

### Physical & Mechanical Properties

| Composition |       | Melting Range     |                   | Density (g/cc) | Hardness (HV) |
|-------------|-------|-------------------|-------------------|----------------|---------------|
| Pt          | 90.0% | 1790° C - 1800° C | 3254° F - 3272° F | 21.56          | 162 (As Cast) |
| Ir          | 10.0% |                   |                   |                |               |
| Co          | 0.0%  |                   |                   |                |               |

### Melting & Casting Instructions

| Temperatures |                                |                   |                   |
|--------------|--------------------------------|-------------------|-------------------|
|              | Casting Weight                 | °C                | °F                |
| Casting      | Medium to Heavy                | 2000° C – 2050° C | 3632° F – 3722° F |
|              | Light weight detailed Castings | 2100° C – 2150° C | 3812° F – 3902° F |
| Flask        | Heavy Weight mountings         | 649° C – 760° C   | 1200° F – 1400° F |
|              | Medium Weight mountings        | 816° C – 871° C   | 1500° F – 1600° F |
|              | Delicate Light mountings       | 927° C – 982° C   | 1700° F – 1800° F |

|                    |                 |
|--------------------|-----------------|
| <b>Quench Time</b> | 15 - 20 Minutes |
|--------------------|-----------------|

|                  |               |
|------------------|---------------|
| <b>Remelting</b> | 50% Fresh Mix |
|------------------|---------------|

|                           |                                   |
|---------------------------|-----------------------------------|
| <b>Investment Removal</b> | Recommended Pt Investment remover |
|---------------------------|-----------------------------------|

### General Instructions

- Use only ceramic crucibles designed for melting platinum. Flux should never be used for Pt alloys.
- Use phosphate, acid bonded or other investment materials specifically designed for platinum casting. Use recommended Pt Investment remover to remove all investment before remelting.
- Wear proper eye protection when melting platinum alloys.