

Technical Data Sheet (TDS) – JewelCast

Product Overview

JewelCast is an **advanced material** designed for **direct investment casting** in the **jewelry market**. With excellent **burnout properties** and exceptional **detail retention**, JewelCast ensures sharp, high-quality prints that are perfect for producing intricate and precise jewelry pieces.

JewelCast produces parts that **evaporate cleanly** at **moderate burn-out temperatures**, offering **extremely low thermal expansion**, ensuring flawless casting results.

Key Applications

- **Jewelry** – Ideal for **investment casting** of **rings, necklaces, pendants, and intricate designs**.
- **High-Precision Casting** – Achieves sharp detail and **smooth surface finish**.
- **Fine Jewelry Production** – Perfect for jewelry makers who demand **precision and durability**.

Material Properties

Property	Value	Test Method
Viscosity	361.7 mPa·s	
Tensile Strength	16.8 MPa	ISO 527-1
Elongation at Break	7.46%	ISO 527-1
Flexural Strength	23.0 MPa	ISO 178
Flexural Modulus	404.0 MPa	ISO 178
Bending Strain	10.2%	ISO 180
Izod Impact (Notched)	11.03 kJ/m ²	ISO 180
Density	1.178 g/cm ³	ISO 1183-1
Hardness (Shore D)	69	ISO 868
Ignition Temperature	350°C	—

Key Features & Benefits

- **Exceptional Burnout Properties** – **Evaporates cleanly** at moderate temperatures without reacting with investment.
- **Sharp Detail Retention** – Produces **fine, intricate designs** ideal for **luxury jewelry**.
- **Low Thermal Expansion** – Ensures minimal distortion during the casting process.

- **Smooth, High-Quality Finish** – Ideal for both **small and large intricate jewelry designs**.
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Recommended 3D Printer Compatibility

- SLA
 - DLP
 - mSLA
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Storage & Handling

- ⚠ **Store in a cool, dry place** to prevent exposure to direct sunlight.
 - ⚠ **Shake well before use** to ensure consistency in material quality.
 - ⚠ **Wear gloves and ensure proper ventilation** when handling the uncured material.
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Regulatory Compliance

- ✓ **Manufactured by Resinify Technology LLC, Detroit, Michigan, USA**
- ✓ **Designed for use in professional jewelry casting**