

**MASTER  
ALLOY**
**C145N 375‰**

MASTER ALLOY FOR CASTING OF 375-585-750‰ (9-14-18 KT) RED GOLD

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

|                    |                       |
|--------------------|-----------------------|
| Color              | Red                   |
| Color shade        | Pink                  |
| Typology           | Master alloy for gold |
| Production process | Casting               |

**Melting temperatures**

|               |       |
|---------------|-------|
| Liquidus [°C] | 940.0 |
| Solidus [°C]  | 845.0 |

**Commercial composition**

|            |       |
|------------|-------|
| Silver (%) | 16,00 |
| Copper (%) | 82,00 |
| Zinc (%)   | 2,00  |



GOLD line

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

|    |      |
|----|------|
| L* | 85.7 |
| a* | 7.3  |
| b* | 15.2 |

**Physical characteristics**

|                              |      |
|------------------------------|------|
| Density [g/cm <sup>3</sup> ] | 11.2 |
|------------------------------|------|

**Mechanical characteristics**

|                           |       |
|---------------------------|-------|
| As cast hardness [HV 0.2] | 140.0 |
|---------------------------|-------|

**Product applications**

|                           |
|---------------------------|
| Stone-in-place casting    |
| Casting in open systems   |
| Casting in closed systems |
| Casting without stones    |

**RELATED PRODUCTS LIST**
**Related Products**

|        |  |
|--------|--|
| LSR490 | Master alloy for soldering of 375-585-750‰ (9-14-18 Kt) red gold |
| LSR500 | Master alloy for soldering of 585-750‰ (14-18 Kt) red gold       |

**Alternative Products**

|        |   |
|--------|---|
| OR129C | Master alloy for casting of 375-585‰ (9-14 Kt) red gold                   |
| OR129W | Master alloy for mechanical working of 375-585-750‰ (9-14-18 Kt) red gold |

**CASTING PROCESSING PARAMETERS**

Pre-mixing temperature [°C] 1060.0

| CASTING TEMPERATURES | Flask from [°C] | Flask to [°C] | Metal from [°C] | Metal to [°C] |
|----------------------|-----------------|---------------|-----------------|---------------|
| < 0.5 mm             | 660.0           | 720.0         | 1040.0          | 1070.0        |
| 0.5 - 1.2 mm         | 580.0           | 650.0         | 1020.0          | 1040.0        |
| > 1.2 mm             | 460.0           | 600.0         | 1000.0          | 1020.0        |

**Trees without stones**

Let the flask cool down for 10-15 minutes, then quench in water.

**Stone-in-place casting trees**

Let the flask cool down for 30-45 minutes, then quench in water.

**Pickling**

Dip in RADIAL solution (50 g/l conc. at 60°C for 2 min.), or in sulphuric acid (10% conc. at 50°C for 5 min.)