# Platinum Classic Flat Bottomed Crucible with Pouring Lip

Pt flat crucible with pouring lip (99.99%, OD 35–44 mm) for XRF/ICP lithium borate bead fusion — controlled pouring cuts material loss, stable above 1000 °C. **SKU:** 1000236191-group
**Product Code:** PT00-CB

## Material Properties for Precious Metals

### Atomic Properties

| Element | Value |
|---|---|
| Atomic number | 78 |
| Crystal structure | Face centred cubic |
| Electronic structure | Xe $4f^{1}$? 5d? $6s^{1}$ |
| Valences shown | 1,2,3,4 |
| Atomic weight( amu ) | 195.08 |
| Thermal neutron absorption cross-section( Barns ) | 9 |
| Photo-electric work function( eV ) | 5.3 |
| Natural isotope distribution( Mass No./% ) | 192/ 0.79 |
| Natural isotope distribution( Mass No./% ) | 196/ 25.30 |
| Natural isotope distribution( Mass No./% ) | 190/ 0.01 |
| Natural isotope distribution( Mass No./% ) | 195/ 33.80 |
| Natural isotope distribution( Mass No./% ) | 198/ 7.20 |
| Natural isotope distribution( Mass No./% ) | 194/ 32.90 |
| Atomic radius - Goldschmidt( nm ) | 0.138 |
| Ionisation potential( No./eV ) | 1/ 9.0 |
| Ionisation potential( No./eV ) | 2/ 18.6 |

### Mechanical Properties

| Element | Value |
|---|---|
| Material condition | Hard |
| Material condition | Soft |
| Poisson's ratio | 0.39 |
| Poisson's ratio | 0.39 |

| Element | Value |
|---|---|
| Bulk modulus( GPa ) | 276 |
| Bulk modulus( GPa ) | 276 |
| Tensile modulus( GPa ) | 170 |
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| Hardness - Vickers( kgf mm?² ) | 40 |
| Hardness - Vickers( kgf mm?² ) | 100 |
| Tensile strength( MPa ) | 200-300 |
| Tensile strength( MPa ) | 125-150 |
| Yield strength( MPa ) | 14-35 |
| Yield strength( MPa ) | 185 |

## Electrical Properties

| Element | Value |
|---|---|
| Electrical resistivity( µOhmcm ) | 10.58@20°C |
| Temperature coefficient( K?¹ ) | 0.00392@0-100°C |

## Physical Properties

| Element | Value |
|---|---|
| Boiling point( C ) | 3827 |
| Density( gcm?³ ) | 21.45@20°C |

## Thermal Properties

| Element | Value |
|---|---|
| Melting point( C ) | 1772 |
| Latent heat of evaporation( J g?¹ ) | 2405 |
| Latent heat of fusion( J g?¹ ) | 101 |
| Specific heat( J K?¹ kg?¹ ) | 133@025°C |
| Thermal conductivity( W m?¹ K?¹ ) | 71.6@0-100°C |
| Coefficient of thermal expansion( x10?? K?¹ ) | 9@0-100 |