Product Data

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R-0529
UV-LIGHT STABILIZED ISOPHTHALIC LAMINATING RESIN

R-0529 UV-Light Stabilized Isophthalic Laminating Resin combines the toughness, chemical resistance and high heat distortion temperature typical of high quality Isophthalic resins with a low laminate exotherm temperature and resistance to degradation by ultraviolet light. These features make this resin an outstanding choice for FRP laminating of structures that will be continuously exposed to outdoor atmospheric conditions.

TYPICAL PROPERTIES OF R-0529

Weight/Gallon, 77°F:	8.95 Pounds
Specific Gravity:	1.08
Viscosity, Brookfield, 77°F	
@ 6 rpm:	1100-1500 cps
@ 60 rpm:	450-550 cps
Acid Value:	< 10
Gel Time, 1.25% MEKP, 77°F	
100-Gram mass:	15-20 minutes
1/8" thick Laminate:	18-23 minutes
Barcol Hardness Development in 1/8" thick Laminate	
Time after Gel:	
2 Hours:	10-20
4 Hours:	25-30
24 Hours:	45+
Shelf Life, Uncatalyzed:	3 Months minimum

1/8" THICK CLEAR CASTING

		Test Method
Barcol Hardness:	45	----
Flexural Strength:	18,100 psi	ASTM D-790
Flexural Modulus:	565,000 psi	ASTM D-790
Tensile Strength:	8,200 psi	ASTM D-638
Elongation in Tension:	1.5%	ASTM D-638
Heat Distortion Temp (264 psi):	108°C.	ASTM D-648

CATALYZATION AND APPLICATION

Proper catalyzation is important to the cure of any good laminating resin. R-0529 Laminating Resin should be catalyzed with Methyl Ethyl Ketone Peroxide (RCI Superox 46-702 or equivalent) at a level of 1.25% of the resin weight.

The laminating resin and catalyst should be mixed thoroughly and then carefully applied by spraying, brushing or rolling along with chopped fiberglass strands directly behind the properly applied and cured gel coat film. Instructions for the proper application of a laminate can be found in Technical Bulletin HKR055. Extreme care must be taken to assure that the glass reinforcement is thoroughly wet with resin and all entrapped air is worked out of the laminate.

SAFETY CONSIDERATIONS

HK Research's Isophthalic Tooling Resins 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 reusing.