

**GENERAL INFORMATION**
**General information**

|                        |                       |
|------------------------|-----------------------|
| Typology               | Ready to use platinum |
| Color                  | Platinum              |
| Color shade            | Premium white         |
| Production process     | All-purpose           |
| Grain refinement level | High                  |
| Deoxidation level      | Minimum               |

**Commercial composition (%)**

|    |      |
|----|------|
| PT | 95.5 |
| RU | 4.5  |

**Melting Temperatures**

|                    |        |
|--------------------|--------|
| Solidus [°C]       | 1730.0 |
| Liquidus [°C]      | 1760.0 |
| Melting range [°C] | 30.0   |

**FULL CHARACTERIZATION DATA**
**Color coordinates**

| L *  | a*  | b*  | c*  | Yellow Index |
|------|-----|-----|-----|--------------|
| 87.9 | 0.4 | 3.2 | 3.2 | 6.8          |

**Mechanical characteristics**

|                                       |       |
|---------------------------------------|-------|
| As cast hardness [HV 0.2]             | 165.0 |
| Hardness after 70% area red. [HV 0.2] | 285.0 |
| Hardness after annealing [HV 0.2]     | 170.0 |
| Tensile strength (Rm) [Mpa]           | 540.0 |
| Yield strength (Rp0.2) [MPa]          | 250.0 |
| Elongation at rupture (A) [%]         | 20.0  |

**Physical characteristics**

|                              |      |
|------------------------------|------|
| Density [g/cm <sup>3</sup> ] | 20.6 |
|------------------------------|------|

**General characteristics**

|                         |      |
|-------------------------|------|
| As cast grain size [μm] | 95.0 |
|-------------------------|------|

**Product applications**

Ingot casting  
 Casting in closed systems  
 Casting in open systems  
 Casting without stones  
 Casting without stones  
 Wire production  
 Sheet production

**CASTING PROCESSING PARAMETERS**
**Pre-melting temperature**

Temperature [°C]

**POURING TEMPERATURES**

|              |     |     |      |      |
|--------------|-----|-----|------|------|
| < 0.5 mm     | 800 | 900 | 1840 | 1880 |
| 0.5 - 1.2 mm | 750 | 850 | 1820 | 1860 |
| > 1.2 mm     | 700 | 800 | 1800 | 1840 |

**Flask from [°C]**
**Flask to [°C]**
**Metal from [°C]**
**Metal to [°C]**
**Trees without stones**

Let the flask cool down for 3-4 minutes under inert atmosphere, then quench it in water.

**Pickling**

Use water jet or sandblaster.

**MECHANICAL WORKING PARAMETERS**
**Pre-melting temperature**

Temperature [°C]

**Reductions**

|                               |      |
|-------------------------------|------|
| Wire - diameter (%)           | 40.0 |
| Sheet - area or thickness (%) | 60.0 |

**POURING TEMPERATURES**
**Countinous from [°C]**
**Countinous to [°C]**
**Ingot to [°C]**
**Ingot from [°C]**
**Temperatures**

1840

1880

**MECHANICAL WORKING ANNEALING**
**Temp. from [°C]**
**Temp. to [°C]**
**Time [min]**

|          |     |     |    |
|----------|-----|-----|----|
| < 1 mm   | 930 | 970 | 30 |
| 1 - 5 mm | 930 | 970 | 45 |
| > 5 mm   | 930 | 970 | 60 |

**Mechanical working quenching**