

**Model 84 material declaration. BI Technologies Corporation**

10/3/2013

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

No content is banned per E.U. RoHS. Average mass of 84 trimmer is 0.4 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			
Housing	PPS blend	40.3%	polyphenylene sulfide	26125-40-6	0.103				
			Fiberglass	65997-17-3	0.069				
Shaft	Brass	9.7%	Cu	7440-50-8	0.026				
			Zn	7440-66-6	0.015				
			Pb in brass	7439-92-1	0.001	Pb in copper alloy (RoHS 6c)			
Rotor	PTFE	8.9%	PTFE	009002-84-0	0.038				
O-ring		0.7%	methylvinyl polysiloxane	68083-18-1	0.002				
			trade secret	unknown	6.00E-04	non-hazardous			
Contact	Pd alloy wire	0.26%	Pd	7440-05-3	2.97E-04				
			Ag	7440-22-4	4.40E-04				
			Cu	7440-50-8	2.75E-04				
			Zn	7440-66-6	1.10E-05				
			Ni	7440-02-0	7.70E-05				
	Nickel alloy bar	0.23%	Cu	7440-50-8	5.00E-07				
			Ni	7440-02-0	8.46E-04				
			C	7440-44-0	6.00E-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				
Terminals	Cu wire	10.2%	Cu	7440-50-8	0.043				
	Sn plating	0.004%	Sn	7440-31-5	1.73E-05				
Potting	Epoxy	11.8%	SiO2, amorphous	7631-86-9	0.003				
			modified aliphatic polyamine	trade secret	0.010				
			hydantoin epoxy resin	15336-82-0	0.003				
			epichlorohydrin / polyglycol epoxy resin	26142-30-3	0.003				
			epichlorohydrin/bisphenol A epoxy resin	unknown	0.031	BPA			
			cycloaliphatic epoxy resin	2386-87-0	0.003				
Substrate	Alumina	17.7%	Al2O3	1344-28-1	0.073				
			SiO2, amorphous	7631-86-9	7.56E-04				
			TiO2	13463-67-7	3.78E-04				
			FeO2	1345-25-1	3.78E-04				
			MnO2	1313-13-9	7.56E-04				
			MgO	1309-48-4	3.78E-04				
			CaO	1305-78-8	3.78E-04				
			Conductor	AgPd thick film	0.10%	Al2O3	1344-28-1	2.85E-06	
						SiO2, amorphous	7631-86-9	1.25E-05	
TiO2	13463-67-7	2.85E-06							
PbO	1317-36-8	1.70E-05				Pb in electronic ceramic (RoHS 7c-1)			
ZnO	1314-13-2	3.09E-06							
B2O3	1303-86-2	1.05E-06							
ZrO2	1314-23-4	2.52E-07							
BaO	1304-28-5	3.23E-06							
Ag	7440-22-4	3.39E-04							
Pd	7440-05-3	3.78E-05							
Resistor	Ruthenate thick film	0.07%	Al2O3	1344-28-1	4.25E-06				
			SiO2, amorphous	7631-86-9	3.57E-05				
			TiO2	13463-67-7	4.25E-06				
			MnO2	1313-13-9	1.92E-06				
			PbO	1317-36-8	9.35E-05	Pb in electronic ceramic (RoHS 7c-1)			
			ZnO	1314-13-2	1.02E-05				
			B2O3	1303-86-2	1.19E-05				
			ZrO2	1314-23-4	2.86E-06				
			BaO	1304-28-5	4.83E-06				
			Ag	7440-22-4	1.15E-05				
			Pd	7440-05-3	1.47E-05				
			Steatite	14807-96-6	6.40E-07				
			Bi2Ru2O6	unknown	1.44E-05				
			Pb2Ru2O6+x	unknown	1.02E-04	Pb in electronic ceramic (RoHS 7c-1)			
			RuO2	12036-10-1	6.72E-06				