

# Product Data



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## B-9043

### MEDIUM GRAY, RESILIENT, SOFT-SAND

### PRIMER/SURFACER GEL COAT

B-9043 is an Isophthalic-based Primer/Surfacer Gel Coat formulated with sufficient resilience 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-9043 is non-air inhibited which facilitates its use for application to plugs or patterns. When cured this surface can then be readily sanded to a smooth, hard surface from which molds can be reproduced.

#### TYPICAL PROPERTIES @ 77°F (25°C)

##### UNCATALYZED

Weight/Gallon:	11.7 Pounds
Specific Gravity, g/cc:	1.41
Viscosity, Brookfield, 6 RPM	16,000 cps
60 RPM	2,600 cps
Shelf Life:	3 Months, minimum in sealed container maintained at less than 80°F.

##### CATALYZED (2% MEKP\* @ 77°F.)

Gel time, 100-gram mass:	12 - 16 Minutes
20 Mil Film Geltime:	20 - 25 Minutes
20 Mil Film, Cure to Laminate:	40 - 50 Minutes

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\*RCI Superox 46-702 or equivalent

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## APPLICATION

HK Research Corporation's B-9043 Gray Soft-Sand Isophthalic Primer/Surfacer 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-9043 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-9043 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-9043 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.

## 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-9043 Gray 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°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-9043 Gray Soft-Sand Isophthalic Primer/Surfacer 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.**

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.