

8 Leads - SOIC
Package Material Declaration



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|------------------------|------------------------------|----------------|--------------------|
| Date | 16-Aug-18 | Product name | Integrated Circuit |
| Package Code | DC | RoHS Compliant | Y |
| Package Name | Plastic Small Outline 150mil | Halogen Free | Y |
| Product Total Mass (g) | 0.07446 | Plating | Pure Matte Sn |

| | |
|-----------------------|----------|
| Product Number | MLX91216 |
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Material Declaration

| Part Name | Material Name | Component Weight (g) | Material Component (Element) | CAS # | Element ratio (%) | Material Weight (g) | Ratio total Wt (ppm) |
|---------------------|-----------------------|----------------------|------------------------------|-------------|-------------------|---------------------|----------------------|
| Leadframe | Zirconium Copper C151 | 0.02401 | Copper (Cu) (remaining) | 7440-50-8 | 99.9393 | 0.02400 | 322238 |
| | | | Iron (Fe) (0.005 max) | 7439-89-6 | 0.0001 | 0.00000002 | 0.3 |
| | | | Manganese (Mn) (0.005 max) | 7439-96-5 | 0.0001 | 0.00000002 | 0.3 |
| | | | Aluminium (Al) (0.005 max) | 7429-90-5 | 0.0005 | 0.00000001 | 2 |
| | | | Zirconium (Zr) (0.05~0.15%) | 7440-67-7 | 0.06 | 0.00001 | 193 |
| Plating | Silver | 0.00024 | Silver (Ag) | 7440-22-4 | 100 | 0.00024 | 3263 |
| Die | Silicon IC | 0.00302 | Silicon (Si) | 7440-21-3 | 99.99 | 0.00302 | 40552 |
| | | | others | - | 0.01 | 0.00000003 | 4 |
| IMC | S-FeNi-8 | 0.000012 | Iron (Fe) | 7439-89-6 | 19.75 | 0.000002 | 32 |
| | | | Nickel (Ni) (0.0 ~ 80%) | 7440-02-0 | 40 | 0.000005 | 64 |
| | | | Molybdenum (Mo) (0.0 ~ 80%) | 7439-98-7 | 40 | 0.000005 | 64 |
| | | | others (max. 0.5%) | - | 0.25 | 0.00000003 | 0.4 |
| Die attach material | Conductive epoxy 8290 | 0.00113 | Epoxy resin (10~30%) | Proprietary | 15 | 0.00017 | 2276 |
| | | | Gamma Butyrolactone (1~10%) | Proprietary | 5 | 0.00006 | 759 |
| | | | Amine (1~10%) | Proprietary | 5 | 0.00006 | 759 |
| | | | Metal Oxide (1~10%) | Proprietary | 5 | 0.00006 | 759 |
| | | | Silver Ag (70~90%) | 7440-22-4 | 70 | 0.00079 | 10622 |
| Wire | Gold | 0.00030 | Gold (Au) | 7440-57-5 | 99 | 0.00030 | 3988 |
| | | | Palladium (Pd) | 7440-05-3 | 1 | 0.000003 | 40 |
| Lead Finish | Alloy | 0.00137 | Tin (Sn) | 7440-31-5 | 99.99 | 0.00137 | 18396 |
| | | | Others | - | 0.01 | 0.00000014 | 2 |
| Encapsulation | Epoxy resin G700HA | 0.04438 | Silica fused (75~95%) | 60676-86-0 | 87.7 | 0.03892 | 522679 |
| | | | Epoxy Resin (4~10%) | Proprietary | 7 | 0.00311 | 41719 |
| | | | Phenol Resin (2~8%) | Proprietary | 5 | 0.00222 | 29799 |
| | | | Carbon Black (0.1~0.5%) | 1333-86-4 | 0.3 | 0.00013 | 1788 |

Total package weight (g) 0.07446

Comments

- Composition derived from MSDS and material CoC from vendors
- Component weight based on assembly of generic parts
- Reliability qualification reports are available upon request through the appropriate sales or marketing contact
- Third party testing for RoHS substances are available upon request to environment@melexis.com

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