



# Marbo America Inc.

5210-B South Orange Ave. Orlando Florida 32809 Tel: (407) 857-1330 +++ Fax: (407) 857-1340 Marbocote@aol.com

# MARBOCOTE ECO SERIES APPLICATION INSTRUCTIONS

TECHNICAL CHARACTERISTICS:

Specific Gravity: 0.74
Odor: Mild
Physical Appearance: Colorless
Flash Point: 82°F and above

## MOLD PREPARATION

Mold surfaces must be clean and free of any other non-crosslinking release agents or resin build-ups from previous processing; otherwise **MARBOCOTE** could have a poor film formation and give unsatisfactory release performance. Clean molds with acetone, or other suitable solvent that provides thorough cleaning without leaving any residual film. Take care not to damage polyester molds, (especially if less than seven days old), by using a solvent which is too aggressive to the surface of the mold.

## PREPARATION OF NEW MOLDS

Newly produced molds, ("green molds"), contain excessive levels of un-reacted styrene molecules which are attracted to other styrene molecules, as in gell coats. The barrier built between this attraction is extremely important during the first few cycles of a new molds' service. Polymer releases (e.g. MARBOCOTE) are effective barriers against styrene migration; however, close attention should be paid to applying at least 3 thorough coats of MARBOCOTE RS415 SEALER to the new molds prior to an equal number of MARBOCOTE GRP ECO RELEASE. Allow each coat to cure completely as instructed. Perform an adhesive tape test on multiple locations of the mold surface to confirm sufficient film formation and that the continuity and completeness of the MARBOCOTE film has been achieved. The ease of release of the adhesive tape will demonstrate the performance of the release coating.

# APPLICATION OF RELEASE SYSTEMS

All **MARBOCOTE** (RS415, GRP ECO, 75ECO) products should be applied using a clean, lint free cotton cloth, or by airless spraying. For the most effective performance always use the "wipe on/wipe off" technique, applying ample **MARBOCOTE** to thoroughly wet the mold surface. Then after allowing





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a fairly large area (i.e. 3' X 6') to remain wet for at least 20-30 seconds, wipe over the entire area, (while still wet), *just once* with a large clean cloth in order to absorb excess solvent and unnecessary puddles.

This initial wiping should only "smooth" the application area, however, not necessarily dry the surface. Surface may remain moist, but not wet. The remaining damp surface should be allowed to dry and fully cure for 15 minutes. Any remaining haze is easily removed by the next application of either Sealer or Top Coat. Only the final topcoat needs be detailed for streak free, high gloss appearance. This is most easily done once the "smoothed" coat is completely dry. A soft, clean cotton cloth should again be used and only slight hand pressure is needed, as well as only a single pass over the mold surface. Repeated back and forth polishing actions with a firm hand are unnecessary and only reduce the release foundation already applied. There is little difference in the application of the various products. You will notice that more application time is available with **MARBOCOTE** systems without resultant streaking. The 75ECO takes about 1 minute to dry (use moderately damp applicator cloth) and cures in about 3 to 4 minutes. The 75ECO should never be wiped off after application until completely dry.

Here are some additional references to go by when deciding which product best suits your needs:

GLOSS FINISH: MARBOCOTE GRP ECO
TO MAINTAIN A MATTE FINISH: MARBOCOTE 75 ECO
PHENOLIC RESIN ITEMS: MARBOCOTE 75ECO
ROTATIONAL MOLDING: MARBOCOTE 75ECO

#### **SEALER APPLICATION:**

To eliminate porosity of new resin or aluminum molds, first apply three coats of **MARBOCOTE RS415 SEALER** with a 15 minute cure time between applications to ensure that solvents have completely dried off, then wait approximately 60 minutes before applying standard **MARBOCOTE RELEASE** Systems. If a seasoned mold is being sealed, top coating may begin in 15 minutes after final sealer coat application.

## TOP COAT APPLICATION

Apply 3-6 coats of **MARBOCOTE GRP ECO** with a 15 minute cure time between each coat, and then wait 40 - 60 minutes, if possible, for the best cure with maximum performance. 75ECO should be allowed to completely dry before detailing to remove haze.

When applying, be sure to keep the film uniform. Re wet the application cloth often so as not to allow it to dry out, or starve the intended coating. The technique is to wipe on the release material in order to "wet out" the area of application and then wipe of gently with a separate dry, lint free, cloth after final





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application has fully cured. Apply a single conditioning coat after the first three or four cycles to cleanse the porosity of any remaining contamination and to increase the number of multiple releases. When release becomes more difficult, note the number of consecutive cycles achieved and schedule another coating sooner. Apply one or two coats of **MARBOCOTE**, again allowing 15 minutes between coats. Waiting 40-60 minutes before continuing molding often extends the number of multiple cycles prior to recoating. If absolute maximum cycles are not necessary, molding may continue after only 12-16 minutes providing all solvents have dried off and a good foundation is obtained. This can be quickly checked using the adhesive tape test.

NOTE: Always reseal the cans after use. MARBOCOTE products are moisture sensitive.

# **TOUCH UP**

Continuous abrasion of **MARBOCOTE** during the release will eventually wear down the coating resulting in a more difficult release. To repair **MARBOCOTE** release film, be sure any damaged area is free of cured resin, dust, or other contaminants, then apply two coats of **MARBOCOTE GRP ECO** to the area waiting a minimum of 15 minutes, and resume production. **MARBOCOTE 75** is designed for intermittent touch up, between coatings, to only areas of high abrasion or where extra slip is needed, thus prolonging the time between fully coating the tool for release foundation maintenance. **MARBOCOTE 75 ECO** is to be lightly wiped on the intended areas and allowed to dry and cure at least 5 minutes before wiping. **MARBOCOTE 75ECO** should never be wiped while still wet.

#### PROCESS RECOMMENDATIONS

- Never dilute **MARBOCOTE** with any other product or solvent.
- Always use in a well ventilated area, taking care not to inhale concentrated vapors.
- Always use clean, lint free, cloths when applying.
- Always use separate cloths for each product.

If you wish to obtain the highest gloss finish possible, wipe gently oafter each coat to "polish" the release film. This procedure is especially recommended for use of GRP ECO in order to obtain a higher gloss mold surface. For best results, always gently polish with clean, lint free cotton cloths, such as T-shirt material.

When **MARBOCOTE** is stored in sealed containers, it has a shelf life of 12 months, but it should be used within three months after it has been opened.

HEALTH AND SAFETY DATA SHEETS ARE PROVIDED SEPARETELY.