Materials Declaration

Package	TQFP - EP
Body Size	10 X 10 X 1.0 (7.5EP)
LeadCount	64
Option	Pb-free, Halide-free

Molding Compound

Substance	% of Compound	Weight (g)	PPM
Silica	88	1.15 E-01	394725
Epoxy & Phenol Resir	11.5	1.51 E-02	51583
Carbon black	0.5	6.55 E-04	2243
Subtotal	100	1.31 E-01	448551

Leadframe

Substance	% of Leadframe	Weight (g)	PPM
Copper	99.25	9.71 E-02	332286
Chromium	0.30	2.93 E-04	1004
Tin	0.25	2.45 E-04	837
Zinc	0.20	1.96 E-04	670
Subtotal	100.00	9.78 E-02	334797

Internal Leadframe Plating

Substance	% of Plating	Weight (g)	PPM
Silver	100	1.20 E-03	4107

External Leadframe Plating

Substance	% of Plating	Weight (g)	PPM
Tin	100	8.86 E-03	30318

Bond Wires

Substance	% of Wire	Weight (g)	PPM
Gold	99.99	1.52 E-03	5216

Chip

Substance	% of Chip	Weight (g)	PPM
Doped Silicon	100	4.52 E-02	154555

Die Attach

Substance	% of Die Attach	Weight (g)	PPM
Silver	75.47	4.95 E-03	16948
Epoxy resin	18.87	1.24 E-03	4238
Gamma Butyrolactone	2.83	1.86 E-04	636
Curing agent & hardener	2.83	1.86 E-04	636
Subtotal	100.00	6.56 E-03	22457

Molding Compound

Substance	PPM	Method
Lead	Not Detected	Draft IEC 62321. ICP
Cadmium	Not Detected	Draft IEC 62321. ICP
Mercury	Not Detected	Draft IEC 62321. ICP
Chromium+6	Not Detected	Draft IEC 62321. Colorimetric Method.
Polybrominated biphenyls (PBB)	Not Detected	Draft IEC 62321. GC-MS.
Polybrominated Diphenyl Ethers (PBDE	Not Detected	Draft IEC 62321. GC-MS.

Die Attach Paste

Substance	PPM	Method
Lead	Not Detected	Draft IEC 62321. ICP-AES.
Cadmium	Not Detected	Draft IEC 62321. ICP-AES.
Mercury	Not Detected	Draft IEC 62321. ICP-AES.
Chromium+6	Not Detected	Draft IEC 62321. UV-VIS.
Polybrominated biphenyls (PBB)	Not Detected	Draft IEC 62321. GC-MS.
Polybrominated Diphenyl Ethers (PBDE	Not Detected	Draft IEC 62321. GC-MS.

Package Totals

Weight (g)	PPM
2.92 E-01	1000000

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

ANALOG DEVICES

ADI Proprietary

Materials Declaration

Package	TQFP - EP
Body Size	10 X 10 X 1.0 (7.5EP)
LeadCount	64
Option	With Pb, Halide-free

Molding Compound

Substance	% of Compound	Weight (g)	PPM
Silica	88	1.15 E-01	394725
Epoxy & Phenol Resin	11.5	1.51 E-02	51584
Carbon black	0.5	6.55 E-04	2242
Subtotal		1.31 E-01	448551

Leadframe

Substance	% of Leadframe	Weight (g)	PPM
Copper	99.25	9.71 E-02	332285
Chromium	0.30	2.93 E-04	1003
Tin	0.25	2.45 E-04	838
Zinc	0.20	1.96 E-04	671
Subtotal	100.00	9.78 E-02	334797

Internal Leadframe Plating

Substance	% of Plating	Weight (g)	PPM
Silver	100	1.20 E-03	4107

External Leadframe Plating

Substance	% of Plating	Weight (g)	PPM
Tin	85	7.53 E-03	25770
Lead	15	1.33 E-03	4548
Subtotal	100	8.86 E-03	30318

Bond Wires

Substance	% of Wire	Weight (g)	PPM
Gold	99.99	1.52 E-03	5216

Chip

Substance	% of Chip	Weight (g)	PPM
Doped Silicon	100	4.52 E-02	154555

Die Attach

Substance	% of Die Attach	Weight (g)	PPM
Silver	75.47	4.95 E-03	16948
Epoxy resin	18.87	1.24 E-03	4238
Gamma Butyrolactone	2.83	1.86 E-04	636
Curing agent & hardener	2.83	1.86 E-04	636
Subtotal	100.00	6.56 E-03	22457

Package Totals

Weight (g)	PPM
2.92 E-01	1000000

Molding Compound

Substance	PPM	Method
Lead	Not Detected	Draft IEC 62321. ICP
Cadmium	Not Detected	Draft IEC 62321. ICP
Mercury	Not Detected	Draft IEC 62321. ICP
Chromium+6	Not Detected	Draft IEC 62321. Colorimetric Method.
Polybrominated biphenyls (PBB)	Not Detected	Draft IEC 62321. GC-MS.
Polybrominated Diphenyl Ethers (PBDE)	Not Detected	Draft IEC 62321. GC-MS.

Die Attach Paste

Substance	PPM	Method
Lead	Not Detected	Draft IEC 62321. ICP-AES.
Cadmium	Not Detected	Draft IEC 62321. ICP-AES.
Mercury	Not Detected	Draft IEC 62321. ICP-AES.
Chromium+6	Not Detected	Draft IEC 62321. UV-VIS.
Polybrominated biphenyls (PBB)	Not Detected	Draft IEC 62321. GC-MS.
Polybrominated Diphenyl Ethers (PBDE)	Not Detected	Draft IEC 62321. GC-MS.

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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

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