


# MATERIAL DECLARATION SHEET

# BOURNS®

Material Number	PEC09			
Product Line	ENCODER			
Compliance Date	2010/10/20			
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	Shaft	Aluminum	0.90	Silicon	14464-46-1	0.125	0.024	19.564
				Iron	7439-89-6	0.186	0.036	
				Copper	7440-50-8	5.415	1.060	
				Zinc	7440-66-6	0.135	0.026	
				Titanium	7440-32-6	0.01	0.002	
				Tin	7440-31-5	0.79	0.154	
				Bismuth	7440-69-9	0.536	0.105	
				Aluminum	7429-90-5	92.803	18.157	
2	Bushing	Zinc Casting	2.05	Zinc	7440-66-6	95.9374	42.7546	44.565
				Cadmium	7440-43-9	0.0004	0.0002	
				Copper	7440-50-8	0.0010	0.0004	
				Iron	7439-89-6	0.0020	0.0009	
				Indium	7440-74-6	0.0005	0.0002	
				Magnesium	7439-95-4	0.0500	0.0223	
				Nickel	7440-02-0	0.0010	0.0004	
				Lead	7439-92-1	0.0020	0.0009	
				Silicon	7440-21-3	0.0050	0.0022	
				Tin	7440-31-5	0.0005	0.0002	
				Tantalum	7440-25-7	0.0002	0.0001	
				Aluminum	7429-90-5	4.0000	1.7826	

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3	Leaf Spring	t0.2 Phosphor Bronze	0.06	Tin	7440-31-5	8.450	0.11021	1.3043
				Phosphorus	7723-14-0	0.090	0.00117	
				Lead	7439-92-1	0.003	0.00004	
				Iron	7439-89-6	0.002	0.00003	
				Zinc	7440-66-6	0.004	0.00005	
				Copper	7440-50-8	91.451	1.1928	
				Tin	7440-31-5			
				Phosphorus	7723-14-0			
4	Stopper Plate	Zinc Casting	0.22	Zinc	7440-66-6	95.9374	4.5883	4.78
				Cadmium	7440-43-9	0.0004	0.000002	
				Copper	7440-50-8	0.001	0.000048	
				Iron	7439-89-6	0.002	0.000096	
				Indium	7440-74-6	0.0005	0.00002	
				Magnesium	7439-95-4	0.05	0.00239	
				Nickel	7440-02-0	0.001	0.00005	
				Lead	7439-92-1	0.002	0.000096	
				Silicon	7440-21-3	0.005	0.00024	
				Tin	7440-31-5	0.0005	0.000024	
				Tantalum	7440-25-7	0.0002	0.0000096	
				Aluminum	7429-90-5	4.000	0.191304	
5	Insulation Case	PBT	0.30	Polybutylene Terephthalate	26062-94-2	70	4.56	6.52
				Glass Fiber	65997-17-3	28	1.83	
				Additives	non-hazardous	2	0.13	

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6	Terminal	t0.2 Phosphor Bronze	0.05	Tin	7440-31-5	8.45	0.092	1.09
				Phosphorus	7803-51-2	0.09	0.001	
				Lead	7439-92-1	0.003	0.00003	
				Iron	7439-89-6	0.002	0.00002	
				Zinc	7440-66-6	0.004	0.00004	
				Copper	7440-50-8	91.451	0.9940	
				Tin	7440-31-5			
				Phosphorus	7803-51-2			
		Ag Plating (0.5~1um)		Silver	7440-22-4	100		
7	Contact Holder	POM	0.05	Polyoxymethylene	30846-29-8		1.09	1.09
8	Slide Contact	t0.12 Phosphor Bronze	0.02	Tin	7440-31-5	8.45	0.0367	0.43
				Phosphorus	7803-51-2	0.09	0.0004	
				Lead	7439-92-1	0.003	0.00001	
				Iron	7439-89-6	0.002	0.000001	
				Zinc	7440-66-6	0.004	0.000017	
				Copper	7440-50-8	91.451	0.3976	
				Tin	7440-31-5			
				Phosphorus	7803-51-2			
		Ag Plating (0.5~1um)		Silver	7440-22-4	100		
9	Spacer	PBT	0.15	Polybutylene Terephthalate	26062-94-2	70	2.28	3.26
				Glass Fiber	65997-17-3	28	0.91	
				Additives, not to declare	Non-hazardous	2	0.07	

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10	E Ring	t0.4 Steel Nickel Plating	0.02	Carbon	7440-44-0	0.050	0.0002	0.43
				Manganese	7439-96-5	0.240	0.001	
				Phosphorus	7723-14-0	0.016	0.0	
				Sulfur	7704-34-9	0.012	0.0	
				Silicon	7440-21-3	0.010	0.0	
				Aluminum	7429-90-5	0.045	0.0	
				Iron	7439-89-6	99.627	0.4	
		Ni Plating (2~3um)		Nickel	7440-02-0	100		
11	Actuator	POM	0.19	Polyoxymethylene	30846-29-8	100	4.13	4.13
12	Switch Contact	t0.08 Titanium with copper	0.035	Copper	7440-50-8	96.6	0.734	0.76
				Titanium	7440-32-6	3.4	0.026	
		Ag Plating (0.5~1um)		Silver	7440-22-4	100		
13	SW Insulation Case	PBT	0.30	Polybutylene Terephthalate	26062-94-2	70	4.56	6.52
				Glass Fiber	65997-17-3	28	1.83	
				Additives	non-hazardous	2	0.13	
14	SW Terminal	t0.25 Brass	0.10	Copper	7440-50-8	65.685	1.428	2.17
				Iron	7439-89-6	0.035	0.001	
				Lead	7439-92-1	0.002	0.001	
				Zinc	7440-66-6	34.278	0.745	
		Ag Plating (0.5~1um)		Silver	7440-22-4	100		
15	Spacer	PBT	0.11	Polybutylene Terephthalate	26062-94-2	70	1.67	2.39
				Glass Fiber	65997-17-3	28	0.68	
				Additives, not to declare	Non-hazardous	2	0.04	

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16	Rivet	Aluminum	0.045	Silicon	7440-21-3	0.125	0.0012	0.98
				Iron	7439-89-6	0.186	0.0018	
				Copper	7440-50-8	5.415	0.053	
				Zinc	7440-66-6	0.135	0.0013	
				Titanium	7440-32-6	0.01	0.0001	
				Tin	7440-31-5	0.79	0.0077	
				Bismuth	7440-69-9	0.536	0.0052	
				Aluminum	7429-90-5	92.723	0.9071	
		<b>Total weight (g)</b>	<b>4.6</b>					

**This Document was updated on: May 5, 2020**

**Important remarks:**

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