

1. Composition

Pd	95.00%
Ga	2.90%
Mo	2.10%

2. Physical Properties

Melting range	1430-1445°C
Density	11.9 g/cm ³
Colour	white
Young's Modulus	100 GPa

3. Mechanical Properties

Condition	cold worked	soft	hardened
Parameters	75% KV	1000°/60/H2O	-
Hardness HV5	225	100	
Tensile strength (Rm)	700 MPa	410 MPa	
0.2% Proof stress (Rp 0.2%)	695 MPa	175 MPa	
Elongation	1.5 %	38.5 %	

4. Handling

Brazing Recommended brazing filler metal: Lote S.Platine A (alloy No. 169, hard, TI 1270°C) and S.W 1100 (alloy No. 769, soft, TI 1100°C).

Pickling With diluted hot sulphuric acid (H₂SO₄, 20%) . Discoloration due to pickling can be removed by polishing. After pickling the parts have to be well rinsed under running water followed by cleaning in an ultrasonic bath for five minutes. Then rinse in alcohol and dry.

Remarks Annealing (for single parts):
60 minutes at 1000°C followed by quenching in water. To prevent oxidation annealing should be done in a reducing atmosphere.

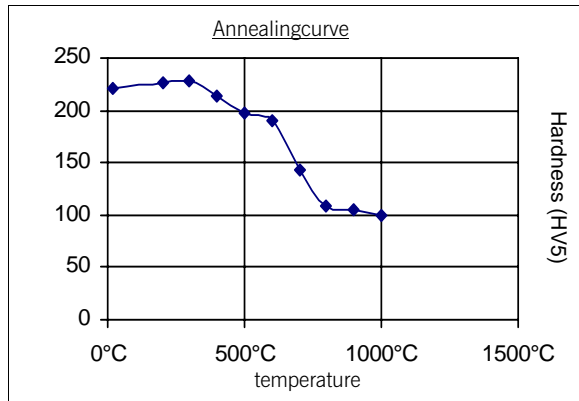
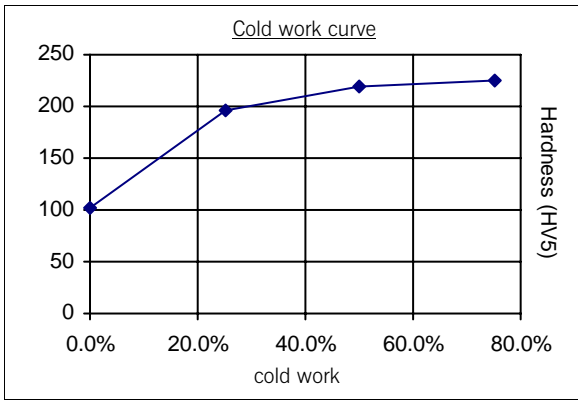
Hardening:
The alloy cannot be thermally hardened.

Very well suited for all cold work processes (rolling, drawing, stamping, punching, bending, chasing).

Machining such as turning, milling, drilling etc. is preferably done on cold worked material.

5. Certification

Manufacture and delivery are constantly monitored according to the quality management system standard according to ISO 9001.



Cendres + Métaux SA

Niklaus Baltzer

Dr. Niklaus Baltzer
Head of Materials Development

Peter W. Fleetwood

Peter W. Fleetwood
Consultant Regulatory Affairs