

# ED HOY'S

Date: November 1, 2010  
Subject: GELFLEX MOLD  
MATERIAL

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GELFLEX is a heat -meltable vinyl material that is used to make flexible molds in the lost wax casting process. Two types are available. They may be used separately or mixed together. Natural or Beige Color is softer and used for enhanced detail whereas the Blue colored material is harder for larger molds requiring added rigidity. In some instances, the Natural material may surround the master, for best detail, and the Blue color then poured over the Natural to support the mold. Gelflex allows for deep undercuts, has a good resistance to tearing and good flexibility to release the dimensional pattern of the wax.

Important points to remember: The original from which a duplicate is to be made must be sufficiently sealed to be non-porous.

A glass, metal or china original must be warm so as not to chill the melted Gelflex.

Heat & pour the Gelflex at specified temperature, exceeding them will cause shrinkage of the mold and reduce the number of possible remelts

Provide ample ventilation. The melting process produces an undesirable odor.

The molding box [flask] interior should be varnished and the joints sealed with Silicone Sealant. The sides and bottom must be secured with screws or nails, not adhesive backed tape, which will melt.

MELTING GELFLEX – Melting should be done in a thermostatically controlled container. For the glass craftsman, a conventional “Turkey Roaster” works well. For small melts a Pyrex measuring cupful placed in a microwave oven is suitable.

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Melt to temperature between 302-329oF [150-165oC]. DO NOT EXCEED THESE TEMPERATURES.

The roaster method takes a great deal of time to bring to temperature. A short cut is to heat small batches in the microwave oven and pour them into the roaster

The Master, if lightweight must be secured to the base of the flask so as not to float when Gelflex is poured.

Cool to 284-302oF [140-150oC]. This will allow any entrapped air bubbles to rise & disperse before pouring off.

POURING the molten Gelflex . It should be poured continuously into the enclosure, not directly over the Master. USE CAUTION TO KEEP FROM DRIPPING THE MOLTEN MATERIAL ONTO YOUR HANDS. It will stick and cause severe burns.

Allow to set for several hours until cool.

NOTE: Gelflex does not adhere to itself when cold. Any mixing of colors must be done while it is molten.

DE-MOLDING – After solidifying the master may be released. This will be easily done if the mold is still very slightly warm.

REMELTING GELFLEX- Once a finished mold has served its purpose it may be remelted following the original procedure and used again.