

Product Data



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B-2843/B-2844 WHITE VINYLESTER PRIMER GEL COAT

B-2843/B2844 are both vinylester based primer gel coats formulated from a tough, resilient vinylester resin system that will resist direct impacts while maintaining a hard, durable surface that is relatively easy to sand in preparation for subsequent application of a top-coat. Furthermore, the vinylester resin base of these products enhance their resistance to blistering that is often encountered in standard polyester products.

B-2843 is a non-air inhibited gel coat which facilitates its use for application to a plug or pattern where the cured gel coat can be readily sanded to a smooth hard surface from which a mold can be reproduced.

B-2844 is an air-inhibited product which means that it will cure with a slightly tacky surface which will enhance adhesion of a subsequent layer of gel coat. This allows the buildup of several layers of gel coat with assurance of good bonding between each layer.

Both of these products are formulated at a viscosity which will offer ease of spraying and excellent leveling of the gel coat surface thereby reducing the need for excessive sanding prior to top-coating.

TYPICAL PROPERTIES @ 77° F (25°C)

UNCATALYZED

Weight/Gallon:	11.6 Pounds
Specific Gravity:	1.38 g/cc
Viscosity, Brookfield, 6 RPM	12,000 cps
60 RPM	2,300 cps
Shelf Life:	3 Months, minimum in sealed container maintained at less than 80°F.

TYPICAL PROPERTIES @ 77°F (25°C)

CATALYZED (2% MEKP* @ 77°F.)

Gel time, 100 gram mass: 20 - 25 Minutes

Gel time, 20 mil film: 30 - 40 Minutes

Cure to Laminate, 20 mil film: 60 - 70 Minutes

*Norac MEKP 925H or Witco Hi Point 90

APPLICATION

HK Research Corporation's B-2843/B2844 White Vinylester Primer Gel Coat is formulated for standard conventional spray application as well as "air-less" application. This gel coat is suitable for use in standard "air-less equipment" or the currently available "low pressure-air assisted" air-less type equipment. This high performance gel coat requires careful application in order to maximize the properties in the cured gel coat film. Poor application of the B-2843/B2844 Gel Coat will cause a reduction in the properties of the cured gel coat film as well as the possibility of porosity which may interfere with post coating applications.

B-2843 is particularly suited for use as a primer/surfacer on plugs or patterns. This gel coat cures to a tack-free surface that can readily be sanded to a smooth, hard finish in preparation for the construction of an FRP mold from this pattern or plug.

B-2843 is formulated with a surfacing agent making the product non-air inhibited which provides a tack-free surface for sanding, particularly when this product is used as a filler/surfacer. It is important to remember that this gel coat surface must be sanded and cleaned with a solvent such as mineral spirits to remove traces of surfacing agent that could interfere with bonding of a coating or laminate applied to this gel coat.

B-2844 is air-inhibited which means that it will cure with a slightly tacky surface that will serve to enhance the adhesion of this gel coat to subsequent coatings applied to this surface as long as the surface is kept clean and dry.

MIXING

Prior to removal from the shipping container and catalyzation, it is recommended that the materials be mixed thoroughly to reincorporate any "settled" or "stratified" material. It is further recommended that the material in the shipping container be mixed at least once a week during its use period. The mixing procedure would assure the most uniform properties during application of the gel coat. Mechanical mixing is recommended and should be sufficient to "turn" the material 10 times. Most common gel coat mixing equipment will accomplish an adequate blend in less than 1/2 hour.

It is suggested that the catalyst concentration used in the application of B-2843/B-2844 White Primer Gel Coat not exceed 3.0% or fall below 1.5% to retain maximum properties. The recommended range for the catalyst concentration within the applied film is 1.8 to 2.2% at 77° F.

Under normal conditions the gel coat is ready to "lay up" in approximately 60 minutes. The "time to laminate" is dependent on the ambient temperature, humidity, and air movement, as well as the catalyst concentration and the film thickness. A wet film thickness of at least 18 to 20 mils is recommended for proper hiding, cure, and performance properties. When particularly high baking temperatures, i.e., greater than 250°F are to be used, increase the film thickness to 22-25 mils. for best results. This product should not be used when the temperature conditions, both mold and ambient, are less than 65°F as the curing of the gel coat may be adversely affected.

SAFETY CONSIDERATIONS

The B-2843/B-2844 White Primer Gel Coat is based on a high grade vinylester resin which contains styrene monomer, a flammable liquid. Keep away from sparks, heat and open flame (including pilot lights). Electrical equipment should be vapor-proof and protected from breakage.

Styrene vapors are heavier than air and will tend to concentrate in the low areas of molds and in pockets immediately above the floor area. To keep vapors within a safe limit in all areas, adequate ventilation or suction fans should be used that will remove these styrene monomer vapors.

All equipment must be grounded - including spray guns and molds.

Both the polyester gel coat and catalyst may cause burns to eyes and skin. Do not get in the eyes! Avoid breathing vapors! Gel coat applicators should wear a NIOSH approved respirator effective for vapors, spray mist and dust. In case of accidental contact, remove contaminated clothing and wash affected skin areas with soap and copious quantities of water. Contact a physician if persistent skin irritation occurs. For eyes immediately flush with plenty of water for at least 15 minutes; call a physician immediately. Wash contaminated clothing before reusing.