Product Data



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B-3025

BLACK, RESILIENT, SOFT-SAND

PRIMER GEL COAT

B-3025 is an Isophthalic-based Polyester Primer Gel Coat formulated with sufficient resiliency to resist direct impacts while maintaining a hard, dense surface that is relatively easy to sand in preparation for subsequent application of other coatings. B-3025 is formulated for use as an in-mold coating wherein the primer gel coat is sprayed into a properly prepared mold and a laminate is then built behind the gel coat. The de-molded FRP component can then be sanded to a hard, smooth surface and coated with a wide variety of coatings to meet a customer's specific requirements.

B-3025 has the added advantage of having a total VOC content of less than 35% thereby qualifying it as a Low VOC Polyester under California's SCAQMD Rule 1162. The estimated emissions in a gel coat spray process using B-3025 have been calculated at less than 10% using Federal EPA AP-42 guidelines. This low total VOC content and low estimated emissions make B-3025 very advantageous to FRP operations that must maintain tight emission controls.

If you are looking for a similar product in a primer/surfacer that can be applied to a pattern or plug and then sanded to a smooth, hard finish in preparation for making a mold we suggest our B-9043 Primer/Surfacer Gel Coat.

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The information and data given in this bulletin are based on tests, which are considered to be reliable and accurate. Because of environmental conditions beyond our control, however, no warranty is given concerning the results obtained by the user of HK Research products. Each user should satisfy himself, by adequate testing, of the suitability of HK Research products for his particular application.

TYPICAL PROPERTIES @ 77°F (25°C)

UNCATALYZED	
Weight/Gallon:	11.2 Pounds
Specific Gravity, g/cc:	1.35
Viscosity, Brookfield, 6 RPM 60 RPM	12,000 - 18,000 cps 2,300 - 3,200 cps
Shelf Life:	3 Months, minimum in sealed container maintained at less
<u>CATALYZED</u> (2% MEKP* @ 77°F.)	
Cup Gel, 100 gram mass:	10 - 15 Minutes
20 Mil Film, Gel:	20 - 25 Minutes
20 Mil Film, Cure to Laminate:	40 - 50 Minutes

*RCI Superox 46-702 or equivalent

APPLICATION

HK Research Corporation's B-3025 Black Soft-Sand Isophthalic 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-3025 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.

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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-3025 Black Soft-Sand Isophthalic Primer/Surfacer 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 $77^{\circ}F$.

Under normal conditions the gel coat is ready to "lay up" in 40 to 50 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-3025 Black Soft-Sand Isophthalic Primer Gel Coat is based on a high grade isophthalic 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.

page 3 of 4 HKR017-123097rev 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.