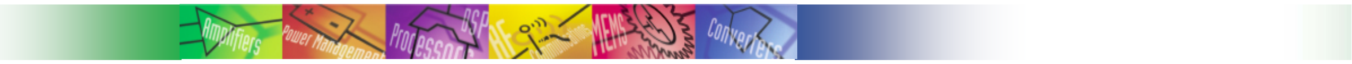

# Materials Declaration

| | |
|---|---|
| **Package** | TQFP - EP |
| **Body Size** | 12 X 12 |
| **LeadCount** | 80 |
| **Option** | Pb-Free |

### Molding Compound

| Item | % of Compound | Weight (g) | PPM |
|---|---|---|---|
| SiO2 Filler | 88 | 2.11 E-01 | 556661 |
| Multi-aromatic Resin | 11.5 | 2.75 E-02 | 72746 |
| Carbon Black | 0.5 | 1.20 E-03 | 3163 |
| Subtotal | | 2.39 E-01 | 632570 |

### Leadframe

| Item | % of Leadframe | Weight (g) | PPM |
|---|---|---|---|
| Cu | 99.25 | 1.07 E-01 | 282236 |
| Cr | 0.3 | 3.23 E-04 | 854 |
| Sn | 0.25 | 2.69 E-04 | 711 |
| Zn | 0.2 | 2.15 E-04 | 568 |
| Subtotal | | 1.08 E-01 | 284369 |

### Internal Leadframe Plating

| | % of Plating | Weight (g) | PPM |
|---|---|---|---|
| Ag | 100 | 9.60 E-04 | 2537 |

### External Leadframe Plating

| Item | % of Plating | Weight (g) | PPM |
|---|---|---|---|
| Sn | 100 | 7.37 E-03 | 19474 |

### Bond Wires

| | % of Wire | Weight (g) | PPM |
|---|---|---|---|
| Au | 99.99 | 1.66 E-03 | 4395 |

### Chip

| | % of Chip | Weight (g) | PPM |
|---|---|---|---|
| Si | 100 | 1.74 E-02 | 46094 |

### Die Attach

| Item | % of Die Attach | Weight (g) | PPM |
|---|---|---|---|
| Ag Filler | 70 | 2.80 E-03 | 7392 |
| Resin | 20 | 7.99 E-04 | 2112 |
| Anhydride | 10 | 4.00 E-04 | 1057 |
| Subtotal | | 4.00 E-03 | 10560 |

### Molding Compound

| Item | PPM | Method |
|---|---|---|
| Pb | None Detected | USEPA 3050B. ICP-AES. |
| Cd | None Detected | EN 1122:2001. ICP-AES |
| Hg | None Detected | USEPA 3052. ICP-AES |
| Cr+6 | None Detected | USEPA 3060A & 7196A. |
| PBB | None Detected | USEPA 3540C or 3550C. Analysis by HPLC/DAD, LC/MS or GC/MS. |
| PBDE | None Detected | USEPA 3540C or 3550C. Analysis by HPLC/DAD, LC/MS or GC/MS. |

### Die Attach Paste

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

### Package Totals

| Weight (g) | PPM |
|---|---|
| **3.78 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** | 12 X 12 |
| **LeadCount** | 80 |
| **Option** | SnPb |

**Molding Compound**

| Item | % of Compound | Weight (g) | PPM |
|---|---|---|---|
| SiO2 Filler | 88 | 2.08 E-01 | 546110 |
| Multi-aromatic Resin | 11.5 | 2.71 E-02 | 71367 |
| Carbon Black | 0.5 | 1.18 E-03 | 3103 |
| | | 2.36 E-01 | 620580 |

**Leadframe**

| Item | % of Leadframe | Weight (g) | PPM |
|---|---|---|---|
| Cu | 99.25 | 1.07 E-01 | 280823 |
| Cr | 0.3 | 3.23 E-04 | 849 |
| Sn | 0.25 | 2.69 E-04 | 707 |
| Zn | 0.2 | 2.15 E-04 | 565 |
| | | 1.08 E-01 | 282945 |

**Internal Leadframe Plating**

| | % of Plating | Weight (g) | PPM |
|---|---|---|---|
| Ag | 100 | 9.60 E-04 | 2524 |

**External Leadframe Plating**

| Item | % of Plating | Weight (g) | PPM |
|---|---|---|---|
| Sn | 85 | 6.78 E-03 | 17825 |
| Pb | 15 | 1.20 E-03 | 3145 |
| | | 7.98 E-03 | 20970 |

**Bond Wires**

| | % of Wire | Weight (g) | PPM |
|---|---|---|---|
| Au | 99.99 | 1.66 E-03 | 4373 |

**Chip**

| | % of Chip | Weight (g) | PPM |
|---|---|---|---|
| Si | 100 | 2.16 E-02 | 56723 |

**Die Attach**

| Item | % of Die Attach | Weight (g) | PPM |
|---|---|---|---|
| Ag Filler | 70 | 3.16 E-03 | 8320 |
| Resin | 20 | 9.04 E-04 | 2377 |
| Anhydride | 10 | 4.52 E-04 | 1189 |
| | | 4.52 E-03 | 11885 |

**Molding Compound**

| Item | PPM | Method |
|---|---|---|
| Pb | None Detected | USEPA 3050B. ICP-AES. |
| Cd | None Detected | EN 1122:2001. ICP-AES |
| Hg | None Detected | USEPA 3052. ICP-AES |
| Cr+6 | None Detected | USEPA 3060A & 7196A. |
| PBB | None Detected | USEPA 3540C or 3550C. Analysis by HPLC/DAD, LC/MS or GC/MS. |
| PBDE | None Detected | USEPA 3540C or 3550C. Analysis by HPLC/DAD, LC/MS or GC/MS. |

**Die Attach Paste**

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

**Package Totals**

| Weight (g) | PPM |
|---|---|
| **3.80 E-01** | 1000000 |

Note: The information provided in this declaration are true to the best of ADI's knowledge.
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ANALOG DEVICES

ADI Proprietary