

**LTM8049 77LD BGA-PBF 15mm X 9mm X 2.42mm (TABLE OF MATERIAL DECLARATION)**

This Package is RoHS compliant per EU RoHS Directive 2003/95/EC.  
It contains less than 100ppm cadmium (Cd) and less than 1,000ppm of each - lead (Pb), mercury (Hg), hexavalent chromium (Cr+) polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE)

No.	Part Name	Material Name	Component Weight (gram)	Materials Analysis (element)	CAS Number	Material Mass (gram)	Materials Analysis (weight %)
1	Substrate	Circuit Board	0.1357	Bismaleimide/Triazine/Resin/Filler Substance(Silica Crystalline)	105391-33-1 1156-51-0/9003-36-5/21645-51-2 non-disclosure	0.02385	17.58
				Continuous Filament Fiber Glass	65997-17-3	0.02115	15.59
				Copper Metal	7440-50-8	0.07596	56.00
				Zinc	7440-66-6	0.00003	0.02
				Chromium(III) Oxide	1308-38-9	0.00002	0.01
				Epoxy Resin	non-disclosure	0.00003	0.02
				Barium Compounds	7727-43-7	0.00410	3.03
				Silica amorphous	7631-86-9	0.00008	0.06
				Calcium Caobonate	471-34-1	0.00001	0.00
				Amine compounds	non-disclosure	0.00006	0.04
				Leveling agent and others	non-disclosure	0.00018	0.13
				Acrylic Resin	non-disclosure	0.00782	5.77
				Copper Compounds	147-14-8	0.00004	0.03
				Talc;not containing fibers like asbestos	14807-96-6	0.00047	0.35
				Aromatic Carbonyl compounds	non-disclosure	0.00045	0.33
				Cyanoguanidine	461-58-5	0.00001	0.01
				Nickel	7440-02-0	0.00113	0.83
				Gold metal or alloy	7440-57-5	0.00025	0.18
				Ecotoxic substances	7440-38-2 7440-28-0	0.00002	0.01
				2	Solder Paste	Alloy	0.0088
3	Components	Passive/Active	0.1991	Antimony (Sb)	7440-36-0	0.00044	5.00
				Iron Powder (Fe)	7439-89-6	0.11774	59.13
				Copper (Cu)	7440-50-8	0.04453	22.37
				Nickel (Ni)	7440-02-0	0.00436	2.19
				Tin (Sn)	7440-31-5	0.00216	1.09
				Ceramic (Ba) Compounds	12047-27-7	0.03031	15.23
4	Active lcs	Silicon	0.0055	Silicon (Si)	7440-21-3	0.00545	100.00
5	Wire	Gold	0.0050	Gold (Au)	7440-57-5	0.00502	99.99
6	Solder Ball	Alloy	0.1283	Tin (Sn)	7440-31-5	0.12379	96.50
				Silver (Ag)	7440-22-4	0.00385	3.00
				Copper (Cu)	7440-50-8	0.00064	0.50
7	Encapsulation	Epoxy Resin	0.3283	Fused Silica	60676-86-0	0.25343	77.20
				Epoxy Resin	non-disclosure	0.02922	8.90
				Phenol Resin	non-disclosure	0.02922	8.90
				Crytalline Silica	14808-60-7	0.00985	3.00
				Carbon Black	1333-86-4	0.00164	0.50
				Metal Hydroxide	non-disclosure	0.00492	1.50
Total Package Weight			0.8106				

Note: Composition derived from MSDS and material C of C from Vendors  
Component Weight based on assembly of generic parts