



# SR83

## TECHNICAL DATA SHEET

<b>Fineness</b>	<b>750 ‰</b>	<b>Density</b>	<b>14.74</b>
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<b>Melting Range</b>	<b>Solidus: 816 °C</b>	<b>Casting Temperature</b>	<b>Min: 970 °C</b>
	<b>Liquidus: 870 °C</b>		<b>Max: 1020 °C</b>

### HAND POURING IN MOULD

Prepare the mould, heating it until a temperature between 300 and 350°C preferably inside a furnace, or heat it by a powerful flame to reach the temperature mentioned above just before metal pouring. Put the master alloy in the crucible first, then put the fine gold on top (if you have not made a premelting previously). Heat the metal, protecting with boric acid, until a temperature between 970 and 1020°C. Protect the molten metal with a reducing flame or with any available inert gas (we suggest the use of argon or forming gas). Pour the metal in the mould, giving to the molten metal a stable and not too fast flow in it, possibly always protecting it as did during melting. After casting, remove the casted metal from the mould and quench it immediately.

### CONTINUOUS CASTING

Put the master alloy in the crucible first, then put the fine gold on top. Heat the metal, protecting it, if a furnace without atmosphere protection is used, with boric acid, until a temperature between 970 and 1020°C, protecting the molten metal with a reducing flame or with any available inert gas (we suggest the use of argon or forming gas). To avoid an excessive crystalline grain growth, use the fastest speed possible (guaranteeing satisfactory casting quality) and during metal exit from the die, if a cooling system is not installed in the casting machine, cool it with water.

### REDUCTIONS

The thickness reductions must be done not exceeding the 30% at the first step (just after casting) and not exceeding the 40-50% during subsequent steps, so after that a recrystallization annealing have been carried out. It is important to not make deformations steps lower than 50%, which are reasons of excessive crystalline grain growth.

### RECRYSTALLIZATION ANNEALING

After the proper deformation steps as per above explanation, put the material in the furnace heating it at a temperature of 570°C for 15-20'. It's important to use the obtained soldering alloy in the annealed state to avoid to compromise its features.

### FURTHER INFORMATION

For any further information or request, please contact our local agent.



Marketed By  
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