# Device Material Content

**Assembly:** ASEM  
**Size (mm):** 5 x 5  
**Lead pitch (mm):** 0.4  
**MSL:** 3  
**Reflow max (ºC):** 260

<table>
<thead>
<tr>
<th>Package Code:</th>
<th>CM121</th>
</tr>
</thead>
<tbody>
<tr>
<td>Package:</td>
<td>121 ucBGA</td>
</tr>
<tr>
<td>Total Device Weight</td>
<td>41.84 Milligrams</td>
</tr>
</tbody>
</table>

## Package Information

- **Size (mm):** 5 x 5
- **Lead pitch (mm):** 0.4
- **Reflow max (ºC):** 260

## Components

### Die
- **Weight (mg):** 1.298  
- **% of Total Pkg. Wt.:** 3.10%  
- **Substance:** Silicon chip  
- **CAS #:** 7440-21-3  
- **% of Subst.:** 100.00%  

### Mold Compound
- **Weight (mg):** 22.585  
- **% of Total Pkg. Wt.:** 55.98%  
- **Substances:** Silica, Epoxy resin, Phenol Resin, Carbon Black  
- **CAS #:** 60676-86-0, - , - , 1333-86-4  
- **% of Subst.:** 87.50%, 6.50%, 5.50%, 0.50%  

### D/A Tape
- **Weight (mg):** 0.063  
- **% of Total Pkg. Wt.:** 0.15%  
- **Substances:** Epoxy Resin, Phenol Resin, Silica Filler  
- **CAS #:** 99439-28-8, 19943-38-4, 99439-28-8  
- **% of Subst.:** 15.00%, 15.00%, 87.50%  

### Wire
- **Weight (mg):** 0.582  
- **% of Total Pkg. Wt.:** 1.39%  
- **Substances:** Copper, Palladium  
- **CAS #:** 7440-50-8, 7440-05-3  
- **% of Subst.:** 97.30%, 2.70%  

### Solder Balls
- **Weight (mg):** 1.042  
- **% of Total Pkg. Wt.:** 2.49%  
- **Substances:** Tin (Sn), Silver (Ag), Copper (Cu)  
- **CAS #:** 7440-31-5, 7440-22-4, 7440-50-8  
- **% of Subst.:** 98.50%, 1.00%, 0.50%  

### Substrate
- **Weight (mg):** 7.7465  
- **% of Total Pkg. Wt.:** 18.51%  
- **Substances:** BT Resins, Glass fiber  
- **CAS #:** 65997-17-3, -  
- **% of Subst.:** 68.00%, 32.00%  

### Foil
- **Weight (mg):** 6.1962  
- **% of Total Pkg. Wt.:** 14.81%  
- **Substances:** Copper, Nickel plating, Gold plating  
- **CAS #:** 7440-50-8, 7440-02-0, 7440-57-5  
- **% of Subst.:** 79.39%, 18.75%, 1.86%  

### Solder Mask
- **Weight (mg):** 2.3246  
- **% of Total Pkg. Wt.:** 5.56%  
- **Substances:** Quartz, Dipropylene glycol monomethyl ether, Morpholine derivative**, Silicon dioxide, Silica, amorphous Carbon black, Trade secret ingredients  
- **CAS #:** 14808-60-7, 34590-94-8, 71868-10-5, 7631-86-9, 112945-52-5, 1333-86-4, -  
- **% of Subst.:** 54.37%, 7.53%, 3.32%, 3.00%, 3.00%, 0.24%, 28.74%  

**Notes:**

- **SVHC:** * 0.19% max. concentration of Bisphenol A (CAS® 80-05-7), contained in substrate laminate material as impurity - not intentionally added.  
- **SVHC:** ** 0.18% max. concentration of Morpholine derivative (CAS® 71868-10-5), contained in solder mask material.

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