

Product Data



908 LENOIR ROAD • POST OFFICE BOX 1809
HICKORY, NORTH CAROLINA • 28603-1809
TELEPHONE (828) 328-1721
TOLL FREE (800) 334-5975
FAX (828) 328-4572

"H" SERIES COLOR CONCENTRATES

HK Research Corporation has developed a series of color concentrates suitable for use in today's high output mixing equipment as well as for use in conventional marble manufacturing procedures. The following features distinguish the "H-Series" Color Concentrates:

***** LOW VISCOSITY *****
(pourable)

***** NO FILLERS - PIGMENT AND VEHICLE ONLY *****
(use less and get "sharper colors")

***** BASE COLORS ARE STABLE FOR OVER ONE YEAR *****
(and they don't dry out)

***** REACTIVE VEINING COLORS TO MAXIMIZE PROPERTIES *****
(especially in dark veining applications)

***** AVAILABLE IN ALL STANDARD SANITARY COLORS *****

HK Research Corporation's "H" Series Color Concentrates are being used in numerous applications through high output mixing equipment, as well as conventional cultured marble manufacturing techniques. All of the concentrates are designed to chemically combine with the surrounding matrix to provide the maximum in product durability.

The "H" Series base colors contain no "fillers" or other extraneous materials that detract from the appearance and sharpness of color. The "H" Series veining colors are designed to provide the "sharpness" required in "top notch" cultured marble applications.

TYPICAL PROPERTIES

	<u>H SERIES BASE COLORS</u>	<u>H SERIES VEINING COLORS</u>
Weight/Gallon @ 77°F:	9.70 - 17.30	9.50 - 12.40
Specific Gravity g/cc @ 77°F:	1.17 - 2.08	1.14 - 1.50
Viscosity, cps @ 77°F:	Pourable	Slightly Thixotropic
Shelf Life @ 77°F:	12 months	3 months

APPLICATION

BASE COLORS

The "H" series base colors are designed for incorporation in the base marble matrix mix. The normal usage rate is 1 - 2% by weight of the total mix but varies greatly in use due to the wide variation in desired effects. It is preferable to premix the colorant with the resin prior to filler addition to obtain the fastest blending in the matrix. The high solubility characteristics of the "H" series of base color concentrates make them readily soluble in the matrix resins. The "base" colorants will readily blend within the matrix system to provide a uniformly high quality cultured marble casting.

HK Research Corporation "H" Series Colorants are matched to the standards we have at a concentration of 1% by weight in a marble matrix consisting of 75% MARBLEND/25% SILMAR S-585. A number of special colors have also been formulated for use in a molder's specific formulation in order to assure the best possible color match. We do know that significant variations can be seen in the color of resins, fillers and even clear gel coats that can affect the final casting color. It is for this reason that we strongly suggest that each color be checked in your own shop with your specific mix in order to be sure that you have satisfactory color match before starting full production with that new color.

This is particularly true of people making both cultured marble and onyx products. A color paste that is formulated for use in marble may not give the exact same color in an onyx formula. Here, again, we recommend that you test each color in your particular mix before going into full production. If you let us know when you order that this color is to be used for onyx, marble, or gel coat, we can help you select the proper product for the best color match.

A final precaution to be considered is that plumbingware color cards and even the ceramic chips do not always represent exact color matches to the actual plumbingware component. We have attempted to match each color to the color standard supplied to us but since we do know that some variation does exist, it is recommended that you cast a small part of a new color and compare this to your customer's specific part prior to starting full production with that new color. Once we establish the correct color for use with a particular formula we can readily duplicate that color from batch to batch. The most important factor is establishing the correct color to start with.

The "H" Series Cultured Marble colorants are well known for dispersion characteristics in mass production mixing equipment. The manner in which they rapidly disperse in the matrix is especially important due to the short retention time typical of this type of equipment. Most of these products are supplied at a viscosity that can be handled by the production equipment. Some pigment settling may be seen at this viscosity so we recommend that containers of these pigments be mixed at least once a day prior to use to assure uniformity of color.

The "fineness of grind" as well as their lubricity, typical of the "H" Series base colors, minimize the "wear and tear" on the pumps used to transfer them.

VEINING COLORS:

The "H" series veining colors were designed to be used for applications where the "soft spots" caused by the inhibiting effect of various pigments needed to be overcome. The "H" series veining colors contain no fillers which detract from the "sharpness" of the vein.

These products are designed to be slightly thixotropic so that they will "stay where they are put". These products are uniquely designed for the cultured marble industry. They are provided in a high grade isophthalic matrix resin base that reacts with the surrounding material to maximize the product quality and to minimize the "stretch marks" and "soft spots" associated with non-reactive pigment systems.

When used in conventional cultured marble applications, it is preferable to catalyze those products prior to use. Use 1/4 - 1/2% of the matrix MEKP catalyst and mix thoroughly before pouring the veining concentrate on top of the matrix. Special effects may be obtained by prediluting with matrix resin to obtain "translucent or transparent" veins.

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 concentrate. Mechanical mixing is recommended and should be sufficient to "turn" the material 10 times.

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

SAFETY CONSIDERATIONS

"H" Series Veining Color Concentrates 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 veining color concentrates and the catalyst may cause burns to eyes and skin. Do not get in the eyes! Avoid breathing vapors! 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.