

Materials Declaration

Package	CSP_BGA
Body Size	9 X 9
Ball Count	169
Option	SnPbAg
Ball Size	0.4 mm

Molding Compound			
Item	% of Compound	Weight (g)	PPM
SiO2 Filler	75.0	8.94 E-01	432724
Epoxy resin	20.0	2.37 E-01	114629
Antimony oxide	3.0	3.55 E-02	17194
Carbon Black	1.5	1.78 E-02	8597

Laminate			
Item	% of Laminate	Weight (g)	PPM
BT-Epoxy	25.0	1.88 E-01	91201
Glass Fiber	25.0	1.88 E-01	91201
Copper	19.0	1.43 E-01	69315
Solder Mask	12.2	9.19 E-02	44509
Nickel	11.0	8.29 E-02	40129
Gold	7.8	5.88 E-02	28455

Solder Ball			
	% of Solder Ball	Weight (g)	PPM
Sn	62.0	2.95 E-02	14284
Pb	36.0	1.71 E-02	8294
Ag	2.0	9.52 E-04	461

Bond Wires			
	% of Wire	Weight (g)	PPM
Au	99.99	2.25 E-03	1089

Chip			
	% of Chip	Weight (g)	PPM
Si	100.0	1.06 E-02	5151

Die Attach			
Item	% of Die Attach	Weight (g)	PPM
Ag Filler	70.0	4.74 E-02	22937
Epoxy Resin	20.0	1.35 E-02	6553
Amine	5.0	3.38 E-03	1638
Silane	5.0	3.38 E-03	1638

Package Totals	
Weight (g)	PPM
2.07 E+00	1000000

Molding Compound		
Item	PPM	Method
Pb	None Detected	US EPA Method 3052. ICP-OES
Cd	None Detected	US EPA Method 3052. ICP-OES
Hg	None Detected	US EPA Method 3052. ICP-OES
Cr+6	None Detected	US EPA Method 3060A & 7196A. UV-VIS
PBB	None Detected	Analysis was performed by GC/MS
PBDE	None Detected	Analysis was performed by GC/MS

Die Attach Paste		
Item	PPM	Method
Pb	None Detected	US EPA Method 3052. ICP-OES
Cd	None Detected	US EPA Method 3052. ICP-OES
Hg	None Detected	US EPA Method 3052. ICP-OES
Cr+6	None Detected	US EPA Method 3060A & 7196A. UV-VIS
PBB	None Detected	Analysis was performed by GC/MS
PBDE	None Detected	Analysis was performed by GC/MS

Laminate		
Item	PPM	Method
Pb	None Detected	US EPA Method 3052. ICP-OES
Cd	None Detected	US EPA Method 3052. ICP-OES
Hg	None Detected	US EPA Method 3052. ICP-OES
Cr+6	None Detected	US EPA Method 3060A & 7196A. UV-VIS
PBB	None Detected	Analysis was performed by GC/MS
PBDE	None Detected	Analysis was performed by GC/MS

Note: The information provided in this declaration are true to the best of ADI's knowledge.
ADI derived most of the information listed in this declaration from documents provided by third parties, and assumes no liability to any inaccuracy of such information.



ADI Proprietary

9/20/06