

MATERIAL DECLARATION SHEET

BOURNS®

Material Number	85/86A2X-BXX-AXX/R51L			
Product Line	Panel Control			
Compliance Date	January 02, 2006			
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	Hex Nut	Brass C260	1.2500	Copper	7440-50-8	70.00	4.336	6.19
				Zinc	7440-66-6	30.00	1.858	
		Plating	0.0900	Nickel	7440-02-0	100	0.446	0.45
2	Lock Washer	Carbon Steel C1050	0.3100	Carbon	7440-44-0	0.5	0.008	1.54
				Iron	7439-89-6	98.7	1.516	
				Manganese	7439-96-5	0.75	0.012	
				Phosphorus	7723-14-0	0.02	0.0003	
				Sulphur	7704-34-9	0.03	0.0005	
		Plating	0.0001	Nickel	7440-02-0	100	0.0005	0.0005
3	Bushing	Aluminum 2011	1.1470	Aluminum (Metal)	7429-90-5	92.93	5.28	5.68
				Bismuth	7440-69-9	0.4	0.02	
				Copper	7440-50-8	5.5	0.31	
				Iron	7439-89-6	0.345	0.02	
				Lead	7439-92-1	0.4	0.02	
				Silicon	7440-21-3	0.2	0.01	
				Zinc (Metal)	7440-66-6	0.15	0.01	
				Misc, Not to Declare	Proprietary	0.075	0.004	

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		Plating	0.0010	Nickel	7440-02-0	100	0.005	0.005
4	Body Primary	Resin	1.8600	PBT	26062-94-2	53.7	4.95	9.22
				Glass Fiber	65997-17-3	30	2.77	
				Brominated Epoxy Resin	68928-70-1	10.5	0.97	
				Antimony Trioxide	1309-64-4	3	0.28	
				Pigment Blue 15	147-14-8	0.8	0.07	
				Further Additives, Not to Declare	Proprietary	2	0.18	
5	Shaft	Brass 360	6.4300	Copper	7440-50-8	61.5	19.60	31.87
				Iron	7439-89-6	0.2	0.06	
				Lead	7439-92-1	3	0.96	
				Zinc	7440-66-6	35	11.15	
				Misc, Not to Declare	Proprietary	0.3	0.10	
		Plating	0.0010	Nickel	7440-02-0	100	0.005	0.005
6	Rotor	Resin	0.5300	PBT	26062-94-2	53.7	1.41	2.63
				Glass Fiber	65997-17-3	30	0.79	
				Brominated Epoxy Resin	68928-70-1	10.5	0.28	
				Antimony Trioxide	1309-64-4	3	0.08	
				Pigment Blue 15	147-14-8	0.8	0.02	
				Further Additives, Not to Declare	Proprietary	2	0.05	
7	Contact Spring	Strip Laminated	0.005	Copper	7440-50-8	70	0.0173	0.02
				Zinc	7440-66-6	30	0.0074	
		Spacer Strip	0.004	Nickel	7440-02-0	18	0.004	0.02
				Copper	7440-50-8	55	0.011	
				Zinc	7440-66-6	27	0.005	
		Solder Inlay	0.0015	Tin	7440-31-5	94.2	0.007	0.01
				Silver	7440-22-4	5	0.0004	
				Bismuth	7440-69-9	0.3	0.00002	
				Impurities	Proprietary	0.5	0.00004	

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		Wire	0.013	Copper	7440-50-8	65	0.04	0.06
				Nickel	7440-02-0	18	0.01	
				Zinc	7440-66-6	17	0.01	
8	Rotor Driver	Zinc Alloy 3	1.0130	Aluminum (Metal)	7429-90-5	4	0.20	5.02
				Cadmium	7440-43-9	0.002	0.0001	
				Copper	7440-50-8	0.1	0.01	
				Iron	7439-89-6	0.05	0.003	
				Magnesium (Metal)	7439-95-4	0.04	0.002	
				Lead	7439-92-1	0.003	0.0002	
				Tin	7440-31-5	0.002	0.0001	
				Zinc (Metal)	7440-66-6	95.7	4.80	
				Misc, Not to Declare	Proprietary	0.1	0.01	
9	Substrate	Ceramic	1.0700	Aluminum Oxide	1344-28-1	96	5.09	5.30
				Silicon Oxide	7631-86-9	2	0.11	
				Magnesium Oxide	1309-48-4	1	0.05	
				Calcium Oxide	1305-78-8	1	0.05	
10	Conductor Ink	Ink	0.0050	Silver	7440-22-4	75	0.0186	0.02
				Palladium	7440-05-3	11.5	0.0028	
				Glass w/o Declarables	65997-17-3	6	0.0015	
				Lead in Glass	7439-92-1	0.5	0.0001	
				Dibismuth-Trioxide	1304-76-3	3.2	0.0008	
				Nickel-Monoxide	1313-99-1	0.8	0.0002	
				Zinc Oxide	1314-13-2	0.8	0.0002	
				Ceramic w/o Declarable Substances	66402-68-4	2.1	0.0005	
				Copper	7440-50-8	0.1	0.00002	
11	Resistive Ink	Ink	0.0009	Ruthenium Oxide	12036-10-1	12.1	0.001	0.004
				Silver	7440-22-4	10.1	0.0005	
				Palladium	7440-05-3	12.1	0.001	
				Lead in Glass	7439-92-1	36.3	0.002	

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				Aluminum	7429-90-5	3.1	0.0001	
				Calcium Oxide	1305-78-8	1.1	0.00005	
				Bismuth Trioxide	1304-76-3	11.1	0.0005	
				Digadolinium Trioxide	12064-62-9	14.1	0.001	
12	Resistive Ink	Ink	0.0171	Ruthenium Oxide	12036-10-1	15	0.013	0.08
				Silver	7440-22-4	5	0.004	
				Palladium	7440-05-3	5	0.004	
				Lead in Glass	7439-92-1	43	0.036	
				Aluminum	7429-90-5	5	0.004	
				Bismuth Trioxide	1304-76-3	13	0.011	
				Digadolinium Trioxide	12064-62-9	14	0.012	
13	Terminal Wire 3X	Copper	0.2960	Copper	7440-50-8	100	1.47	1.47
		Plating	0.0030	Tin	7440-31-5	100	0.015	0.015
14	Body Element	Resin PBT	0.5670	PBT	26062-94-2	53.7	1.51	2.81
				Glass Fiber	65997-17-3	30	0.84	
				Brominated Epoxy Resin	68928-70-1	10.5	0.30	
				Antimony Trioxide	1309-64-4	3	0.08	
				Pigment Blue 15	147-14-8	0.8	0.02	
				Further Additives, Not to Declare	Proprietary	2	0.06	
15	Switch Body Molded	Resin	1.4890	Diallyl Phthalate Polymer	25053-15-0	37	2.73	7.38
				Polyester Resin	68604-67-1	1	0.07	
				Calcium Silicate	13983-17-0	7.7	0.57	
				Amorphous Silica	61790-53-2	1.5	0.11	
				Glass Fiber	65997-17-3	41	3.03	
				Alumina Trihydrate	21645-51-2	2.6	0.19	
				Calcium Stearate	1592-23-0	1	0.07	
				Antimony Trioxide	1309-64-4	3.1	0.23	
				Bis(Tetrabromophthalimido)Ethane	32588-76-4	5.1	0.38	

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16	Rotor Inner	Resin	0.5770	PBT	26062-94-2	54.25	1.55	2.86
				GF-Fiber ISO 1043-2	65997-17-3	30	0.86	
				Halogenated Compound ISO 1043-4, Not Declarable	Proprietary	9	0.26	
				Antimonytrioxide	1309-64-4	3.5	0.10	
				Carbon Black	1333-86-4	1.25	0.04	
				Additives, Not to Declare	Proprietary	2	0.06	
17	Blade Fixed X2	Strip Laminated Brass 260	0.009	Copper	7440-50-8	70	0.031	0.04
				Zinc	7440-66-6	30	0.013	
		Solder Inlay	0.00100	Silver	7440-22-4	100	0.005	0.005
		Under Plating	0.001	Nickel	7440-02-0	100	0.005	0.005
		Finish Plating	0.001	Gold	7440-57-5	100	0.005	0.005
18	Rotor Outer	Resin	0.2440	PBT	26062-94-2	53.7	0.65	1.21
				Glass Fiber	65997-17-3	30	0.36	
				Brominated Epoxy Resin	68928-70-1	10.5	0.13	
				Antimony Trioxide	1309-64-4	3	0.04	
				Pigment Blue 15	147-14-8	0.8	0.01	
				Further Additives, Not to Declare	Proprietary	2	0.02	
19	Spring Detent	BeCu CA-172 alloy 25	0.0430	Beryllium	7440-41-7	1.9	0.004	0.21
				Nickel	7440-02-0	0.3	0.001	
				Cobalt	7440-48-4	0.3	0.001	
				Iron	7439-89-6	0.3	0.001	
				Aluminum	7429-90-5	0.1	0.0002	
				Silicon	7440-21-3	0.1	0.0002	
				Copper	7440-50-8	96.7	0.206	
				Silver	7440-22-4	0.05	0.0001	
				Misc, Not to Declare	Proprietary	0.25	0.001	
20	Spring Helper	BeCu CA-172	0.0190	Beryllium	7440-41-7	1.9	0.002	0.09

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		Alloy 25		Nickel	7440-02-0	0.3	0.0003	
				Cobalt	7440-48-4	0.3	0.0003	
				Iron	7439-89-6	0.3	0.0003	
				Aluminum	7429-90-5	0.1	0.0001	
				Silicon	7440-21-3	0.1	0.0001	
				Copper	7440-50-8	96.7	0.09	
				Silver	7440-22-4	0.05	0.00005	
				Misc, Not to Declare	Proprietary	0.25	0.0002	
21	Moving Contact X2	Silver	0.01400	Silver	7440-22-4	100	0.069	0.07
		Under Plating	0.00010	Nickel	7440-02-0	100	0.0005	0.0005
		Finish Plating	0.00010	Gold	7440-57-5	100	0.0005	0.0005
22	Spring Moving Contact X2	BeCu CA-172 Alloy 25	0.1600	Beryllium	7440-41-7	1.9	0.02	0.79
				Nickel	7440-02-0	0.3	0.002	
				Cobalt	7440-48-4	0.3	0.002	
				Iron	7439-89-6	0.3	0.002	
				Aluminum	7429-90-5	0.1	0.001	
				Silicon	7440-21-3	0.1	0.001	
				Copper	7440-50-8	96.7	0.8	
				Silver	7440-22-4	0.05	0.0004	
				Misc, Not to Declare	Proprietary	0.25	0.002	
		Under Plating	0.00020	Nickel	7440-02-0	100	0.001	0.001
		Finish Plating	0.00020	Tin	Proprietary	100	0.001	0.001
23	Washer	Teflon	0.0160	Polytetrafluoroethylene	9002-84-0	100	0.08	0.08
24	Spring Washer	Beryllium Copper	0.031	Beryllium	7440-41-7	1.90	0.0029	0.15
				Nickel	7440-02-0	0.30	0.0005	
				Cobalt	7440-48-4	0.30	0.0005	
				Iron	7439-89-6	0.30	0.0005	
				Aluminum	7429-90-5	0.10	0.0002	
				Silicon	7440-21-3	0.10	0.0002	

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				Copper	7440-50-8	96.70	0.1	
				Silver	7440-22-4	0.05	0.0001	
				Misc, Not to Declare	Proprietary	0.25	0.0004	
25	Front Cover	Stainless Steel 304	0.694	Carbon	7440-44-0	0.08	0.003	3.44
				Manganese	7439-96-5	2	0.0688	
				Phosphorus	7723-14-0	0.045	0.0015	
				Sulfur	7704-34-9	0.03	0.0010	
				Silicon	7440-21-3	0.75	0.0258	
				Chromium	7440-47-3	18	0.6191	
				Nickel	7440-02-0	8	0.2751	
				Iron	7439-89-6	71.095	2.4451	
				Aluminum	7429-90-5	95.01	2.204	2.32
26	Rivet X4	Aluminum Wire 2117-H-15	0.468	Copper	7440-50-8	2.6	0.060	
				Silicon	7440-21-3	0.8	0.019	
				Chromium	7440-47-3	0.09	0.002	
				Manganese	7439-96-5	0.2	0.005	
				Zinc	7440-66-6	0.25	0.006	
				Iron	7439-89-6	0.7	0.016	
				Magnesium	7439-95-4	0.35	0.008	
				PBT	26062-94-2	53.7	2.10	3.91
27	Cover Molded	Resin	0.7880	Glass Fiber	65997-17-3	30	1.17	
				Brominated Epoxy Resin	68928-70-1	10.5	0.41	
				Antimony Trioxide	1309-64-4	3	0.12	
				Pigment Blue 15	147-14-8	0.8	0.03	
				Further Additives, Not to Declare	Proprietary	2	0.08	
				Carbon	7440-44-0	0.08	0.004	4.70
28	Rear Cover	Stainless Steel 304	0.949	Manganese	7439-96-5	2	0.094	
				Phosphorus	7723-14-0	0.045	0.002	
				Sulfur	7704-34-9	0.03	0.001	

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				Silicon	7440-21-3	0.75	0.035	
				Chromium	7440-47-3	18	0.847	
				Nickel	7440-02-0	8	0.376	
				Iron	7439-89-6	71.095	3.344	
29	Adhesive	Adhesive 680	0.0001	Acrylic Resin	Proprietary	98.8	0.0005	0.0005
				Misc, not to Declare	Proprietary	1.2	0.00001	
30	Lube	Lube	0.0016	Decanoic Acid, Mixed Esters with Heptanoic Acid, Octanoic Acid, Trimethylolpropane	68130-53-0	54.40	0.0043	0.008
				Lithium 12-Hydroxystearate	7620-77-1	5.70	0.0005	
				Isohexadecyl-Isooctadecanoate	52006-45-8	33.70	0.0027	
				Polyisobutylene	9003-27-4	6.20	0.0005	
31	Lube	Lube	0.0288	Siloxanes and Silicones, Di-Me, Di-Ph	68083-14-7	68.90	0.098	0.14
				Lithium stearate	4485-12-5	25.40	0.036	
				Silane, Dichlorodimethyl-Reaction Products with Silica	68611-44-9	4.80	0.007	
				Diphenylamine	122-39-4	0.90	0.001	
32	Lube	Lube	0.0290	Poly(Oxy(Methyl-1,2-Ethanediy)), Alpha-Butyl-Omega-Hydroxy	9003-13-8	97.5	0.14	0.144
				Benzenamine, N-Phenyl-, Reaction Products with 2,4,4-Trimethylpentene	68411-46-1	0.8	0.001	
				Quartz (SiO ₂)	14808-60-7	1.5	0.002	

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				N, N-Bis(2-Ethylhexyl)-4-Methyl- 1H-Benzotriazole-1-Methylamine	80584-90-3	0.1	0.0001	
				N, N-Bis(2-Ethylhexyl)-5-Methyl-1H-Benzotriazole-1-Methylamine	80595-74-0	0.1	0.0001	
		Total weight	20.1787					

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Important remarks:

1. It is the responsibility of the user to verify they are accessing the latest version.