PRODUCT BULLETIN

August 2020

HiGloss THP™ 99T Series

Transportation Gel Coats

DESCRIPTION

- HiGloss THP™ gel coats are high performance products formulated for the Transportation Industry. These gel coats have lower volatile organic compounds (VOC's) than conventional gel coats. These gel coats require only the addition of the proper amount of the appropriate methyl ethyl ketone peroxide (MEKP) to cure.

BENEFITS & FEATURES

- Low VOC content
- Resistance to porosity, tearing, color separation, sag resistance
- Consistent liquid properties and good patch-ability
- Formulated to be resistant to water and certain chemicals.
- Specifically developed for transportation applications to provide durable, reduced maintenance products.
- HiGloss THP™ gel coats meet the EPA National Emission Standards for Hazardous Air Pollutants (NESHAP): Reinforced Plastic Composites Production.

PROPERTIES – LIQUID

Property(1)	Unit	White Values	Color Values
Viscosity(2)	cps	13,500	3,550
Thix Index	-	5.85	6.0
Gel Time(3)	minutes	15.5	12.5

1) All properties at 25°C/77°F unless otherwise noted
2) Brookfield Viscometer RVF Spindle #4 at 20 RPM
3) 1.8% DDM-9

APPLICATION

Although 99T's are formulated as low VOC products, it should be noted that over-atomization of a gel coat means more volatilization (more overspray, more monomer and solids loss, more odor). It is important then to strive for good atomization (good fan pattern, no fingers or tails, uniform particle size of about 1/16") while maintaining lowest pump and atomizing pressures as practical.

The inherent chemistry of these gel coats does not allow for the same ease of fluid movement experienced with other gel coats. Adjustments may have to be made for pump pressure, delivery rate, tip size and atomization. Polynt Composites does not recommend fluid lines longer than 50 feet, or pumps smaller than 20:1 ratio. In addition, 99T's are more sensitive to cold temperatures than are other gel coats. HiGloss THP™ 99T's are formulated for airless as well as conventional spray application. Neither brushing nor rolling is recommended.

In addition to the low VOC chemistry, the lower viscosity and thixotropic index result in both less overspray and less monomer loss, but the total film thickness should be sprayed in multiple passes (at least 3 at 18 mils, 4 at 20 to 24 mils). More rapid film build could result in some sag.

Proper mold maintenance is important. Although 99T's have excellent patching properties, minimal repair work is always desirable. Sanding and compounding can hasten the chalking and loss of gloss of all gel coats.

These products should not be used when temperature conditions are below 60°F, as curing may be adversely affected.

99T Series gel coats are not compatible in the liquid state with isophthalic gel coats or resins. Spray and pumping equipment must be completely clean of these products before 99T's can be used.

Do not add any material, other than a recommended methyl ethyl ketone peroxide, to these products without the advice of a representative of Polynt Composites. Under no circumstances should glycerin be added.

Refer to Polynt's Composites Applications Guide ("Cookbook") for equipment and application recommendations. Each user must determine the suitability of this product to his/her particular mode of operation and intended end-use application. A Polynt representative will be available to assist in the proper selection of all Polynt-Reichhold products available for commercial use.

SHELF LIFE & STORAGE

The shelf life of standard cure HiGloss THP™ 99T Series is 120 days from the date of manufacture from Polynt. The shelf life of fast cure (gel time less than 9 minutes) HiGloss THP™ 99T Series is 60 days from the date of manufacture from Polynt. To maximize usage life and maintain optimum properties, resins and gel coats should be stored in the original closed container at temperatures below 23°C/73°F and away from ignition sources and sunlight. Keep containers sealed to prevent moisture pick-up and monomer loss.

RELATED PRODUCTS

Polynt recommends the use of PATCHAID® when patching HiGloss THP™ 99T Series gel coats. Options are as follows:

- Polynt's PATCHAID® 970XJ037, 970X900, 970XJ166 and 970XA014 – Resin based products that can be mixed into the gel coat to improve the working properties of spray patches.

- FC PATCHAID® 970C961 Fast Cure Spraycure™– Monomer based product that can be mixed into the gel coat to improve the working properties of spray patches or can be used as an overspray to seal the open side of spray patches.

SAFETY & WARRANTY

To receive a copy of our safety and warranty information, please email safetyandwarranty@polynt.com.