

# OG445C

## Technical chart

Last revision

19/08/2009

### YELLOW ALLOY FOR 9-14 KT CASTING

Pag. 1/2

Title **14** Colour **Yellow** [ L: 85,6 a: 1,7 b: 18,4 c: ]

#### Product description

OG445C is a soft yellow alloy for lost wax casting. This is a versatile product which possesses an excellent quality:price ratio. Offers compact surfaces and reduced shrinkage porosity. Possesses antioxidant properties and good fluidity.

#### Recommended applications

OG445C is an alloy for lost-wax casting, designed specifically for open systems. If a more yellow-greenish colour is required, the alloy composition can be modified with the addition of silver, according to the following ratio: Au: 585 / Ag: 75 / OG445C: 340. After this modification, liquidus temperature (T<sub>liq.</sub>) will be about 870°C. Casting and graining temperatures reported in this technical sheet will be consequently reduced of about 20°C.

#### Physical-chemical properties

##### Precious metal of reference

Ag 3,0%

##### Temperatures (°C)

Solidus	855
Liquidus	890
Range	35

##### Density (g/cm<sup>3</sup>) 12,7

#### Mechanical characteristics

Tensile strength (R <sub>m</sub> ) [N/mm <sup>2</sup> ]	
Yield strength (R <sub>p0.2</sub> ) [N/mm <sup>2</sup> ]	
Elongation (A) [%]	
"As cast" hardness [HV 0.2]	118
Hardness after 70% red. [HV 0.2]	255
Hardness after annealing [HV 0.2]	

# OG445C

## Technical chart

Last revision

19/08/2009

Pag. 2/2

### YELLOW ALLOY FOR 9-14 KT CASTING

Title **14** Colour **Yellow** [ L: 85,6 a: 1,7 b: 18,4 c: ]

#### Instructions for use

#### Casting

Graining temperature (°C) 1010

#### Casting temperatures

Size of objects	Metal casting (°C)	Flask (°C)
thin from 0,2 to 0,5 mm.	1020-990	660-720
medium from 0,5 to 1,2 mm	990-970	580-650
thick > 1,2 mm.	970-950	460-600

#### Flasks quenching

Leave flask to air cool for 10-18 minutes, then quench in warm water

#### Pickling

Dip items in RADIAL (50g/l) cleaning solution, 60°C for 2 minutes, or in a 10% sulfuric acid solution, 50°C for 5 minutes

#### Notes

(S)