

# Material Declaration Form

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ams AG  
Tobelbader Strasse 30  
A-8141 Premstaetten, Austria  
Tel +43 (0) 3136 500-0



| Ordering Code | Production Version | Package Family | Assembly Material Number | Lead Count | Weight (mg) | Manufacturing Country | Halogen Free | EU RoHS | China Rohs | Release Status | Report Version |
|---------------|--------------------|----------------|--------------------------|------------|-------------|-----------------------|--------------|---------|------------|----------------|----------------|
| CSG8K-1E5C1LA | Supplier 1         | LGA            | 512010003                | 216        | 3,336.45    | Japan                 | NO           | YES     | YES        |                | 1              |

## Production Version: Supplier 1

| Homogenous Material | Weight (mg) | Symbol    | Chemical Substance  | Input Ratio (%) | CAS Number  | Unit Weight (mg) | Unit Weight (%) | Amount (ppm)  |
|---------------------|-------------|-----------|---|-----------------|-------------|------------------|-----------------|---------------|
| Wire                | 4.55        | Au        | Gold  | 100.00          | 7440-57-5   | 4.55000          | 0.13637         | 1364          |
| <b>Subtotal:</b>    |             |           |   | <b>100.00</b>   |             | <b>4.55000</b>   | <b>0.13637</b>  | <b>1364</b>   |
| Adhesive (Glass)    | 5.3         | 10H13CIO3 | Phenol/<br>formaldehyde/<br>epichloronhydrin<br>copolymer | 55.00           | 9003-36-5   | 2.91500          | 0.08737         | 874           |
|                     |             |           | Additive agents   | 20.00           | 14807-96-6  | 1.06000          | 0.03177         | 318           |
|                     |             |           | Photoinitiators/Curing<br>agents                          | 5.00            | 125054-47-9 | 0.26500          | 0.00794         | 79            |
|                     |             |           | UV curable monomers                                       | 20.00           | 2386-87-0   | 1.06000          | 0.03177         | 318           |
| <b>Subtotal:</b>    |             |           |   | <b>100.00</b>   |             | <b>5.30000</b>   | <b>0.15885</b>  | <b>1589</b>   |
| IC                  | 459.1       | Si        | Silicon   | 100.00          | 7440-21-3   | 459.10000        | 13.76013        | 137601        |
| <b>Subtotal:</b>    |             |           |   | <b>100.00</b>   |             | <b>459.10000</b> | <b>13.76013</b> | <b>137601</b> |
| Glass LID           | 537.4       |           | Inorganic Glass   | 100.00          | 65997-17-3  | 537.40000        | 16.10694        | 161069        |
| <b>Subtotal:</b>    |             |           |   | <b>100.00</b>   |             | <b>537.40000</b> | <b>16.10694</b> | <b>161069</b> |

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## Production Version: Supplier 1

| Homogenous Material | Weight (mg) | Symbol           | Chemical Substance | Input Ratio (%) | CAS Number | Unit Weight (mg)  | Unit Weight (%) | Amount (ppm)  |
|---------------------|-------------|------------------|--------------------|-----------------|------------|-------------------|-----------------|---------------|
| Ceramic Package     | 2,319.1     | Al2O3            | Aluminum Oxide     | 82.81           | 1344-28-1  | 1920.36153        | 57.55703        | 575570        |
|                     |             | Au               | Gold               | 0.24            | 7440-57-5  | 5.65622           | 0.16953         | 1695          |
|                     |             | B                | Boron              | 0.00            | 7440-42-8  | 0.03653           | 0.00109         | 11            |
|                     |             | Bi               | Bismuth            | 0.00            | 7440-69-9  | 0.00209           | 0.00006         | 1             |
|                     |             | CaO              | Calcium Oxide      | 0.55            | 1305-78-8  | 12.73167          | 0.38159         | 3816          |
|                     |             | Cr2O3            | Chromium Oxide     | 3.57            | 1308-38-9  | 82.75590          | 2.48036         | 24804         |
|                     |             | MgO              | Magnesium Oxide    | 0.46            | 1309-48-4  | 10.60974          | 0.31799         | 3180          |
|                     |             | Mo               | Molybdenum         | 0.66            | 7439-98-7  | 15.31798          | 0.45911         | 4591          |
|                     |             | Ni               | Nickel             | 0.42            | 7440-02-0  | 9.69753           | 0.29065         | 2907          |
|                     |             | P                | Phosphorus         | 0.02            | 7723-14-0  | 0.41732           | 0.01251         | 125           |
|                     |             | Pd               | Palladium          | 0.01            | 7440-05-3  | 0.27961           | 0.00838         | 84            |
|                     |             | SiO2             | Silicon Dioxide    | 3.20            | 7631-86-9  | 74.26813          | 2.22596         | 22260         |
|                     |             | Tl               | Thallium           | 0.00            | 7440-28-0  | 0.00056           | 0.00002         | 0             |
|                     |             | W                | Tungsten           | 7.15            | 7440-33-7  | 165.74573         | 4.96773         | 49677         |
|                     |             |                  | Titanium Dioxide   | 0.91            | 13463-67-7 | 21.21946          | 0.63599         | 6360          |
|                     |             | <b>Subtotal:</b> |                    | <b>100.00</b>   |            | <b>2319.10000</b> | <b>69.50801</b> | <b>695080</b> |

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## Production Version: Supplier 1

| Homogenous Material | Weight (mg)     | Symbol           | Chemical Substance | Input Ratio (%) | CAS Number | Unit Weight (mg) | Unit Weight (%)  | Amount (ppm)   |
|---------------------|-----------------|------------------|--------------------|-----------------|------------|------------------|------------------|----------------|
| Adhesive            | 11              | C15H16O2         | Epoxy Resin        | 50.00           | 25068-38-6 | 5.50000          | 0.16485          | 1648           |
|                     |                 | SiO2             | Silica             | 49.50           | 7631-86-9  | 5.44500          | 0.16320          | 1632           |
|                     |                 |                  | Carbon Black       | 0.50            | 1333-86-4  | 0.05500          | 0.00165          | 16             |
|                     |                 | <b>Subtotal:</b> |                    | <b>100.00</b>   |            | <b>11.00000</b>  | <b>0.32969</b>   | <b>3297</b>    |
| <b>Total:</b>       | <b>3,336.45</b> |                  |                    |                 |            | <b>3,336.45</b>  | <b>100.00000</b> | <b>1000000</b> |

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