	7440-21-3	0.2	0.00042	
				Beryllium	7440-41-7	1.5	0.00318	
				Aluminum	7429-90-5	0.2	0.00042	
17	Washer	Stainless Steel	0.479	Carbon	7440-44-0	0.15	0.0049	3.2671
				Manganese	7439-96-5	2	0.06534	
				Phosphorus	7723-14-0	0.045	0.00147	
				Sulfur	7704-34-9	0.03	0.00098	
				Silicon	7440-21-3	1	0.03267	
				Chromium	7440-47-3	17	0.55541	
				Nickel	7440-02-0	7	0.22870	
				Iron	7439-89-5	72.775	2.37763	
18	Retaining Ring	Stainless Steel	0.078	Carbon	7440-44-0	0.09	0.00048	0.5320
				Manganese	7439-96-5	1	0.00532	
				Phosphorus	7723-14-0	0.04	0.00021	
				Sulfur	7704-34-9	0.04	0.00021	
				Silicon	7440-21-3	1	0.00532	
				Chromium	7440-47-3	15	0.0798	
				Nickel	7440-02-0	7.125	0.03791	
				Molybdenum	7439-98-7	2.5	0.0133	
				Aluminum	7429-90-5	1.125	0.00598	
				Iron	7439-89-5	72.08	0.38347	
19	Lube	Grease	0.1	1-Decene, tetramer, mixed with 1-decene trimer, hydrogenated	68649-12-7	58.8	0.40107	0.6821
				1-Propene, polymer with ethane	9010-79-1	30.8	0.21009	
				Silica, amorphous fumed	112945-52-5	5.4	0.03683	

				Ethene, tetrafluoro-, homopolymer	9002-84-0	5	0.03411	
20	Lube	Grease	0.05	Decanoic acid, mixed esters with heptanoic acid, octanoic acid, trimethylolpropane	68130-53-0	55.4	0.18891	0.3410
				Lithium 12-hydroxystearate	7620-77-1	5.7	0.01944	
				Isohexadecyl-isooctadecanoate	52006-45-8	33.7	0.11492	
				Polyisobutylene	9003-27-4	5.2	0.01773	
		Total weight	14.66123					

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Important remarks:

1. It is the responsibility of the user to verify they are accessing the latest version.
2. RoHS2 exemptions used: 6c- lead in copper alloy; 7c-I – electronic components containing lead in a glass...
3. * Lead monoxide and boron oxide are part of a glass formulation. Once glass is formed, these materials are no longer present in the lead monoxide or boron oxide form – they are part of a glass matrix (glass exemption REACH).
4. Per Product Update Memo SC2436, this MDS is under revision. The updated version will be posted soon.