

SILPAK, Inc

470 E. BONITA AVE., POMONA, CA 91767
PH (909) 625-0056 WWW.SILPAK.COM FX (909) 625-0082

Latex Rubber RL-SPRAY Product Data Sheet

RL-SPRAY is a one-part, extremely low viscosity liquid latex that air cures to a strong, papery thin, rubber. Its high elasticity strength, watery consistency and ability to capture infinite detail make this an ideal sprayable material. It also works well for making latex appliances in plaster molds made of *Hydrocal White*. Latex needs to semi dry between coats as multi-layer parts are being created. Latex will reproduce detail, but has the highest shrink rate of all rubber materials.

Available Sizes: Pint & Quart, Gallon & 5 Gallon, 55 Gallon Drum

Accessories

- **Pigments** Red, Blue, Yellow, Black, White
- **RL-Thinner** Add to adjust latex thickness—Better than adding distilled water!!
- **Hydrocal White** Plaster for slush cast molds

Model Preparation:

Model's surface should be clean and free of oil and dirt. Oil clay, wood, stone, and glazed ceramics normally don't need to be sealed. Plaster, concrete, water-based clay, copper containing items should be sealed with shellac or compatible sealer. For all other surfaces, run a small test to ensure compatibility—if latex sticks or turns dark, apply sealer. Next, secure model to a base board—plywood or something similar.

Processing & Curing Instructions:

Slush casted latex such as a mask or a thin rubber product can be made from dry, unsealed *Hydrocal White* or *Ultracal 30* plaster molds. After mold is made, dry it in oven at 150F for several hours (this will give plaster mold the best water absorption ability). Allow mold to cool, then fill mold cavity up with latex and reseal the container to avoid evaporation of water/ammonia. Lightly vibrating mold may help eliminate bubbles if mold is highly intricate. Latex will thicken against mold surface as plaster absorbs water. For a thin skin, pour the excess latex immediately back into container. For a thick skin, allow latex filled mold to sit 1-2 hours, depending on desired thickness, before pouring excess latex material back into container. Latex is then allowed to dry in mold for 24-36 hours at room temperature. Drying time is based on temperature and humidity. Dry, warm air is required for fast curing. A de-humidifier can be used for humid conditions. Accelerated cure can be achieved by oven drying at 100-150F till rubber changes color (darkens). Remove rubber and repeat process. Heat curing will speed up process, producing parts in hours.

Dipping rubber parts requires a positive of master made of plaster, epoxy or aluminum. Compensate for shrinkage when building master. Dipping process can be basic dip and hung to dry, or accelerated by the use of *RL-CN (Cure accelerator spray solution)* and oven dried.

Spraying latex requires an industrial airless sprayer. Allow each coat to change color before applying additional coats, or spray part and oven dry between coats—100-150F. Clean sprayer immediately after using and reseal latex container. *RL-Thinner* can be used to dilute thickened latex.

Using Latex:

Avoid contact with copper containing metals, oils or solvents. Avoid using petroleum based products, solvents and copper containing metals with latex rubber. Clean latex with soap and water. Keep cured latex rubber out of direct sunlight.

Storage/Shelf Life:

Store liquid material in cool, dry area out of direct sunlight, in tightly sealed containers, above 60F. **Do not allow liquid material to freeze which will damage latex causing irreversible coagulation.**

THE INFORMATION AND DATA CONTAINED HEREIN ARE BASED ON INFORMATION THAT WE BELIEVE TO BE RELIABLE. EACH USER OF THE MATERIAL SHOULD THOROUGHLY TEST ANY APPLICATION, AND INDEPENDENTLY CONCLUDE SATISFACTORY PERFORMANCE BEFORE COMMERCIALIZING. SUGGESTIONS OF USAGE SHOULD NOT BE TAKEN AS INDUCEMENTS TO INFRINGE ON ANY PARTICULAR PATENT.