

MATERIAL DECLARATION



Material Number	91 CP Long Life Element (Single Cup)			
Product Line	Panel Controls			
Compliance Date	December 12, 2012			
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	0.3	Aluminum Oxide	1344-28-1	96	2.044032	2.1292
				Silicon Oxide	7631-86-9	2	0.042584	
				Magnesium Oxide	1309-48-4	1	0.021292	
				Calcium Oxide	1305-78-8	1	0.021292	
2	Conductor Ink	Ink	0.003	Silver	7440-22-4	76	0.016188	0.0213
				Palladium	7440-05-3	10	0.00213	
				Disbismuth-trioxide	1304-76-3	10	0.00213	
				Ruthenium(IV)oxide	12036-10-1	1	0.000213	
				Silicon dioxide	7631-86-9	1	0.000213	
				Nickel-monoxide	1313-99-1	1	0.000213	
				Lead-monoxide	1317-36-8	1	0.000213	
3	Resistive Ink	Ink	0.0015	Phenolic Resin	9039-25-2	67	0.007102	0.0106
				DAIP resin	1087-21-4	6	0.000636	
				Carbon Black	1333-86-4	7	0.000742	
				Barium sulfate	7727-43-7	16	0.001696	
				Graphite	7782-42-5	4	0.000424	
4	Terminal Wire	Copper	0.03	Copper	7440-50-8	100	0.2129	0.2129

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		Plating	0.00003	Tin	7440-31-5	100	0.0002	0.0002
5	Contact Spring	Strip Laminated	0.05	Copper	7440-50-8	70	0.24843	0.3549
				Zinc	7440-66-6	30	0.10647	
				Spacer Strip	0.04	Nickel	7440-02-0	18
		Copper	7440-50-8			55	0.156145	
		Zinc	7440-66-6			27	0.076653	
		Solder Inlay	0.0015	Tin	7440-31-5	94.2	0.0099852	0.0106
				Silver	7440-22-4	5	0.00053	
				Bismuth	7440-69-9	0.3	0.0000318	
				Impurities		0.5	0.000053	
		Wire	0.03	Palladium	7440-05-3	35	0.074515	0.2129
				Silver	7440-22-4	30	0.06387	
				Copper	7440-50-8	14	0.029806	
				Platinum	7440-06-4	10	0.02129	
Gold	7440-57-5			10	0.02129			
Zinc	7440-66-6			1	0.002129			
6	Brass Shaft	Brass	7.00	Copper	7440-50-8	61.5	30.553938	49.6812
				Zinc	7440-66-6	35.4	17.5871448	
				Lead	7439-92-1	3.1	1.5401172	
		Nickel plating	0.07	Nickel	7440-02-0	100	0.4968	0.4968
7	Rotor	PBT	1.95	Glass	65997-17-3	30	4.15194	13.8398
				Poly(butylene terephthalate)	30965-26-5	55	7.61189	
				Brominated flame retardant	Trade secret	11	1.522378	
				Antimony Oxide	1309-64-4	4	0.553592	
8	Body	PBT	2.65	Glass	65997-17-3	30	5.64237	18.8079
				Poly(butylene terephthalate)	30965-26-5	55	10.344345	
				Brominated flame retardant	Trade secret	11	2.068869	

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				Antimony Oxide	1309-64-4	4	0.752316	
9	Bushing	Aluminum	1.2	Aluminum	7429-90-5	93.7	7.9793983	8.5168
				Copper	7440-50-8	5.5	0.4683745	
				Bismuth	7440-69-9	0.4	0.0340636	
				Lead	7439-92-1	0.4	0.0340636	
		Plating	0.0011	Nickel	7440-02-0	100	0.0078	0.0078
10	Rear Cover	PBT	0.65	Glass	65997-17-3	30	1.38399	4.6133
				Poly(butylene terephthalate)	30965-26-5	55	2.537315	
				Brominated flame retardant	Trade secret	11	0.507463	
				Antimony Oxide	1309-64-4	4	0.184532	
11	Drive Pin	Carbon Steel	0.05	Carbon	7440-44-0	0.2	0.0007098	0.3549
				Manganese	7439-96-5	0.8	0.0028392	
				Phosphorus	7723-14-0	0.03	0.00010647	
				Sulfur	7704-34-9	0.05	0.00017745	
				Silicon	7440-21-3	0.35	0.00124216	
				Aluminum	7429-90-5	0.05	0.00017745	
		Iron	7439-89-6	98.52	0.34964748			
Plating	0.0001	Zinc	7440-66-6	100	0.0007	0.0007		
12	Washer	Teflon	0.007	Polytetrafluoroethylene	9002-84-0	15	0.007455	0.0497
				1-Dichloro-1-Fluoroethane	1717-00-6	85	0.042245	
13	Washer	Teflon	0.0036	Polytetrafluoroethylene	9002-84-0	15	0.00384	0.0256
				1-Dichloro-1-Fluoroethane	1717-00-6	85	0.02176	
14	Spring Washer	Beryllium Copper	0.031	Copper	7440-50-8	98.1	0.21582	0.2200
				Silicon	7440-21-3	0.2	0.00044	
				Beryllium	7440-41-7	1.5	0.0033	

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				Aluminum	7429-90-5	0.2	0.00044	
15	Lube	Lube	0.021	Siloxanes	68086-14-7	68.9	0.102661	0.1490
				Lithium Stearate	4485-12-5	25.4	0.037846	
				Silane, dichlorodimethyl- reaction products with silica	68611-44-9	4.8	0.007152	
				Diphenylamine	122-39-4	0.9	0.001341	
		Total weight	14.08983					

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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: 6b – lead in aluminum alloy; 6c- lead in copper alloy; 7c-I – electronic components containing lead in a glass...
3. Per [Product Update Memo SC2436](#), this MDS is under revision. The updated version will be posted soon.