



## RTV Rubber Physical Properties

	LiquaCast®	LiquaCast® Long-life	LiquaGlass®	LiquaFast™ ICE	QuickSil® Firm & Flexible	QuickSil® Soft & Flexible
Shore A Hardness	40	45	50	40	40	27
Mix Ratio by weight	1:10	1:1	1:1	1:1	1:1	1:1
Rubber Shrinkage *	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Viscosity **	Very Low 4,000 cps	Very Low 2,000 cps	Very Low 1,200 cps	Low 8,500 cps	Not a liquid – a clay-like putty	Not a liquid – a clay-like putty
Vulcanizes at	70° F/ 21°C	70° F/ 21°C	70° F/ 21°C	70° F/ 21°C	70° F/ 21°C	70° F/ 21°C
Cure Time	18 hours	24 hours	16 hours	60-90 minutes	15 minutes	15 minutes
Rapid Cure Time @150°F/ 65°C	90 minutes	90 minutes	90 minutes	30 minutes	Less than 15 minutes	Less than 15 minutes
Specific Gravity ***	1.39	1.02	1.00	1.12	1.32	1.32
Elongation Before break	897%	1,135%	750%	370%	550%	600%
Tensile Strength Before break	648 psi 4.5 n/mm <sup>2</sup>	408 psi 2.8 n/mm <sup>2</sup>	360 psi 2.1 n/mm <sup>2</sup>	508 psi 3.5 n/mm <sup>2</sup>	660 psi 4.1 n/mm <sup>2</sup>	660 psi 4.1 n/mm <sup>2</sup>
Tear Strength Die C Before break	81 lb./in. 14.2 n/mm	82 lb./in. 13.4 n/mm	74 lb./in. 12.9 n/mm	108 lb./in. 18.9 n/mm	115 lb./in. 20.1 n/mm	119 lb./in. 20.1 n/mm
Color	Pink	Yellow	Clear Blue-Green	Clear Blue	Light Green	Light Blue

\* Special note about shrinkage rates: The figures given for this and all other rubber molding compounds are for the rubber mold itself, not the wax pattern it produces or the final casting produced from the wax pattern. The same rubber compound molded around the same metal master model can produce highly variable final casting shrinkage rates depending on the moldmaker & caster's skill, knowledge, precision and attention to detail. Final casting shrinkage is the result of the jewelry manufacturer's procedures.

\*\* Guide to understanding viscosity figures in cps.:

Water .....	1	Glycerin .....	1,000
Blood .....	10	Honey .....	2,000
Anti-Freeze .....	15	Molasses .....	5,000
Corn Oil .....	50	Chocolate Syrup .....	10,000
Maple Syrup .....	150	Ketchup .....	50,000
Castor Oil .....	250	Dow Corning Silastic E RTV Rubber...	80,000

Low viscosity makes an RTV liquid rubber easy to pour, mix and vacuum de-bubble.

\*\*\* Specific gravity. Water = 1.00. Low specific gravity = more molds per pound/kilogram.