## Product / Package Information

| | |
|---|---|
| **Package** | TSOT - COL |
| **Body Size/Pitch** | |
| **LeadCount** | 5 |
| **Option** | NiPdAu |

## Environmental Compliance Information

| | |
|---|---|
| **RoHS Compliant** | Yes |
| **High Temperature Compliant** | Yes |
| **Halogen Free Compliant** | Yes |
| **REACH SVHC Compliant** | Yes |

# Materials Declaration

### Molding Compound

| Description | Substance | CAS# | Weight (g) | Homogeneous Material Level | | Component Level | |
|---|---|---|---|---|---|---|---|
| | | | | Percentage (%) | PPM | Percentage (%) | PPM |
| Other inorganic materials | Silica | 60676-86-0 | 5.20 E-03 | 87.3 | 873000 | 44.93 | 449317 |
| Thermosets | Phenol Resin | Proprietary | 2.68 E-04 | 4.5 | 45000 | 2.32 | 23161 |
| Thermosets | Epoxy Resin 1 | Proprietary | 1.79 E-04 | 3.0 | 30000 | 1.54 | 15440 |
| Thermosets | Epoxy Resin 2 | Proprietary | 1.79 E-04 | 3.0 | 30000 | 1.54 | 15440 |
| Others | Others | Proprietary | 1.19 E-04 | 2.0 | 20000 | 1.03 | 10294 |
| Other inorganic materials | Carbon Black | 1333-86-4 | 1.19 E-05 | 0.2 | 2000 | 0.10 | 1029 |
| Subtotal | | | 5.96 E-03 | 100.0 | 1000000 | 51 | 514681 |

### Leadframe

| Description | Substance | CAS# | Weight (g) | Homogeneous Material Level | | Component Level | |
|---|---|---|---|---|---|---|---|
| | | | | Percentage (%) | PPM | Percentage (%) | PPM |
| Copper & its alloys | Copper | 7440-50-8 | 4.43 E-03 | 97.5 | 975000 | 38.24 | 382407 |
| Copper & its alloys | Iron | 7439-89-6 | 1.07 E-04 | 2.35 | 23500 | 0.92 | 9217 |
| Copper & its alloys | Zinc | 7440-66-6 | 5.45 E-06 | 0.12 | 1200 | 0.05 | 471 |
| Copper & its alloys | Phosphorus | 7723-14-0 | 1.36 E-06 | 0.03 | 300 | 0.01 | 118 |
| Subtotal | | | 4.54 E-03 | 100 | 1000000 | 39 | 392212 |

### Internal/External Leadframe Plating

| Description | Substance | CAS# | Weight (g) | Homogeneous Material Level | | Component Level | |
|---|---|---|---|---|---|---|---|
| | | | | Percentage (%) | PPM | Percentage (%) | PPM |
| Nickel & its alloys | Nickel | 7440-02-0 | 5.29 E-05 | 90.91 | 909091 | 0.46 | 4568 |
| Precious metals | Palladium | 7440-05-3 | 4.60 E-06 | 7.91 | 79051 | 0.04 | 397 |
| Precious metals | Gold | 7440-57-5 | 6.90 E-07 | 1.19 | 11858 | 0.01 | 60 |
| Subtotal | | | 5.82 E-05 | 100.00 | 1000000 | 0.50 | 5025 |

### Bond Wires

| Description | Substance | CAS# | Weight (g) | Homogeneous Material Level | | Component Level | |
|---|---|---|---|---|---|---|---|
| | | | | Percentage (%) | PPM | Percentage (%) | PPM |
| Precious metals | Gold | 7440-57-5 | 1.50 E-04 | 99.99 | 1000000 | 1.30 | 12952 |

### Chip

| Description | Substance | CAS# | Weight (g) | Homogeneous Material Level | | Component Level | |
|---|---|---|---|---|---|---|---|
| | | | | Percentage (%) | PPM | Percentage (%) | PPM |
| Other inorganic materials | Doped Silicon | 7440-21-3 | 8.00 E-04 | 100 | 1000000 | 6.91 | 69085 |

### Die Attach

| Description | Substance | CAS# | Weight (g) | Homogeneous Material Level | | Component Level | |
|---|---|---|---|---|---|---|---|
| | | | | Percentage (%) | PPM | Percentage (%) | PPM |
| Other inorganic materials | Aluminum oxide | 1344-28-1 | 2.45 E-05 | 35 | 350000 | 0.21 | 2116 |
| Other organic materials | Diethylene glycol monoethyl ether acetate | 112-15-1 | 2.45 E-05 | 35 | 350000 | 0.21 | 2116 |
| Thermoset | Epoxy Resin | Proprietary | 1.75 E-05 | 25 | 250000 | 0.15 | 1511 |
| Others | Amine | Proprietary | 3.50 E-06 | 5 | 50000 | 0.03 | 302 |
| Subtotal | | | 7.00 E-05 | 100 | 1000000 | 0.60 | 6045 |

| | Weight (g) | Percentage (%) | PPM |
|---|---|---|---|
| **Package Totals** | **1.16 E-02** | **100** | **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
any inaccuracy of such information.

ANALOG DEVICES

ADI Proprietary

## Product / Package Information

| | |
|---|---|
| **Package** | TSOT |
| **Body Size/Pitch** | |
| **Lead Count** | 5 |
| **Terminal Finish** | 100 Sn |

## Environmental Compliance Information

| | |
|---|---|
| **RoHS Compliant** | Yes |
| **High Temperature Compliant** | Yes |
| **Halogen Free Compliant** | Yes |
| **JIG Material Content Compliant** | Level A & B Compliant |
| **REACH SVHC Compliant** | Yes |

## Materials Declaration

### Molding Compound

| Description | Substance | CAS# | Weight (g) | Homogeneous Material Level | | Component Level | |
|---|---|---|---|---|---|---|---|
| | | | | Percentage (%) | PPM | Percentage (%) | PPM |
| Other inorganic materials | Silica | 60676-86-0 | 5.20 E-03 | 87.3 | 873000 | 42.76 | 427646 |
| Thermosets | Phenol Resin | Proprietary | 2.68 E-04 | 4.5 | 45000 | 2.20 | 22044 |
| Thermosets | Epoxy Resin 1 | Proprietary | 1.79 E-04 | 3.0 | 30000 | 1.47 | 14696 |
| Thermosets | Epoxy Resin 2 | Proprietary | 1.79 E-04 | 3.0 | 30000 | 1.47 | 14696 |
| Others | Others | Proprietary | 1.19 E-04 | 2.0 | 20000 | 0.98 | 9797 |
| Other inorganic materials | Carbon Black | 1333-86-4 | 1.19 E-05 | 0.2 | 2000 | 0.10 | 980 |
| Subtotal | | | 5.96 E-03 | 100.0 | 1000000 | 49 | 489858 |

### Leadframe

| Description | Substance | CAS# | Weight (g) | Homogeneous Material Level | | Component Level | |
|---|---|---|---|---|---|---|---|
| | | | | Percentage (%) | PPM | Percentage (%) | PPM |
| Copper & its alloys | Copper | 7440-50-8 | 4.44 E-03 | 97.5 | 975000 | 36.49 | 364940 |
| Copper & its alloys | Iron | 7439-89-6 | 1.07 E-04 | 2.35 | 23500 | 0.88 | 8796 |
| Copper & its alloys | Zinc | 7440-66-6 | 5.46 E-06 | 0.12 | 1200 | 0.04 | 449 |
| Copper & its alloys | Phosphorus | 7723-14-0 | 1.37 E-06 | 0.03 | 300 | 0.01 | 112 |
| Subtotal | | | 4.55 E-03 | 100 | 1000000 | 37 | 374297 |

### Internal Leadframe Plating

| Description | Substance | CAS# | Weight (g) | Homogeneous Material Level | | Component Level | |
|---|---|---|---|---|---|---|---|
| | | | | Percentage (%) | PPM | Percentage (%) | PPM |
| Precious metals | Silver | 7440-22-4 | 4.60 E-05 | 100 | 1000000 | 0.38 | 3781 |

### External Leadframe Plating

| Description | Substance | CAS# | Weight (g) | Homogeneous Material Level | | Component Level | |
|---|---|---|---|---|---|---|---|
| | | | | Percentage (%) | PPM | Percentage (%) | PPM |
| Tin & its alloys | Tin | 7440-31-5 | 5.87 E-04 | 100 | 1000000 | 4.82 | 48231 |

### Bond Wires

| Description | Substance | CAS# | Weight (g) | Homogeneous Material Level | | Component Level | |
|---|---|---|---|---|---|---|---|
| | | | | Percentage (%) | PPM | Percentage (%) | PPM |
| Precious metals | Gold | 7440-57-5 | 1.50 E-04 | 99.99 | 1000000 | 1.23 | 12327 |

### Chip

| Description | Substance | CAS# | Weight (g) | Homogeneous Material Level | | Component Level | |
|---|---|---|---|---|---|---|---|
| | | | | Percentage (%) | PPM | Percentage (%) | PPM |
| Other inorganic materials | Doped Silicon | 7440-21-3 | 8.00 E-04 | 100 | 1000000 | 6.58 | 65753 |

### Die Attach

| Description | Substance | CAS# | Weight (g) | Homogeneous Material Level | | Component Level | |
|---|---|---|---|---|---|---|---|
| | | | | Percentage (%) | PPM | Percentage (%) | PPM |
| Precious metals | Silver | 7440-22-4 | 5.64 E-05 | 80.50 | 805000 | 0.46 | 4631 |
| Other organic materials | Carbocyclic Acrylates | Proprietary | 7.00 E-06 | 10.00 | 100000 | 0.06 | 575 |
| Other organic materials | Bismaleimide resin | Proprietary | 2.10 E-06 | 3.00 | 30000 | 0.02 | 173 |
| Other organic materials | 2-preponoic acid, 2-methyl | 68586-19-6 | 2.10 E-06 | 3.0 | 30000 | 0.02 | 173 |
| Others | Additive | Proprietary | 2.10 E-06 | 3.0 | 30000 | 0.02 | 173 |
| Other organic materials | Dicumyl peroxide | 80-43-3 | 3.50 E-07 | 0.5 | 5000 | 0.00 | 29 |
| Subtotal | | | 7.00 E-05 | 100.00 | 1000000 | 0.58 | 5753 |

| | Weight (g) | Percentage (%) | PPM |
|---|---|---|---|
| **Package Totals** | **1.22 E-02** | **100** | **1000000** |

Note: The information provided in this declaration are true to the best of ADI's knowledge
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any inaccuracy of such information.

ANALOG DEVICES