Model 91 material declaration. BI Technologies Corporation **10/3/2013**

LF and non-LF option content are identical after 2/1/2005

No content here is banned per E.U. RoHS. Average mass of 91 trimmer is 0.7 gram each. Prepared by Eric Arnold (714) 447-2565

Weights 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
Rotor	PA blend	26.9%	polyhexamethylene dodecanamide	26098-55-5	0.119	
			MoS2	1317-33-5	0.009	
			fiberglass	65997-17-3	0.056	
			trade secret	unknown	0.004	non-hazardous
Contact	Cu alloy wires	0.07%	Cu	7440-50-8	2.76E-04	
			Zn	7440-66-6	1.35E-04	
			Ni	7440-02-0	9.02E-05	
	Pd alloy wires	0.17%	Ag	7440-22-4	4.68E-04	
			Cu	7440-50-8	2.92E-04	
			Ni	7440-02-0	8.18E-05	
			Pd	7440-05-3	3.16E-04	
			Zn	7440-66-6	1.17E-05	
	Nickel alloy bar	0.14%	Cu	7440-50-8	5.00E-07	
			Ni	7440-02-0	8.46E-04	
			C	7440-44-0	5.00E-07	
			Mn	7439-96-5	2.50E-06	
			Fe	7439-89-6	1.50E-04	
			S	7704-34-9	5.00E-08	
			Si	7440-21-3	5.00E-07	
Rotor lubricant	silicone lube	trace	trade secret	unknown	trace	non-hazardous
Terminals	Cu pin	14.9%	Cu	7440-50-8	0.104	
	Sn plating	0.44%	Sn	7440-31-5	0.003	
Substrate	alumina	57.2%	Al2O3	1344-28-1	0.385	
			SiO2, amorphous	7631-86-9	0.004	
			TiO2	13463-67-7	0.002	
			FeO2	1345-25-1	0.002	
			MnO2	1313-13-9	0.004	
			MgO	1309-48-4	0.002	
			CaO	1305-78-8	0.002	
Conductor	AgPd thick film	0.11%	Al2O3	1344-28-1	5.42E-06	
			SiO2, amorphous	7631-86-9	2.38E-05	
			TiO2	13463-67-7	5.42E-06	
			PbO	1317-36-8	3.24E-05	Pb in electronic ceramic (RoHS 7c-1)
			ZnO	1314-13-2	5.88E-06	
			B2O3	1303-86-2	2.00E-06	
			ZrO2	1314-23-4	4.80E-07	
			BaO	1304-28-5	6.16E-06	
			Ag	7440-22-4	6.46E-04	
			Pd	7440-05-3	7.20E-05	
Resistor	ruthenate thick film	0.14%	Al2O3	1344-28-1	1.33E-05	
			SiO2, amorphous	7631-86-9	1.12E-04	
			TiO2	13463-67-7	1.33E-05	
			MnO2	1313-13-9	6.00E-06	
			PbO	1317-36-8	2.92E-04	Pb in electronic ceramic (RoHS 7c-1)
			ZnO	1314-13-2	3.19E-05	
			B2O3	1303-86-2	3.73E-05	
			ZrO2	1314-23-4	8.95E-06	
			BaO	1304-28-5	1.51E-05	
			Ag	7440-22-4	3.61E-05	
			Pd	7440-05-3	4.59E-05	
			Steatite	14807-96-6	2.00E-06	
			Bi2Ru2O6	unknown	4.50E-05	
			Pb2Ru2O6+x	unknown	3.20E-04	Pb in electronic ceramic (RoHS 7c-1)
			RuO2	12036-10-1	2.10E-05	
Substrate marking	epoxy ink	trace	trade secret	unknown	trace	non-hazardous