

Natural Jewelry Molding Rubber Strips & Ready-Cut WL GL

Technical Datasheet & Molding Instructions

Castaldo White Label & Gold Label Strips & Ready-Cut Natural Rubber now available in the following packaging formats:

Natural Rubber Strips - 5lb / 2.27kg per strip box packed - 10 x 5lb / 2.27kg boxes per carton box.

Natural Rubber Ready-Cut - 5lb / 2.27kg per box.



Name White Label WL®

Shore A Hardness	42 +/- 2
Vulcanizes at	307°F / 152°C
Rubber Shrinkage	2.3%
Break Elongation	688%
Break Tensile Strength	Very Strong 2,215 psi 15.3 n/mm ²
Break Tear Strength	137 lb./in. 24 n/mm ²
Uses	Strong, Firm Molds

Name Gold Label GL®

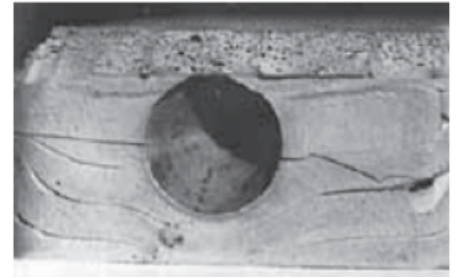
Shore A Hardness	37 +/- 2
Vulcanizes at	307°F / 152°C
Rubber Shrinkage	2.1%
Break Elongation	706%
Break Tensile Strength	Very Strong 2,475 psi 13.9 n/mm ²
Break Tear Strength	134 lb./in. 23.4 n/mm ²
Uses	Strong, Flexible Molds

*Shrinkage rates given are for the rubber mold itself. Final casting shrinkage rates depend on moldmakers and caster's skill, knowledge, precision and attention to detail.

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Three signs that a mold has been under-packed are:

1. The appearance of separate layers of rubber along the edges of the finished mold.
2. A sponge rubber-like appearance caused by thousands of tiny air bubbles.
3. Large pits or depressions in the top and bottom surfaces of the mold. Two of these conditions are illustrated in the accompanying photograph.



Pre-heat the vulcanizer until it reaches the proper temperature and then place the loaded mold frame between the vulcanizer plates. Let it rest there for a few moments, but not longer than 3 minutes. Tighten the vulcanizer press slowly, avoiding extreme pressure. Do not tighten beyond what can be done by hand as delicate models can be bent by the resulting internal pressure. Expect to see some rubber flow out of the mold frame as vulcanizing progresses. If this does not occur, the mold frame is probably underpacked and subsequent frames should be packed more fully. After the first few minutes of vulcanization, some workers prefer to “bump” the molds - releasing pressure for a moment no later than the first 3 or 4 minutes to let out accumulated air pockets and then retightening the vulcanizer press. Check the tightness of the vulcanizer occasionally during the first 10 minutes of vulcanization and tighten as necessary. Slow cooling of the mold after vulcanization has ended is suggested, but if speed is necessary, the mold can be plunged directly into cold water without ill effects.

Vulcanization

Optimum results are achieved at a vulcanization temperature of 307°F (152°C). Calculate vulcanization time as follows: 7.5 minutes for every thickness (1/8 inch or 3.2 mm) of mold rubber, with a minimum time of 30 minutes and a maximum time of 75 minutes. Thus a 3/4 inch mold (19 mm) consisting of six thicknesses should be vulcanized for 45 minutes (6 x 7.5). A half inch mold (13 mm) should be vulcanized for 30 minutes (4 x 7.5).

Castaldo Jewelry Molding Rubber will normally flow into and around the most intricate and detailed parts of a jewelry model. In the unlikely event that difficulty is experienced, however, it is advisable to reduce vulcanization temperature to 290°F (143°C) and double the recommended vulcanization time. This will allow a longer period for the rubber to flow in semi-liquid form. Poor flow is also a symptom of too high vulcanizing temperatures. Do not rely on thermostat dials but check your vulcanizer with a reliable thermometer instead.

Recommended Vulcanization Times:

Mold Thickness	Number of Rubber Pieces	Temperature 307°F (152°C)
1/2 Inch or 13mm	4	30 Minutes – Minimum
5/8 Inch or 16mm	5	37 Minutes
3/4 Inch or 19mm	6	45 Minutes
1 Inch or 25mm	8	60 Minutes
1 1/4 Inch or 32mm	10	75 Minutes
1 1/2 Inch or 38mm	12	75 Minutes - Maximum

Complete instructions are available www.castaldo.com.