

MATERIAL DECLARATION SHEET

BOURNS®

Material Number	PF2270			
Product Line	Fixed Resistor			
Compliance Date	3/11/2025			
RoHS Compliant	Yes	MSL		

No.	Construction Element (Subpart)	Homogeneous Material	Material Weight (g)	Homogeneous Material Substance	CASRN	Material Mass %	Material Mass % of total unit wt.	Subpart mass of total wt. (%)
1	Chip	Ceramic	0.9944	Aluminum Oxide (Al ₂ O ₃)	1344-28-1	96.0000%	3.1522%	3.2835%
				Silicon Dioxide (SiO ₂)	14808-60-7	4.0000%	0.1313%	
		Conductor Layer Thick Film	0.0058	Silver Powder (Ag)	7440-22-4	97.0000%	0.0186%	0.0192%
				Platinum (Pt)	7440-06-4	1.0000%	0.0002%	
				Dicopper Oxide (Cu ₂ O)	1317-39-1	1.0000%	0.0002%	
				Zinc Oxide (ZnO)	1314-13-2	1.0000%	0.0002%	
		Thick Film Resistive Element	0.0011	Ruthenium Oxide (RuO ₂)	12060-10-1	25.0000%	0.0009%	0.0036%
				Silver Powder (Ag)	7440-22-4	40.0000%	0.0015%	
				Palladium (Pd)	7440-05-03	15.0000%	0.0005%	
				Lead (Pb)	7439-92-1	20.0000%	0.0007%	
2	Base Plate	C10200	13.7400	Glass	65997-17-3	85.0000%	0.0042%	0.0050%
				Lead in Glass	7439-92-1	15.0000%	0.0007%	
		Plating	0.1000	Copper (Cu)	7440-50-8	99.9800%	45.3602%	45.3693%
				Misc	Not to Declare	0.0200%	0.0091%	
				Nickel (Ni)	7440-02-0	99.9000%	0.3299%	
3	Contact	C10200	1.8720	Misc	Not to Declare	0.1000%	0.0003%	0.3302%
				Copper (Cu)	7440-50-8	99.9800%	6.1801%	
				Misc	Not to Declare	0.0200%	0.0012%	6.1813%

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		Plating	0.1000	Tin (Sn)	7440-31-5	99.9000%	0.3299%	0.3302%
				Misc	Not to Declare	0.1000%	0.0003%	
4	Shell	Resin	6.8200	Polyphenylene Sulfide	26125-40-6	59.5000%	13.3991%	22.5195%
				Glass fiber	65997-17-3	40.0000%	9.0078%	
				Carbon Black	1333-86-4	0.5000%	0.1126%	
5	Spacer	Aluminum 6061-T651	0.1060	Aluminum (Al)	7429-90-5	97.2300%	0.3403%	0.3500%
				Chromium (Cr)	7440-47-3	0.1950%	0.0007%	
				Copper (Cu)	7440-50-8	0.2750%	0.0010%	
				Iron (Fe)	7439-89-6	0.3500%	0.0012%	
				Manganese (Mn)	7439-96-5	0.0750%	0.0003%	
				Magnesium (Mg)	7439-95-4	1.0000%	0.0035%	
				Silicon (Si)	7440-21-3	0.6000%	0.0021%	
				Zinc (Zn)	7440-66-6	0.1250%	0.0004%	
				Titanium (Ti)	7440-32-6	0.0750%	0.0003%	
				Misc	Trade secret	0.0750%	0.0003%	
6	Hex Nut M4x0.7	Steel Grade 35#	1.2060	Iron (Fe)	7439-89-6	98.8930%	3.9381%	3.9822%
				Carbon (C)	7440-44-0	0.1400%	0.0056%	
				Manganese (Mn)	7439-96-5	0.7800%	0.0311%	
				Phosphorus (P)	7723-14-0	0.0150%	0.0006%	
				Sulfur (S)	7704-34-9	0.0100%	0.0004%	
				Silicon (Si)	7440-21-3	0.1400%	0.0056%	
				Chromium (Cr)	7440-47-3	0.0020%	0.0001%	
				Nickel (Ni)	7440-02-0	0.0100%	0.0004%	
				Copper (Cu)	7440-50-8	0.0100%	0.0004%	
		Plating	0.1000	Zinc (Zn)	7440-66-6	99.9000%	0.3299%	0.3302%
				Misc	Not to Declare	0.1000%	0.0003%	
7	Phillip Panhead Screw M4x0.7, 5mm	Low Carbon Steel	2.3000	Iron (Fe)	7439-89-6	99.8910%	7.5863%	7.5946%
				Carbon (C)	7440-44-0	0.0800%	0.0061%	

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		Plating	0.1000	Phosphorus (P)	7723-14-0	0.0150%	0.0011%	0.3302%
				Sulfur (S)	7704-34-9	0.0140%	0.0011%	
				Zinc (Zn)	7440-66-6	99.9000%	0.3299%	
				Misc	Not to Declare	0.1000%	0.0003%	
8	Lead-Free Solder Paste	SAC305	0.0750	Copper (Cu)	7440-50-8	0.5000%	0.0012%	0.2476%
				Tin (Sn)	7440-31-5	96.5000%	0.2390%	
				Silver (Ag)	7440-22-4	3.0000%	0.0074%	
9	Solder Preform	Solder	0.3130	Tin (Sn)	7440-31-5	95.6000%	0.9880%	1.0335%
				Silver (Ag)	7440-22-4	3.4000%	0.0351%	
				Rosin Mix	65997-05-9	1.0000%	0.0103%	
10	Epoxy Resin w/ Catalyst	Epoxy Resin	2.2000	Aluminum Hydroxide	21645-51-2	57.25%	4.1589%	7.2644%
				Phenol	25068-38-6	31.25%	2.2701%	
				Diethylmethylbenzenediamine	68479-98-1	6.00%	0.4359%	
				Carbon Black	1333-86-4	0.50%	0.0363%	
				Confidential Substances	Trade secret	5.00%	0.3632%	
11	RTV Compound	RTV	0.2500	Silicone rubber	63394-02-5	70.0000%	0.5778%	0.8255%
				Calcium-carbonate	471-34-1	27.3000%	0.2254%	
				Ethyl silicate	11099-06-2	2.0000%	0.0165%	
				Miscellaneous	N/A	0.7000%	0.0058%	
		Total Weight	30.2848					

This Document was updated on: 5/21/2025

Important remarks:

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