Materials Declaration

Package	CSP_BGA
Body Size	15 X 15
Ball Count	196
Option	96.5Sn/3Ag/0.5Cu
Ball Size	0.6mm

Molding Compound

Item	% of Compound	Weight (g)	PPM
SiO2 Filler	77.0	2.46 E-01	328014
Epoxy resin	10.0	3.19 E-02	42599
Phenol Resin	10.0	3.19 E-02	42599
Metal Hydroxide	2.5	7.98 E-03	10650
Carbon Black	0.5	1.60 E-03	2130

Laminate

Item	% of Laminate	Weight (g)	PPM
BT-Epoxy	27.0	5.39 E-02	71978
Glass Fiber	25.0	4.99 E-02	66636
Copper	18.0	3.59 E-02	47954
Solder Mask	11.0	2.19 E-02	29245
Nickel	11.0	2.19 E-02	29245
Gold	8.0	1.60 E-02	21313

Solder Ball

	% of Solder Ball	Weight (g)	PPM
Sn	96.5	1.58 E-01	211527
Ag	3.0	4.92 E-03	6574
Cu	0.5	8.21 E-04	1096

Bond Wires

	% of Wire	Weight (g)	PPM
Au	99.99	5.10 E-03	6807

Chip

	% of Chip	Weight (g)	PPM
Si	100.0	2.05 E-02	27416

Die Attach

Item	% of Die Attach	Weight (g)	PPM
Ag	75.0	3.05 E-02	40663
Diester	12.5	5.08 E-03	6777
Resin	5.0	2.03 E-03	2711
Functionalized ester	5.0	2.03 E-03	2711
Functionalized urethene	2.5	1.02 E-03	1355

Package Totals

Weight (g)	PPM
7.49 E-01	1000000

Molding Compound

Item	PPM	Method
Pb	None Detected	USEPA3050B. ICP-AES
Cd	None Detected	EN 1122 Method B:2001. ICP-AES
Hg	None Detected	USEPA 3052. ICP-AES
Cr+6	None Detected	USEPA 3060A & USEPA 7196A
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	5.00	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.