

# ASTM E617

Tolerances have been converted from avoirdupois to metric and rounded to two significant figures.

| Nominal Size | Class 0  | Class 1  | Class 2  | Class 3 | Class 4 |
|--------------|----------|----------|----------|---------|---------|
| 1g           | 0.017 mg | 0.034 mg | 0.054 mg | 0.10 mg | 0.20 mg |
| 2g           | 0.017 mg | 0.034 mg | 0.054 mg | 0.13 mg | 0.26 mg |
| 5g           | 0.017 mg | 0.034 mg | 0.054 mg | 0.18 mg | 0.36 mg |
| 10g          | 0.025 mg | 0.050 mg | 0.074 mg | 0.25 mg | 0.5 mg  |
| 50g          | 0.060 mg | 0.12 mg  | 0.25 mg  | 0.60 mg | 1.2 mg  |
| 100g         | 0.13g mg | 0.25 mg  | 0.50 mg  | 1.0 mg  | 2.0 mg  |
| 200g         | 0.25 mg  | 0.50 mg  | 1.0 mg   | 2.0 mg  | 4.0 mg  |
| 500g         | 0.60 mg  | 1.2 mg   | 2.5 mg   | 5.0 mg  | 10 mg   |
| 1kg          | 1.3 mg   | 2.5 mg   | 5.0 mg   | 10 mg   | 20 mg   |
| 2kg          | 2.5 mg   | 5.0 mg   | 10 mg    | 20 mg   | 40 mg   |
| 5kg          | 6.0 mg   | 12 mg    | 25 mg    | 50 mg   | 100 mg  |
| 10kg         | 13 mg    | 25 mg    | 50 mg    | 100 mg  | 200 mg  |

## OIML R111-I 2004

**Tolerance for weights of denominations between those listed can be determined as follows:**

- If the unit of measure is non-metric, convert the nominal value to a metric unit.
- For weights that are between those listed, the tolerance for the next lower weight shall be applied

| Nominal Size | Class E2 | Class F1 | Class M1 |
|--------------|----------|----------|----------|
| 1mg          | 0.006 mg | 0.020 mg | 0.20 mg  |
| 2mg          | 0.006 mg | 0.020 mg | 0.20 mg  |
| 5mg          | 0.006 mg | 0.020 mg | 0.20 mg  |
| 10mg         | 0.008 mg | 0.025 mg | 0.25 mg  |
| 20mg         | 0.010 mg | 0.03 mg  | 0.30 mg  |
| 50mg         | 0.012 mg | 0.04 mg  | 0.40 mg  |
| 100mg        | 0.016 mg | 0.05 mg  | 0.50 mg  |
| 200mg        | 0.020 mg | 0.06 mg  | 0.60 mg  |
| 500mg        | 0.025 mg | 0.08 mg  | 0.80 mg  |
| 1g           | 0.030 mg | 0.10 mg  | 1.0 mg   |
| 2g           | 0.040 mg | 0.12 mg  | 1.2 mg   |
| 5g           | 0.050 mg | 0.16 mg  | 1.6 mg   |
| 10g          | 0.060 mg | 0.20 mg  | 2.0 mg   |
| 20g          | 0.080 mg | 0.25 mg  | 2.5 mg   |
| 50g          | 0.10 mg  | 0.30 mg  | 3.0 mg   |
| 100g         | 0.16 mg  | 0.5 mg   | 5.0 mg   |
| 200g         | 0.30 mg  | 1.0 mg   | 10.0 mg  |
| 500g         | 0.8 mg   | 2.5 mg   | 25.0 mg  |
| 1kg          | 1.6 mg   | 5 mg     | 50.0 mg  |
| 2kg          | 3.0 mg   | 10 mg    | 100.0 mg |