

# JEWELRY INJECTION WAXES



## Providing Casters with Versatility, Dependability, Production Efficiency & Pattern Excellence

AquaSphere™ jewelry injection waxes were scientifically developed to meet the vast needs of jewelry casters, no matter their specific application. Characteristics such as flow, toughness, durability, replication of detail, ductility, memory and release have all been engineered into these exceptional waxes to make them the ideal fit for everyone! Whether you have difficult draws, are looking to inject thin or thick sections, produce extra fine detail, or require extra toughness, there is an AquaSphere wax to meet your needs.

All AquaSphere waxes can be injected into all conventional rubber mold materials as well as typical aluminum production dies. AquaSphere waxes offer exceptionally consistent results and are manufactured using only the purest synthetic and highest quality natural raw materials available in the industry, which results in extremely low ash residue (0.003-0.007%) and enables exceptionally clean burnout and accurate reproductions. All AquaSphere waxes undergo stringent quality control testing in a state-of-the-art laboratory to ensure the highest level of quality. AquaSphere waxes are sold in pastillated form and come in a variety of formulas and colors.

### AquaSphere wax

- Strength and flexibility needed to easily remove it from the mold
- Low shrink
- Exceptional surface finish and toughness
- Extremely low ash residue
- Exceptionally consistent results

### AquaSphere Plus wax

- Pliability needed to easily remove it from the mold with no pattern damage
- Excellent flow
- Low shrink
- Exceptional surface finish and reproduction of fine detail
- Improved opacity and a greater degree of toughness than AquaSphere wax
- Can be used for stone-in-place casting
- Extremely low ash residue
- Exceptionally consistent results

### Wax Selection

The below information is a guide only. For more detailed help selecting your wax, please contact our technical team at: [Technical@ransom-randolph.com](mailto:Technical@ransom-randolph.com).

	AquaSphere wax	AquaSphere Plus wax
General Purpose Wax	★★★	★★★
Stone-in-Place		★★
Filigree		★★
Large Molds		★
Thin Sections	★★★	★★



## RANSOM & RANDOLPH

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    Made in the USA

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## Typical Material Properties\*

	AquaSphere wax	AquaSphere Plus wax
Flow/Viscosity	200 cps	263 cps
Solidification Temperature	145 °F (62.8 °C)	144 °F (62.2 °C)
Injection Temperature	155-162 °F (68.3-72.2 °C)	158-168 °F (70.0-75.6 °C)
Needle Penetration ± 5mm	30.0 dmm	28.3 dmm
Melt Temperature	157 °F (69.4 °C)	156 °F (68.9 °C)
Typical Ash Content	0.005%	0.003%
Color	Aqua, Blue, Pink, Red	Blue

\*These results are based on the testing methods, frequency and procedures of Ransom & Randolph or its approved suppliers. The levels referenced herein are only for general guidance and do not constitute a firm specification.

## Properties Comparison Chart

	AquaSphere wax	AquaSphere Plus wax
Flow	Highest	High
Flexibility/ Ductility	High	Medium
Opacity	Good	Good
Memory	Medium	Medium
Toughness/ Durability	High	Medium
Detail Replication	Highest	High
Pattern Shelf Life	High	Medium
Dwell Time/ Solidification	Medium	Fast

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Issue Date: November 2, 2023

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