

## Pen Point Alloy E3



### Properties of all the Pen Points

Pen Points have to meet very high requirements. They must be hard, i. e. wear-resistant and tough, and capable of being perfectly welded to both gold and steel nibs, and must have excellent polishing properties as well as being free from porosity and resistant to inks.

### Pen Point Alloy E3

A low priced ruthenium alloy of fair hardness, for tipping steel and gold nibs. Its resistance to wear will give about three years of service. It is resistant to ink and can be easily worked and polished. Like all our alloys it can be used for spot, arc and gas welding.

### Technical Information about the Pen Point Alloy E3

<b>usage:</b>	tipping of fountain pen nibs
<b>alloy:</b>	complex tungsten / ruthenium basis alloy
<b>availability:</b>	diameter: 0.60 up to 1.60 mm, tolerance: $\pm 0.05$ mm
<b>specific weight:</b>	approx. 15,9 g / cm <sup>3</sup>
<b>production:</b>	molten alloy
<b>supplied in:</b>	near spherical form
<b>weldability:</b>	good with steel, fair with gold
<b>hardness:</b>	approx. HV 1000 - 1100
<b>ink-resistance:</b>	resistant against all commonly used inks
<b>longevity:</b>	factor 30
<b>does <u>not</u> contain any:</b>	arsenic, cadmium, hexavalent chromium, mercury, antimony, lead, barium or any soluble compound of these materials

**Heraeus Deutschland  
GmbH & Co. KG**  
Heraeus Performance Products  
Heraeusstraße 12 - 14  
63450 Hanau, Germany

**Phone: +49 6181.35-5809**  
**Fax: +49 6181.35-8620**  
**E-Mail: [sergej.schander@heraeus.com](mailto:sergej.schander@heraeus.com)**  
**[www.heraeus-writingutensils.com](http://www.heraeus-writingutensils.com)**