

6173 material declaration. BI Technologies Corporation

4/26/2011

For resistor values above 2K ohms

No content here is banned per E.U. R.o.H.S.. Average mass of 6173 potentiometer is 13 grams each. Prepared by Eric Arnold (714) 447-2565
Weights in table above 1 milligram rounded to the nearest mg. Values less than 1 milligram given in scientific notation.

Sub-component	Material	% of total mass	Substance name	CAS #	Substance Weight (grams)	Special classification		
Housing	Aluminum	39.3%	Al	7429-90-5	5.087			
		trace	black dyed anodize	n/a	trace	non-hazardous		
	white epoxy marking	trace	trade secret	n/a	trace	non-hazardous		
Lid	Aluminum	16.5%	Al	7429-90-5	2.135			
		trace	black dyed anodize	n/a	trace	non-hazardous		
	white epoxy marking	trace	trade secret	n/a	trace	non-hazardous		
Element glue	polyurethane resin acrylic	0.78%	trade secret	n/a	0.101	non-hazardous		
Tap wires	nickel alloy	0.06%	C	7440-44-0	3.90E-06			
			Cu	7440-50-8	1.56E-05			
			Mn	7439-96-5	1.56E-05			
			Ni	7440-02-0	0.008	not pure Ni, not external		
			S	7704-34-9	1.56E-07			
			Si	7440-21-3	3.74E-06			
Solder	SAC solder alloy (Pb-free)	0.02%	Ag	7440-22-4	8.25E-05			
			Cu	7440-50-8	1.38E-05			
			Sn	7440-31-5	0.003			
Substrate	phenolic blend	4.85%	alumina trihydrate	21645-51-2	0.031			
			calcium silicate	13983-17-0	0.094			
			fiberglass	65997-17-3	0.220			
			phenol resin	9003-35-4	0.283			
Substrate lube	PFPE grease	0.004%	trade secret	n/a	0.001	non-hazardous		
Resistor termination	conductive polymer	0.003%	Ag	7440-22-4	2.94E-04			
			DAIP resin	1087-21-4	4.15E-05			
			trade secret	n/a	1.69E-06	non-hazardous		
Resistor	conductive polymer	0.02%	methacryloxypropyl trimethoxysilane	2530-85-0	2.00E-05			
			t-butyl peroxybenzoate	614-45-9	3.78E-05			
			DAIP resin	1087-21-4	0.001			
			C	7440-44-0	6.65E-04			
			silica	60676-86-0	1.12E-05			
			trade secret	n/a	5.08E-05	non-hazardous		
Terminals (sum of all)	brass alloy	1.89%	Cu	7440-50-8	0.151			
			Zn	7440-66-6	0.087			
			Pb	7439-92-1	0.008	Pb in copper alloy (E.U. RoHS exempt) not external		
	Ni plating	0.01%	Ni	7440-02-0	0.002			
	Au plating	0.02%	Au	7440-57-5	0.003			
	DAP blend	1.11%	DAP resin	25053-15-0	0.050			
			fiberglass	65997-17-3	0.050			
			mineral fill	n/a	0.036	non-hazardous		
			trade secret	n/a	0.007	non-hazardous		
Terminal cap	brass alloy	0.15%	Cu	7440-50-8	0.013			
			Zn	7440-66-6	0.006			
			Fe	7439-89-6	7.53E-06			
			P	7723-14-0	9.41E-06			
			Ni plating	0.01%	Ni	7440-02-0	0.001	not external
			Au plating	0.01%	Au	7440-57-5	0.001	
Terminal adhesive	epoxy	0.15%	bisphenol-A	80-05-7	5.94E-04	BPA		
			calcium carbonate	471-34-1	0.006			
			diethylene triamine	111-40-0	0.001			
			epichlorohydrin	106-89-8	2.73E-07			
			epoxy resin,	25068-38-6	0.005	BPA		
			epichlorohydrin/bisphenol A					
			iron oxide, black	1317-61-9	9.10E-04			
			SiO2, amorphous	7631-86-9	3.64E-04			
			trimethylolethane triglycidyl ether	30499-70-8	0.005			
Terminal fill	silicone gel	0.15%	methylvinylsiloxane polymer	67762-94-1	0.020			
Shaft	steel	11.43%	Fe	7439-89-6	1.026			
			C	7440-44-0	0.001			
			Cr (0)	7440-47-3	0.281			
			Mn	7439-96-5	0.001			
			Mo	7439-98-7	0.007			
			P	7723-14-0	0.001			
			S	7704-34-9	0.006			
			Ni	7440-02-0	0.148	not pure Ni		
			Si	7440-21-3	0.007			
Rotor	BeCu alloy	2.16%	Cu	7440-50-8	0.272			
			Be	7440-41-7	0.006	Be compound		
			Ni	7440-02-0	5.59E-04	not pure Ni, not external		
			Co	7440-48-4	0.001			

	Ni plating	0.03%	Fe	7439-89-6	5.59E-04	
	Au plating	0.04%	Ni	7440-02-0	0.005	not external
	Polyolester grease	0.07%	Au	7440-57-5	0.006	
			trade secret	n/a	0.009	non-hazardous
Contact	Pd alloy wire	0.01%	Pd	7440-05-3	4.18E-04	
			Ag	7440-22-4	3.61E-04	
			Pt	7440-06-4	9.50E-06	
			Cu	7440-50-8	1.52E-04	
	Ni alloy bar	0.01%	Ni	7440-02-0	9.50E-06	not pure Ni, not external
			Cu	7440-50-8	4.00E-07	
			C	7440-44-0	4.80E-07	
			Fe	7439-89-6	1.20E-04	
			Mn	7439-96-5	2.00E-07	
			Ni	7440-02-0	6.77E-04	not external
			S	7704-34-9	4.00E-09	
			Si	7440-21-3	4.00E-07	
Spring	BeNi alloy	0.14%	Ni	7440-02-0	0.018	not external
			Be	7440-41-7	3.51E-04	Be compound
			Ti	7440-36-2	9.00E-05	
			trade secret	n/a	9.00E-06	non-hazardous
Retaining ring	BeCu alloy	2.74%	Cu	7440-50-8	0.345	
			Be	7440-41-7	0.007	Be compound
			Ni	7440-02-0	7.09E-04	not pure Ni, not external
			Co	7440-48-4	0.001	
			Fe	7439-89-6	7.09E-04	
Truarcs	BeCu alloy	0.26%	Cu	7440-50-8	0.032	
			Be	7440-41-7	6.62E-04	Be compound
			Ni	7440-02-0	6.62E-05	not pure Ni, not external
			Co	7440-48-4	1.32E-04	
			Fe	7439-89-6	6.62E-05	
Insulator	LCP blend	1.09%	fiberglass	65997-17-3	0.043	
			trade secret liquid crystal polymer	n/a	0.099	non-hazardous
Clamp	stainless steel	6.85%	Fe	7439-89-6	0.615	
			C	7440-44-0	8.87E-04	
			Cr (0)	7440-47-3	0.169	
			Mn	7439-96-5	8.87E-04	
			Mo	7439-98-7	4.44E-03	
			P	7723-14-0	8.87E-04	
			S	7704-34-9	0.004	
			Ni	7440-02-0	0.089	not pure Ni
			Si	7440-21-3	0.004	
Screw	stainless steel	1.24%	Fe	7439-89-6	0.111	
			C	7440-44-0	1.60E-04	
			Cr (0)	7440-47-3	0.030	
			Mn	7439-96-5	1.60E-04	
			Mo	7439-98-7	8.00E-04	
			P	7723-14-0	1.60E-04	
			S	7704-34-9	6.40E-04	
			Ni	7440-02-0	0.016	not pure Ni
			Si	7440-21-3	8.00E-04	
Bearings	steel balls	8.44%	Fe	7439-89-6	0.873	
			C	7440-44-0	0.012	
			Cr (0)	7440-47-3	0.186	
			Mn	7439-96-5	0.011	
			Mo	7439-98-7	0.008	
			P	7723-14-0	0.003	
			S	7704-34-9	3.28E-04	
	silicone grease	0.14%	trade secret	n/a	0.018	non-hazardous
Contact spring	Pd alloy	0.08%	Pd	7440-05-3	0.004	
			Ag	7440-22-4	0.004	
			Pt	7440-06-4	9.85E-05	
			Cu	7440-50-8	0.002	
			Ni	7440-02-0	9.85E-05	not pure Ni, not external
Wave washer	BeCu alloy	0.11%	Cu	7440-50-8	0.014	
			Be	7440-41-7	2.89E-04	Be compound
			Ni	7440-02-0	2.89E-05	not pure Ni, not external
			Co	7440-48-4	5.78E-05	
			Fe	7439-89-6	2.89E-05	
Shim(s) - number varies in each pot	brass alloy	0.16%	Cu	7440-50-8	0.015	
			Zn	7440-66-6	0.006	
			Fe	7439-89-6	5.23E-06	
			Pb	7439-92-1	6.27E-06	Pb in copper alloy (E.U. RoHS exempt)
Sum of all substances					12.95	