

# Product Data



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## **G-1985 MASSTONE COLOR BASE GEL COAT FOR TINTING**

HK Research high molecular weight, 80% NPG/Isophthalic, UV Stabilized Gel Coats are unsurpassed in the Cultured Marble industry for their superior properties.

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HK Research gel coats meet the exacting requirements for use in both commercial and residential applications.

HK Research gel coats meet applicable standards for sanitary-ware gel coats (i.e., ANSI Z124.3-1986).

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HK Research gel coats are specially formulated, pigmented polyesters that are designed for use in cultured marble and sanitary-ware industries, building panels, etc. The light stabilized, high molecular weight, NPG-Isophthalic vehicles provide superb durability in the finished product. These gel coats are distinguished by their excellent leveling and fast, even film cure rates.

G-1985 is specifically formulated as a masstone-tinting base to permit the end user to add pigment concentrates or color pastes of his choice in order to formulate special colored gel coats to meet his needs. The use of a tinting base such as G-1985 and color concentrates allows the user to have access to a wide variety of gel coat colors without stocking a large quantity of products. With the proper use of G-1985 and specially formulated color pastes, cultured marble manufacturers can easily match most of the standard plumbing-ware colors or design their own special colors while stocking only the one tinting base gel coat and much smaller quantities of the color pastes.

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## TYPICAL LIQUID PROPERTIES

Weight Per Gallon, 77°F:	8.5 - 8.8 lbs.
Specific Gravity	1.01 - 1.06
Viscosity, Brookfield, 77°F	
6 RPM:	15,000-18,000 cps
60 RPM:	2,400- 2,800 cps
Shelf Life,	
Uncatalyzed, 77°F:	3 months minimum
Pot Life, Catalyzed,	
2% MEKP*, 77°F:	12 - 16 minutes

\*RCI 46-702 or Equivalent

## APPLICATION

G-1985 is a specially formulated masstone tinting base polyester gel coat designed for the cultured marble and sanitary-ware industries. This light-stabilized, high molecular weight, NPG- Isophthalic based gel coat provides superb durability in the finished product. This gel coat is further distinguished by its excellent leveling and fast, even film cure rate.

G-1985 is ideal for use with polyester compatible pigment concentrates and color pastes such as the HK Research Standard Cultured Marble Color Paste Series. G-1985 is particularly suited for use in dark masstone colors such as deep blues and greens, black and dark reds. G-1985, in combination with these dark colors, produces a gel coat that will exhibit less tendency to show water spotting when the gel coat is exposed to standing water for long periods of time. We have also found that G-1985 can be used with white pigment to obtain a "whiter" white than can be obtained with a standard translucent gel coat.

For most colors, a suggested starting formula would call for adding 5% by weight of the color paste to G-1985 Masstone Color Base Gel Coat and mixing thoroughly. In some cases, such as with white, it may be necessary to increase the color paste loading to 10% to obtain the desired color and hiding. The HK Research laboratory staff will be happy to assist you with recommended pigmentation levels.

HK Research Corporation's "G-series" NPG-Isophthalic Gel Coats are formulated for standard conventional spray application as well as airless spray 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 the 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 the "G" series NPG-ISO Clear 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" in 30 to 60 minutes depending on the system that is used. 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 20 to 25 mils is recommended for optimum 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.

## SAFETY CONSIDERATIONS

"G" series NPG-ISO clear gel coats are based on a resin that 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 the 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.