



# INVESTMENT CASTING WITH 19K Ni WHITE GOLD

## GR19W601000



Imperial's 19K Nickel White formulation has already proven popular as an ultra-white (\*) gold for special jewellery designs. The 19K Ni-White casting grain has been formulated to include carefully chosen grain refiners and deoxidizers that offer superior casting characteristics and increased ductility for settings, while maintain its unmistakable white colour.



(\*) 19K white alloy was already the whitest gold available, even graded whiter than fine silver according to the new standard for whiteness established by the World gold Council and MJSA. Visit [www.imperialproducts.com/quality](http://www.imperialproducts.com/quality) for more information regarding white gold classification



### CASTING INFORMATION

1. **Melting range:** \*902 – 920°C / \*1656 – 1688°F
2. **Density:** 15.20 grams/cm<sup>3</sup> , 160.4 dwt/in<sup>3</sup>
3. **Recommended Casting and Flask Temperatures:** These vary with the design and mass of the item(s) being cast, so you may need to run some test casts to work out the combination of temperatures best suited to your specific design. As a starting point, we recommend the following conditions:
 

	<u>Casting Temperature</u>	<u>Flask Temperature</u>
Large Items	950°C / 1742°F	480°C / 900°F
Medium sized items	980°C / 1796°F	540°C / 1000°F
Small, intricate items	1020°C / 1868°F	590°C / 1100°F
4. **Cooling:** After casting, let the flask cool at room temperature until it is no longer red (approximately 10 minutes), then quench in water.
5. **Recycling:** This product can be recycled 50% reused / 50% new grain, under strictly clean casting procedures to avoid carryover of contaminants (investment material, etc.).
6. **Physical Properties:**

**Ultimate Tensile Strength (UTS):** 105,000 psi  
**As-Cast Hardness (Vickers):** 230 Hv

*We are always interested in hearing your opinion of how our products have performed for your application. Also, contact us should you have any questions, comments or require information regarding Imperial's wide range of gold, silver and platinum products.*

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