

Palysium

Hera 6307

Palysium is a recently developed Heraeus-alloy which is specially tailored for probing applications. It is characterized by very high electrical conductivity combined with excellent mechanical properties and good workability. High electrical conductivity opens new applications and can reduce the cost of semiconductor-testing. Significantly more current can be transmitted with the same cross-sectional area. Thus, high-power applications can be tested. At the same time, the needles can shrink considerably at the same current, which has a positive effect on the pitch, the pin count and testing parallelism.

General information

Applications	Springs, probes
Product Forms	wire
Density, g/cm ³	10.5
Melting Range, °C	1100 - 1190

Forming Processes

Material Behaviour	ductile
Forming Process	formable, machinable

Physical properties

Conductivity, min., % IACS	24
Conductivity, max., % IACS	29
Thermal Conductivity at 20 °C, W/(m*K)	144
Young's Modulus, GPa	120
Current Carrying Capability (CCC)*, mA	590
Maximum Allowable Current (MAC)*, mA	506

*41 µm diameter, 8 mm length, flat tip and end, overtravel 75 µm, offset 250 µm, 120 s current cycle time, 10 s off-time between cycles, room temperature

	Property Range
Hardness, HV	400 - 480
Yield Strength, MPa	1250 - 1500

Contact

precious.metals@heraeus.com | www.heraeus-precious-metals.com
 Heraeus Deutschland GmbH & Co. KG | Heraeusstrasse 12-14 | 63450 | Hanau | Germany



Looking for more data?

The information in this data sheet contains only general information on the use of our products or examples for their application. They do not release the customer from a careful inspection of the delivered product for its fitness for the customer's particular purpose of use. Any customer's special requests regarding the particular use of a product will only be authoritative if Heraeus has confirmed to the customer in writing at the time of conclusion of a corresponding contract that the product delivered is fit for the customer's intended use. Heraeus, therefore, does not guarantee the correctness and completeness of the information regarding the customer's intended use. The customer's purchase will be governed exclusively by the written order confirmation of Heraeus and the Heraeus General Terms of Sale and Delivery, which are available at www.heraeus.com/gtc. This data sheet may be subject to changes at any time.