

VLT®

Very Low Temperature! As low as 71°C -160°F

Technical Datasheet



Very Low Temperature! As low as 71°C -160°F Rapid Molds from Rapid Prototypes! Computer to Production In Hours, Not Days!

Make high-volume production molds Directly from CAD/CAM and Rapid Prototyping models fast.

VLT® brings to manufacturers what has been missing so far in the CAD/CAM revolution - speed! Get your models into production in as little as 30 minutes!

VLT® vulcanizes at temperatures as low as 160°F / 71°C, making it ideal for creating tough, strong long-lasting production rubber molds directly from all types of plastic resin models. Makes great molds from traditional wax carvings too!

VLT® produces highly detailed wax injections with an extraordinarily shiny surface that requires less finishing. Waxes are self-releasing and need no release spray. Molds are easy to pack and easy to cut. Rubber shrinkage is only 0.1%.

Castaldo VLT Jewelry Molding Rubber is available in strips 18" x 2 7/8" x approximately 3/8" (45.7cm x 7.3cm x approximately 6mm) and packaged in 5lb. cartons (2.27kg).

Name	VLT®
Shore A Hardness	38-40
Vulcanizes at	71 - 88°C
Rubber Shrinkage	Very Low 0.1%
Break Elongation	614%
Break Tensile Strength	8.9 n/mm ²
Break Tear Strength	18.2 n/mm ²
Uses	Low temp for resin CAD CAM, RP & SL

*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.

Silicone Molding Rubber



Castaldo Silicone Molding Rubber is soft and pliable, with a consistency like putty or molding clay.

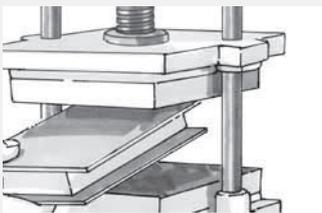
Mold frame packing with Castaldo Silicone Molding Rubber is fast, easy and requires no tools.



Placing and embedding the model exactly as you want it is simple.



Curing Castaldo Silicone Jewelry Molding Rubber involves no mixing, limited working times or de-bubblizing. Simply put into your vulcanizer between 160°F - 190°F (71°C - 88°C) for 15 minutes per 1/4 inch (6mm)



Castaldo Silicone Jewelry Molding Rubber Molds are easy to cut, reducing hand fatigue and increasing control. Users say they "Cut like butter".



Parting lines are easily controlled and corrected by hand when used with the powder separation technique.



Finished molds can be simple or complex with cores, straight plugs or even spiral plugs. Castaldo Silicone Jewelry Rubber Molds are strong and tear resistant and can last for years and years.

CASTALDO® VLT® Silicone Molding Rubber can be vulcanized at a wide range of time and temperature combinations depending on the softening point and other characteristics of your model material.

Below are some suggested combinations for a typical mold 1" / 19 mm thick:

88°C / 190°F for 30 minutes

82°C / 180°F for 45 minutes

76°C / 170°F for 60 minutes

71°C / 160°F for 90 minutes

PLEASE NOTE: Because CASTALDO VLT® vulcanizes at such low temperatures it does not have the extended storage life of many of our other compounds. CASTALDO VLT® may SELFVULCANIZE DURING STORAGE at high summer temperatures or in very warm climates.

During the summer months or in very warm climates the rubber should be kept in cold storage such as in a refrigerator or in a constantly air-conditioned room, but NOT below 32°F / 0°C. You may want to avoid storing more VLT rubber than is needed for immediate use. Similarly, long ocean freight shipments during very warm periods may affect the rubber. Possible solutions might be to avoid such shipments entirely during the summer months or ship smaller quantities via air freight.

CASTALDO® VLT® Silicone Molding Rubber CANNOT be burned in the usual manner to add sprues or correct details.