

# Product Data



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## "G" SERIES SOLID COLOR ROOFING GEL COAT

HK Research high molecular weight NPG/Isophthalic, UV-Stabilized Gel Coats are unsurpassed in the FRP industry for their superior properties. These gel coats have been specially formulated into non-air inhibited, pigmented polyester coatings that are designed for roofing applications. The UV-light stabilized, high molecular weight NPG/Isophthalic vehicles provide superior weatherability and durability when used as roof or deck coatings subjected to constant outdoor exposure. These gel coats are further distinguished by their excellent leveling and fast, even film cure rate.

These roofing gel coats, as formulated, are intended for application by roller. However, they can be applied in smaller areas by brushing. When applied by roller they will exhibit high hiding in order to facilitate a one-coat application. Due to the non-air inhibited nature of these gel coats, sanding of a cured film will be required before a second coat is applied if that should become necessary.

### TYPICAL PROPERTIES OF UNCATALYZED GEL COAT

WEIGHT/GALLON @ 77°F	10.2 - 10.6 POUNDS
SPECIFIC GRAVITY @ 77°F	1.22 - 1.27
BROOKFIELD VISCOSITY @ 77°F	
6 RPM	23,000 - 25,000 cps
60 RPM	3,200 - 3,400 cps
THIXOTROPIC INDEX	6.0 - 7.0
SHELF LIFE @ 77°F	
UNCATALYZED	3 MONTHS MINIMUM
CATALYZED, 2% *MEKP	12 - 16 MINUTES

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\*Reichhold 46-702, 100 gram mass

## APPLICATION

HK Research Corporation's "G" Series Solid Color Roofing Gel Coats are formulated for roller application but can be brush applied if necessary. When roller applied, these gel coats will level to give a relatively smooth, high-hiding finish to the applied surface.

Please note the mixing and catalyzing instructions in the next section of this bulletin. Furthermore it is important to remember that this material has a limited pot life once the catalyst has been added to the gel coat. All application and clean-up must be completed within this limited time period. Once the gel coat starts to polymerize or gel it is no longer fluid and equipment covered with polymerized gel coat is very difficult to clean.

## 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.

***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.

Specific information about handling and application techniques for use with HK Research's 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.