

**Indication:**

For the construction of frameworks according to the law for medical products (MPG) class 2a for removable prostheses.

**SHERALIT-ELASTIC (390 HV):** Hard but elastomeric quality. Universal alloy even suitable for combination works.  
**SHERALIT-IMPERIAL (425 HV):** The **highest-quality alloy** of the **SHERALIT** range. Great strength and a highly elastomeric quality allow most fragile constructions. Low in carbon, suited for laser welding. An alloy with unsurpassed technical data.

These alloys were especially developed by the Shera research team to meet the needs of modern dental laboratories. These are their most important advantages:

- 1) Only raw materials of maximum purity are used, a fact easily proven by the small amount of dross left in the crucible (dross = impurities).
- 2) The alloys are cast under constant quality control using a gentle casting method.
- 3) They are easy to sandblasted, trim and polished.
- 4) Due to the high purity these alloys can be re-cast (the percentage of new material should be above 60%).
- 5) When handled as directed, it is virtually impossible for clasps to break.
- 6) Absolutely resistant to corrosion.
- 7) Stable in shape and colour when incorporated in the patient's mouth.
- 8) Tissue-friendly.
- 9) The low heat conductivity reduces temperature sensitivity to hot and cold food. **SHERALIT**-alloys are comfortable to wear and do not affect the sense of taste.

**Processing:**

- A. Do not add any melting-agents.
- B. **Casting point:** the exact casting point depends on the casting machine (or rather its power). Cast after the cubes have started to melt, the shadows on the molten alloy have disappeared and before the casting skin tears open. The latest casting point is when the casting skin tears open.  
Signs of overheating: shrinkholes and a strong adhesion of oxide to the metal.
- C. **Cooling:** Take mould out of the furnace and bench cool it for 15 minutes with the funnel facing down (preferably on sand). Then quench it in cold water (if you wish).  
Best results are obtained by completely bench cooling the mould at room temperature.

SHERALIT model-casting-alloys are free of nickel, beryllium and gallium according DIN EN ISO 22674.

<b>Physical properties:</b>	<b>SHERALIT-ELASTIC</b>	<b>SHERALIT-IMPERIAL</b>
Vickers hardness HV10 (N/mm <sup>2</sup> )	390	425
density (g/cm <sup>3</sup> )	8,4	8,3
tensile strength (N/mm <sup>2</sup> )	720	725
yield strength (N/mm <sup>2</sup> )	520	525
elongation limit (%)	10	9
modulus of elasticity (N/mm <sup>2</sup> )	220.000	225.000
liquidus point (°C)	1.380	1.400
solidus point (°C)	1.300	1.310
casting temperature (°C)	1.550	1.560

**Material structure in %**

chrome	28,0	28,0
cobalt	64	63
molybdenum	6,1	6,1
niobium	-	1,0
further elements under 1 %	C, Fe, Mn, Nb, Si	C, Fe, Mn, Si

**Adverse effects**

Allergies against components of the alloy or electrochemical paraesthesia are rarely possible.

**Warranty**

SHERA Werkstoff-Technologie GmbH & Co. KG is certified according to ISO 9001 and guarantees for the products, due to a thorough quality control system, a flawless quality of its products. Our instructions for use are based on the results of our test laboratory. The technical data given can only be guaranteed if the processing is carried out as mentioned. The user is self-responsible for processing of the products. We are not liable for faulty results as SHREA has no influence on the processing. Nevertheless possibly arising claims for damages relate to the value of the products only.

