

## 2PK18E/EN



Classic Casting

**18kt**

### GENERAL INFORMATION

Colour: Arabic yellow  
 colour coordinates:  $L^*=88.9$   $a^*=3.8$   $b^*=20.0$

Advised use: casting

Secondary use: mechanical works (if necessary usage of one alloy only)

CASTING	closed systems	■	open systems	■	pre-set stones	■		
MECHANICAL WORKS	stamping	■	chains	■	tube	■	spring	■

Density: 14,92 g/cm<sup>3</sup>

Hardness (as cast): 148 HV

Hardness (after cold work 70%): 260 HV

Hardness (after annealing): 150 HV

Hardness (after age hardening): 240 HV

### DIRECTIONS FOR SUGGESTED USE

Melting range (Solidus – Liquidus): 830 - 850 °C

#### Casting temperature:

100 °C over its Liquidus temperature to cast into ingot-mould and continuous casting.

100 °C over its Liquidus temperature to cast with centrifugal machines and vacuum machines with controlled atmosphere.

140 °C over its Liquidus temperature to cast in outdoor cylinders with vacuum.

#### Cylinders temperature:

from 550 °C to 650 °C depending on the machine and objects dimensions.

#### Ingot-mould temperature:

150 °C

#### Cooling casted objects:

in water after 10 minutes.

#### Cooling casted objects (with stones):

in water after 30/40 minutes.

#### Cooling of ingots:

quick in lukewarm water (about 40 °C)

#### Annealing:

620 °C for 20 minutes followed by a quick cooling in hot water (40 °C min.)

#### Age hardening:

##### Step 1: solubilization

680 °C for 30 minutes. Cooling quickly in warm water (about 40 °C).

##### Step 2: hardening

300 °C for 2 hours. Cooling at room temperature.

### HINTS

- ❖ Recommended Pandora Alloys 18kt yellow solders: TG18 (soft), MG18 (medium), FG18 (hard)

The above directions are only indicative. Strong variations to the above data are possible, depending on personal experience. Please, do not hesitate to contact us for further information.

Tech Chart and Safety Data Sheet available on our website [www.pandoralloys.com](http://www.pandoralloys.com)