



118 Julian Place, Suite 137
 Syracuse, NY 13210
 Tel: (315) 802-4332
 Sales@QSrarematerials.com

Certificate of Analysis

Product Name: PBN Crucible
 Purity: >99.99 %
 Lot Number:
 Date: 1/5/2018

| Element | Concentration [ppm wt] | Element | Concentration [ppm wt] |
|---------|-----------------------------|---------|-----------------------------|
| Li | < 0.05 | Pd | < 0.1 |
| Be | < 0.05 | Ag | < 0.1 |
| B | Matrix | Cd | < 0.5 |
| C | - | In | Binder |
| N | Matrix | Sn | < 1 |
| O | - | Sb | < 0.5 |
| F | < 1 | Te | < 0.5 |
| Na | 0.44 | I | < 0.1 |
| Mg | 0.07 | Cs | < 0.1 |
| Al | 0.37 | Ba | < 0.05 |
| Si | 2.1 | La | < 0.05 |
| P | < 0.05 | Ce | < 0.05 |
| S | < 0.5 | Pr | < 0.5 |
| Cl | 5.7 | Nd | < 0.05 |
| K | < 0.5 | Sm | < 0.05 |
| Ca | < 0.1 | Eu | < 0.05 |
| Sc | < 0.01 | Gd | < 0.05 |
| Ti | 0.33 | Tb | < 0.05 |
| V | < 1 | Dy | < 0.05 |
| Cr | < 0.1 | Ho | < 0.05 |
| Mn | < 0.1 | Er | < 0.05 |
| Fe | < 0.1 | Tm | < 0.05 |
| Co | < 0.05 | Yb | < 0.05 |
| Ni | < 0.1 | Lu | < 0.05 |
| Cu | < 1 | Hf | < 0.05 |
| Zn | < 0.1 | Ta | Source |
| Ga | < 0.1 | W | < 0.5 |
| Ge | < 0.5 | Re | < 0.05 |
| As | < 0.1 | Os | < 0.1 |
| Se | < 0.5 | Ir | < 0.1 |
| Br | < 0.5 | Pt | < 0.1 |
| Rb | < 0.05 | Au | < 0.1 |
| Sr | < 0.1 | Hg | < 0.5 |
| Y | < 0.05 | Tl | < 0.1 |
| Zr | < 0.05 | Pb | < 0.5 |
| Nb | < 0.05 | Bi | < 0.1 |
| Mo | < 0.05 | Th | < 0.01 |
| Ru | < 0.1 | U | < 0.01 |
| Rh | < 0.05 | | |

QS Rare Elements, LLC
 Date: 1/5/2018