

**MASTER  
ALLOY**
**WD481CWPD 750‰**

MASTER ALLOY FOR CASTING OF 585-750‰ (14-18 KT) WHITE GOLD

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

Color	White
Typology	Master alloy for gold
Production process	Casting

**Melting temperatures**

Liquidus [°C]	920.0
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**Commercial composition**

Nickel (%)	18,00
Zinc (%)	17,00
Silver (%)	7,00
Copper (%)	57,50
Palladium (%)	0,50


**GOLD line**
**FULL CHARACTERIZATION DATA**
**Color coordinates**

L*	82.0
a*	2.4
b*	12.3

**Physical characteristics**

Density [g/cm <sup>3</sup> ]	14.8
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**Mechanical characteristics**

As cast hardness [HV 0.2]	160.0
Single step age-hardening hardness [HV 0.2]	240.0

**Product applications**

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

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

LSB475A	Master alloy for soldering of 750‰ (18 Kt) white gold
LSG409D	Master alloy for soldering of 585‰ (14 Kt) yellow gold
LSG409V	Master alloy for soldering of 750‰ (18 Kt) yellow gold

**Alternative Products**

WD481CW	Master alloy for casting of 375-585-750‰ (9-14-18 Kt) white gold
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**CASTING PROCESSING PARAMETERS**

Pre-mixing temperature [°C] 1040.0

CASTING TEMPERATURES	Flask from [°C]	Flask to [°C]	Metal from [°C]	Metal to [°C]
< 0.5 mm	660.0	720.0	1020.0	1050.0
0.5 - 1.2 mm	580.0	650.0	1000.0	1020.0
> 1.2 mm	460.0	600.0	980.0	1000.0

**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 45-60 minutes, then quench in water.

**Pickling**

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

**AGE HARDENING PROCESSING PARAMETERS**

SINGLE STEP AGE-HARDENING TREATMENT	Temperature [°C]	Time [min]	Quenching
	250.0	90.0	Air or in furnace