

# Product Data



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## G-2401

### ABRASION RESISTANT WHITE GEL COAT

The HK Research laboratory has developed an abrasion resistant gel coat that has significantly greater resistance to scratching and other forms of surface abrasion than standard cultured marble gel coat. This product is formulated from the HK Research high molecular weight NPG/Isophthalic polyester resin system found in all of our cultured marble gel coats but has the added feature of improved abrasion resistance and surface hardness.

G-2401 is a standard white color but this same abrasion resistant gel coat is available in a wide variety of other colors including most of the standard sanitary-ware colors.

#### TYPICAL PROPERTIES OF LIQUID G-2401

Weight/Gallon @ 77°F:	11.86 lbs.
Specific Gravity, 77°F:	1.43
Viscosity, Brookfield, 77°F	
6 rpm:	12,000 - 16,000
60 rpm:	2,200 - 2,800
Shelf Life @ 77°F:	
Uncatalyzed:	3 months minimum
Catalyzed, 2% MEKP*:	12 - 16 minutes

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\*Use one of HK Research's recommended MEKP catalysts.

#### APPLICATION

G-2401 Abrasion Resistant White Gel Coat will cure to a hard, durable, abrasion-resistant finish in approximately 24 hours. It is strongly recommended that any buffing, polishing or patching of the gel coat surface be completed within the first 4-8 hours after casting in order to facilitate the sanding or buffing of the surface. Beyond that time, the surface of this gel coat becomes so hard that it is difficult to sand or polish.

HK Research Corporation's "G" Series NPG/Isophthalic based gel coats are formulated for standard conventional spray application, as well as "air-less" application. These high performance gel coats require careful application in order to maximize the properties in the cured gel coat film.

### **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. This 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.

***DO NOT MIX MATERIAL CONTINUOUSLY!---As this may cause loss of thixotropic properties. If gel coat is inadvertently over mixed, hold material for 4 hours without agitation before application.***

It is suggested that the catalyst concentration used in the application of "G" Series NPG/Isophthalic based gel coats 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 pour upon in 30 to 45 minutes. The "time to pour" is dependent on the room 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. These products should not be used when the temperature conditions, both mold and ambient, are below 65°F as the curing may be adversely affected.

Specific information about handling and application techniques for use with HK Research's Cultured Marble Gel Coats can be found in our technical bulletin HKR-015 titled "Description/Application HK Research Gel Coats."

## **SAFETY CONSIDERATIONS**

"G" Series NPG/Isophthalic gel coats are based on a resin which contains styrene monomer, which is 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 the 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 using.