



December 1, 1980
New Information
Mailed to: E, D, C/2169/DB

B-546 100% Solids UV Curing Class H Varnish

Westinghouse B-546 is a 100% solids, UV curing varnish which will comply with EPA regulations. It has a Class H Rating (IEEE 57). This varnish contains a UV sensitizer as it is received and need only to be exposed to UV light to polymerize. It may also be heat cured in the conventional way.

Features:

- 100% solids varnish - no solvent
- Low viscosity for good impregnation
- Good Bond strength
- Cures to a hard cake
- Excellent oil resistance
- To conserve energy, this varnish can be ultraviolet cured in seconds or will cure quickly with heat
- Good moisture resistance

Thermal Life

Westinghouse B-546 has a thermal life of 20,000 hours at 180°C as determined by IEEE #57 test using MW-35 wire.

Bond Strength - Helical Coil

1 Mil per dip, reverse dip, cure 4 hours at 150°C per dip.

Room Temperature	150°C
44 lbs.	6 lbs.

Descriptive Information:

Percent Solids 100%
Weight/Gallon @ 25° C. 9.8 ± .1 Pounds
Viscosity (Dennler #1 @ 25° C.) 250-350 Seconds
Gel Time @ 150° C. 40-50 Minutes
Cake Hardness:
6 Hours @ 135° C. 82/57
Cake in Oil 48 Hrs. @ 110° C. 95/90
Dielectric Strength (Dry) 2800 Volts/Mil
Dielectric Strength (Wet) 1625 Volts/Mil
Flash Point (Tag Closed Cup) 205° F.

Weight Loss Information @ 200° C.

24 Hours 12%
48 Hours 14%
100 Hours 16%
200 Hours 18%
400 Hours 19%
Thermogravimetric Index 178° C.

Recommended Curing Cycle:

Four (4) hours at 150° C. from the time part is at temperature or 5-7 seconds exposure to UV light - 200 watts per linear inch.

Shelf Life:

B-546 is sensitive to light and will thicken and gel if exposed to fluorescent light continuously for approximately two weeks. Incandescent light does not appear to affect it. If the varnish is not exposed to light, such as in a drum, it will be stable for five months at 25° C. The varnish will gel in approximately 24 hours if allowed to reach a temperature of 60° C. The varnish should not be stored outside where it will be exposed to extreme heat or direct sunlight.

Packaging Information:

Westinghouse B-546 100% Solids, UV Curing Varnish is available in 1-gallon cans, 5-gallon pails, and 55-gallon drums.