



Lilly-Ram Chemical Company, LLC
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Ram Gelcoat is specially formulated for moldmaking. Standard Black and Leaded Tangerine Tooling gelcoats can be formulated to meet MACT Regulations. Please consult your sales representative for more information.

The plug to be duplicated must first be waxed to permit positive release. Ram Tooling gelcoat is then applied using air atomizing spray, AAA or impingement equipment, and laminated using a tooling resin or equivalent.

The resulting surface offers a range of advantages facilitating high quality molding:

- High Gloss
- Excellent abrasion resistance
- Superior hardness
- Exceptional craze resistance
- Minimum Distortion

UNCURED GELCOAT PROPERTIES (All properties based on 1.5% MEKP)

- Gel Time @ 77°F.....12-16 min.
- Gel to peak..... 14 –22 min.
- Viscosity @77°F
RVF #4 @ 20 rpm-cps.....4000-4400
- Thix index (6/60).....5.0 – 7.0
- Weight per gallon.....9.5 – 10.0 lbs.
- Stability – 3 months @ 77°F unopened
- Hegman grind4 minimum
- Film cure @ 77 °F.....60-75 min.
- Coverage @ 20 mils, wet. 80 sq. ft/gal
(Actual transfer efficiency affected by overspray, shrinkage, and heat transfer.)
- Hide @ 15 mils (wet).....complete
- Patchability (Ferro UltraPatch patch booster recommended).....good.
- Sag resistance.....20-25 mils

CURED GELCOAT PROPERTIES

- Flex elongation
ASTM D790.....1.5 –1.8%
- HDT ASTM D648.....200-225°F

TYPICAL APPLICATIONS

Marine, sanitaryware, recreational vehicles, and open mold hand lay-up applications.

COLORS:

To contrast with your production gelcoat colors, tooling gelcoats are offered in four colors, all heavy metal-free formulations.

- + Tangerine
- + Black
- + Clear
- + Red
- + Green

CAUTION

- Do not use varnish as a sealer or finish coating when preparing a plug for mold-making. Even if the varnish is well waxed and coated with a parting film, sufficient styrene monomer from the gelcoat can pass through the barriers to soften the varnish which will act as an adhesive between the mold and the plug
- A high heat distortion tooling resin or equivalent should be applied while precisely following the resin manufacturer's recommended laminating procedures.
- Mass exotherms extremely hot.
Caution with skin or contact with combustibles.

APPLICATION GUIDELINES

1. Agitate well before using
2. The gel time of this product may change with aging. Check it to its' specifications.
3. Do not use less than 1.5%, or more than 2.5%, of MEKP catalyst.
4. Use only clean and properly adjusted spray equipment
5. Spray catalyzed gelcoat on two small (approximately 2 ft. X 2 ft) test panels at the same time using the same methods. Carefully use the same spray procedures as used on the mold.
When the test panels have gelled, strip one and inspect it for porosity before proceeding further with the construction of the mold. Laminate the second panel using the same procedure used on the production mold. Retain this panel and identify as to mold and date, for possible future evaluation and correlation.
6. Recommended total mil thickness is 30 mils wet. Applied in two applications.

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