PRODUCT DATA

SOLUTIONS FOR INDUSTRY

Technical Information Sheet

Mould Latex

Latex Moulding Compound

Latex Moulding Compound is supplied in highly concentrated form so that its application may be carried out by brushing. If a thinner viscosity is desired for the first coat, dilute by stirring in a small quantity of warm distilled or soft water.

The high solids and viscosity of Mould Latex makes it possible to brush coat vertical surfaces without runs or sags. Lower viscosity latex compounds are available for moulding as well as dipping or spray applications.

Brushes or spray guns used to apply moulding latex should be rinsed before and after use in a solution of soap and water. This permits the applicators to be cleaned readily and greatly prolongs their period of usefulness.

Mould Latex as supplied has very low shrinkage and fast-drying detail. It forms a soft, flexible, good ageing rubber film when dried. The latex will not phase out or separate on long standing.

Plaster or Plastilina-clay models should first be coated with two or three applications of good orange shellac and thoroughly dried before applying the first coat of latex. Warm air will speed the drying, however, excessive heat can deform the model.

Fasten model to a glass plate or a firm, non porous object so that no handling will be necessary during application of the latex. The latex

compound itself may be used as a cementing medium to fasten the model in place by simply pouring a small quantity on the non-porous surface. Place the model thereon and permit assembly to dry.

If Mould Latex is applied by brushing, care must be taken to provide a smooth, even first coat with all air bubbles carefully brushed out. Drying of the first coat should be at room temperature and not be forced dried to insure the latex film from pulling away from the mould. Brush from the top of the model to the bottom; then continue on out from the base a distance of about 4 cm on the supporting medium. When dry, this marginal overlap provides a very definite aid for ease of handling in latex-casting operations. The overlap should be applied not only on the first latex application but on all subsequent ones as well.

After the first coat has become completely dry to the touch, subsequent coats may be added, allowing each to dry until a satisfactory firm thickness has been built up. Drying may be carried out at room temperature. The process will be greatly speeded if a current of air from an electric fan can be directed across the surface of the model. Heat up to 50^{o}C can be used to further speed drying if desired. No heat curing is necessary. Excessive heat promotes shrinkage and possible cracking of the mould. It also tends to seal over the surface of the latex film trapping the moisture inside, which in turn effects the strength of the finished mould and promotes delamination between plies.

If the model has a relatively large surface area, the first coat of latex should be applied as described above, but this must be followed with another applied as spots of latex in a checkerboard design. After the checkerboard application dries, the model must be given another overall application in the usual manner. If additional coats are to be applied, the checkerboard design application should be interspersed regularly. This accomplishes a reduction in the tendency toward shrinking and dimensions of the finished mould will be very close to those of the original model.

Plastilina-clay may be used as the parting fin on the model when making the mould. If a parting fin is used, first coat the clay with shellac to insure release of the latex. When dry, apply latex on the fin and around half of the model. When that coat is dry, apply next coat further around the model. Continue on with subsequent coats until desired thickness is attained. Then remove the clay fin and apply shellac or mould lube to the surface of the latex fin. Complete the mould with further applications of latex. Avoid direct sunlight during preparation of mould.

Reinforcement of the latex compound may be affected by applying strips of cheesecloth, burlap or similar fabric to the mould after four latex applications have been made. The fabric may be cut into narrow strips and applied to a fresh coat of the latex. After this has dried, two or three coats of latex should be brushed over the fabric. Approximate number of latex coats recommended for a model 15 cm high would be five or six coats. For 30 cm or larger - 10 or maximum 12 coats.

Should you have difficulty with the plaster coat sticking to the rubber mould, dip the latex mould into a water solution containing detergent eg. washing up liquid (50 mm per 10 litres). This mixture tends to keep the mould pliable and clean and helps to eliminate air bubbles from the plaster. The solution on the mould should be completely dry before the plaster is poured. Do not use grease, petroleum oils or stearic acid solutions as release agents on latex rubber moulds. Only vegetable oils, such as castor oil, are recommended. RL mould release is a release agent used for plaster from rubber or plaster from plaster and as a separator between the latex mould and the casing (mother mould). It can be used as a lubricant when slipping a thin latex mould over itself to remove the casting.

Mould Latex is used extensively for casting concrete items, however in many cases a mould release is found beneficial. A-R Castor Oil diluted with alcohol in a ratio of 2 to 4 parts of alcohol to one part Castor Oil is

recommended as a good release agent. Application of this solution can be made with brush to spray to latex mould.

Precautions

Do not apply too thick a film of Mould Latex during hot weather. It is better to brush out the latex to a thinner film for faster drying and apply more coats. A heavy coating, especially in undercuts, will seal over on the surface and not allow complete drying. This in turn effects the cure of the material under the surface, which can result in cracking of the dried film and poor tensile strength.

After the final coat of latex is applied, dry from 24 to 72 hours at room temperature to cure; however, 12 hours at 50-60^{o}C will improve tensile strength. After cure, immediately apply the casting or mother mould to protect against ozone, which attacks the latex causing surface cracks. These cracks on the exterior of the mould generally do not go too deep but will weaken the strength of the latex mould in these areas.

Avoid all contact with copper, or copper containing metals, including so called **gold paint.**

On moulding concrete figurines using Mould Latex compound some grade of cement generate a pink staining on the surface of the finished article. This effect is usually reversible on exposure to natural light and in no way effects the structure of the finished product.

The application, use and processing of our products is the responsibility of the user. Any technical or other advice, information or date provided by us, whether verbally, in writing or by way of trials or tests, is given without guarantee or warranty.

RLA POLYMERS PTY LTD
ACN 004 709 915
215 Colchester Road, Kilsyth, Victoria 3137 Australia
P.O. Box 147, Kilsyth, Victoria 3137 Australia
Telephone: (03) 9728 1644 • Facsimile: (03) 9728 6009
E-mail: info@rlapolymers.com.au • Web: www.rlapolymers.com.au

A Vita Group Company

67 Dalgety Drive (P.O. Box 97-575)
Manukau City, Auckland, New Zealand
Telephone: (9) 268 0301
Facsimile: (9) 268 0305