cenvar®
enamels & varnishes

Chetak Manufacturing Co.
508, Bharat Chambers, Baroda Street, Mumbai - 400009. INDIA
T:91 22 66311995 E: info@cenvar.com W: www.cenvar.com

cenvar Insulating Varnishes

Impregnation Process Guide for Water-Based Varnishes: DIP-BAKE Impregnation

Follow the recommended procedure for impregnation using **Cenvar Water-Based Insulating Varnishes** to achieve optimal results.

Important Notes

- Regularly monitor and maintain **viscosity**, **solids content**, and **pH** of the varnish within recommended limits.
- **pH Level**: Maintain above 8.0 to ensure resin solubility in water. Use **Cenvar pH Adjuster** if needed.
- **Caution**: Do not mix with organic solvents, solvent-based varnishes, or solventless resins.

Preparation

1. **Mixing**: Combine **CenvarWB** varnish with **Thinner TW** to adjust viscosity to the desired level.
2. **pH Check**: Ensure pH is between 8.0 and 8.5. If below 8, adjust with pH adjuster.

Impregnation by Dipping Method

- **Dipping**: Gradually immerse coils in varnish in a varnish tank. Allow sufficient time for air bubbles to escape, indicated by a clear varnish surface.
- **Transfer**: Move windings to the heating oven promptly, allowing only brief dripping to avoid long exposure to air.
- **Cleanliness**: Ensure coil trays are free from contaminants like dust, grease, or any other harmful materials.

Curing

- **Oven Requirements**: Use an air-circulating oven with adequate exhaust.
- **Initial Heating**: Set oven temperature to 90°C for about 1 hour for solvent evaporation.
- **Cure Temperature**: Gradually raise to the recommended temperature based on component size and desired properties. Specific curing temperature and time can be found in the product data sheet.
- **Target Temperature**: For best results, achieve a component temperature of 150–165°C:
    - Small Components: Maintain for 2–3 hours.
    - Larger Components: Maintain for 4–8 hours.

Note: Achieving the recommended curing temperature is essential for proper curing and to obtain optimal mechanical and chemical properties. Lower temperatures or extended times are not substitutes for the specified curing conditions.