

# 407 LATEX™ SLIP CASTING LATEX

## The Industry Standard in Casting Latex

Used for making flexible props, masks, toys and other hollow molds

**DESCRIPTION:** 407 LATEX is the industry standard for pre-vulcanized casting latex. It is most commonly used for the production of hollow molded rubber articles, toys, hot-water bottles, rubber balls, imitation pottery, masks, puppet heads, and display articles. It is also useful for coating polystyrene, texturing, and general special effects for theater work. 407 LATEX is especially useful in making flexible props. Using 407 LATEX does not require any elaborate machinery or expensive metal molds. It is the ideal rubber for small studios as it multi-ple purposes and can even be used as a dipping latex to coat tool handles.

**USES:** Here are just a few of the various uses for 407 LATEX Casting Latex:

- Coating pieces that are sculpted from Styrofoam. 407 LATEX will shrink around an object and pick up every detail. The sculpted piece may then be spray-painted or finished in any fashion.
- When you mix 407 LATEX and 2 1/2 parts of filler ArtMolds Latex Filler, you can insert layers of burlap between coatings to achieve a very hard effect. It is best to use a burlap with a small mesh opening.
- By using 407 LATEX and ArtMolds Latex Filler, flexible props may be created.
- 407 LATEX may be used to blunt sharp instruments such as spears or knives.
- 407 LATEX may also be used to texture garments to give various looks.
- Masks for various productions such as horror movies are designed with 407 LATEX.
- Puppets are also made from 407 LATEX
- Realistic food can easily be made from 407 LATEX

**MODEL PREPARATION:** For best results your mold should be made of a porous substance such as casting or pottery plaster, or CastRite gypsum from ArtMolds which was formulated for use with 407 LATEX. The mold material is the actual mechanism that sets the 407 LATEX by pulling moisture from the latex through the substrate of the plaster surface. A mold that is solid such as silicone or polyurethane cannot do this and drying will take an inordinate time if at all.

**RELEASE AGENTS:** The use of talc as a release agent is highly recommended. Prior to demolding talc should be generously distributed on the surface of your casting to prevent it from sticking to itself. Avoid petroleum-based release as they will cause the latex to deteriorate.

**MAKING THE CASTING:** A few minutes prior to using 407 LATEX, remove the lid and allow the ammonia odor to dissipate.

407 LATEX is usually used in a plaster mold because of the porous nature of plaster. When this casting latex is poured into plaster, the plaster sucks the water out the latex which in turn

### FEATURES

- Highly tear resistant
- Fast cure
- Industry standard
- Low shrinkage
- Superior detail

<b>Color:</b>	White	<b>pH:</b>	9.5 - 10.5
<b>Base Polymer:</b>	Natural Rubber	<b>Weight:</b>	7.50 lbs./gal.
<b>Viscosity:</b>	Pourable Paste	<b>Total Solids:</b>	62%

sets the latex leaving a thin skin. Silicone and urethane molds can be used, but the results can be inferior as they do not have the same curing properties.

Making a latex mold is a simple process just pour in the 407 LATEX and let it stand for about 30-40 minutes or so. (Leaving it longer will produce a thicker skin, shorter a thinner skin.) Then pour it out. Often you may achieve better results by slush casting or rolling the latex around in the mold before you pour the excess out.

Latex can be tinted in advance by adding acrylic based paints. When tinting latex note that colors tend to dry darker then they initially appear.

**CASTING EXAMPLE:** You can use the following formulas for adjusting the appropriate rubber hardness. The formulas can be mixed either by volume or weight:

- Soft Rubber - 1 part 407 LATEX to 1 part ArtMolds Latex Filler
- Medium Rubber - 1 part 407 LATEX to 2 parts ArtMolds Latex Filler
- Hard Rubber - 1 part 407 LATEX to 3 parts ArtMolds Latex Filler

Create a negative mold using CastRite gypsum plaster. If it is a two part mold insure that the seams will not leak. Use modeling clay to close all seams.

Pour one of the 407 LATEX mixed formulas into the plaster mold slowly to avoid bubbles. If your mold has undercuts, you can tilt the mold to allow the latex to cover the difficult to reach areas.

Depending on the thickness of the cast you desire, allow the casting to stand between 15 minutes and one hour depending on the wall thickness you desire. The longer it sits the thicker

the skin will be. Also, the higher the filler ratio, the shorter is the time is needed to create the desired thickness.

When ready pour out the latex in a container. Cover the container to preserve it for future use. The casting must now dry for up to twenty four hours. The thinner the skin the faster the dry time will be. You can hasten the drying time by drying it in a oven at the oven's lowest setting for several hours. Expect about a 5% shrinkage during drying. Since all latex shrinks, plan your model to be oversized so your mold will be larger than the actual size.

Make certain the casting is completely dry before remove it from the mold. Coat all surface with talc before attempting removal to prevent the fresh latex from sticking to itself. After you have removed the casting from the mold, further air or heat drying may be necessary.

**Thinning:** You may thin latex by adding water (use distilled water).

**Ammonia:** 407 LATEX contains ammonia which can evaporate. Smell the latex, and if the ammonia smell has gone or diminished, add up to 26% Aqua Ammonia (from a chemical supply store). Ammonia at grocery stores is 2-3% and contains soap. Add a little at a time . . . just enough to bring it back to normal viscosity.

**SHRINKAGE:** All latex rubbers experience shrinkage when they dry. Therefore, when making a full head mold you must allow for the by making the mold 5-10% percent larger than the actual size that will result from the casting.

**DE MOLDING:** Allow the casting to dry over night. You can hasten drying using a small heater aimed inside the mold. As the mold dries it will tend to separate. This is a helpful sign that the skin is ready to be removed from its mold.

When your casting is dry, dust it with talc powder, then peel it off of the mold like a glove. Dust the inside of the casting with talc powder to keep the fresh latex from sticking to itself. Support the casting on form to keep its shape and to allow you to trim it and paint it.

**SAFETY AND CLEANUP:** Remove wet 407 LATEX with soap and cold water. Do not use warm or hot water as it will cause 407 LATEX to cure. Dried Kreemtex can be softened with waterless hand cleaner. To remove from clothing, clean with dry cleaning solution.

**STORAGE:** Store at 50-70° F. Exposure to temperatures below 40° F. and above 80oF may damage latex, causing irreversible coagulation. **DO NOT ALLOW TO FREEZE.** Storage life is at least twelve months from date of shipment.

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