

# TECHNICAL SPECIFICATIONS

# Heraeus

**Alloy Code:** **H-9570A**      **Colour:** **White**

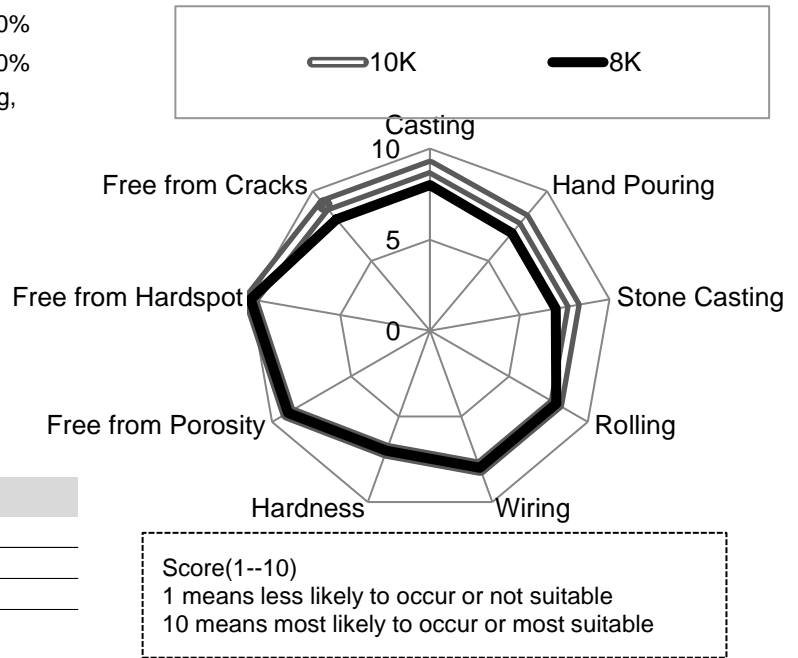
**Suitable Karatage:** 8/10K  
**Content :**      **Nickel:** 0.0%      **Palladium:** 0.0%  
                   **Silver:** 72.6%      **Platinum:** 0.0%  
**Applications:** Suitable for loss wax casting, stone casting, hand-making  
**Advantages:** Palladium & Nickel free, low melting point

**Melting Range (°C):**

8K	796 - 800
10K	825 - 829

**CIELAB Value :**

Karat	YI:D1925	L*	a*	b*
8K	22.6	87.5	-2.8	11.5
10K	24.0	90.1	-3.5	14.0



**Mechanical Properties :**

Karat	Annealed Hardness (HV)	As Casted Hardness (HV)	Max. Strength (MPa)	Yield Strength (MPa)	Elongation (%)
8K	145	145	347	182	27
10K	142	143	377	188	16

**Recommended Casting Parameters :** (Quenching Time: 15 - 25 Minutes)

Karat	Metal Casting Temperature (°C)	Vacuum-assisted Casting Investment Temperature (°C)		
		Thickness of work piece (mm)		
		Thin (<0.5)	Medium (0.5~1.1)	Thick (>1.1)
8K	920-940	640-720	560-640	450-560
10K	930-950	640-720	560-640	450-560

**Recommended Mechanical Working Parameters:**

Recommended Annealing Temperature (°C)	Annealing Time for thickness (min)	< 1 mm	1 - 5 mm	> 5 mm
H-9570A	600 - 650	30	35	40

Process	Casting Temperature (°C)	Recommended Reductions
Ingot	960 - 980	Sheet Thickness % 70
Continuous Casting	1000 - 1060	Wire Diameter % 45

**Technical Advice:**

- To avoid oxidation, the alloys must be covered with inert gas or yellow flame during casting.
- Not more than 50 % of old material should be used for recasting.
- The old material must be tumbled to remove the investment powder residue and oxides.  
 The material is then pickled in dilute sulfuric acid (15 %) for 15 - 20 minutes to remove the rest of oxides.
- The sprue should be placed at the thickest position. Additional sprue must be applied if necessary.  
 Fluted sprue is preferred to avoid any turbulence.

Remarks: The information is for your reference only. The parameters should be adjusted according to the particular casting conditions.  
 If you have any technical questions, please do not hesitate to contact us.