Phenoxy PKHH

USE

Gabriel Phenoxy PK™HH has a high viscosity compared to most phenoxy resins. Phenoxy resins (polyhydroxyethers) are tough, ductile, amorphous, thermoplastic polymers having excellent thermal stability, adhesive strength, and vapor barrier properties. Phenoxy resins may be crosslinked by reacting its hydroxyl functional groups with isocyanates, melamine resins, or phenolic resins. Crosslinked phenoxy resins exhibit excellent chemical resistance, hardness, and adhesion on many substrates including steel, aluminum, glass, and carbon fibers, and plastics such as nylon and polyester (PET). Phenoxy PKHH may also be formulated in single-pack epoxies containing latent hardeners, such as dicyandiamide, providing improved toughness and adhesive strength on substrates when properly cured.

Phenoxy PKHH is soluble in many polar, aprotic solvents such as MEK, cyclohexanone, and glycol ethers.

TYPICAL APPLICATIONS

- Thermoset Coatings
- Single Pack Epoxy Coatings
- Inks and Paints
- Adhesives/Sealants
- Composites
- Electronics

TYPICAL PROPERTIES

- Solids, %..........................................................99%
- Viscosity, cP Brookfield, @ 25 °C; (20% solution in cyclohexanone) ..........525 – 717
- Molecular Weight (Weight Average, Daltons) ....................................... 52,000
- OH Equivalent Weight (g/equiv.).................................................................280
- Color (APHA); (20% solution in cyclohexanone) .......................................200 max.
- Haze, %; (20% solution in cyclohexanone) ............................................... 15 max.
Phenoxy PKHH (cont.)

REGULATORY STATUS

TSCA (USA), DSL (Canada), PICCS (Philippines), AICS (Australia), ENCS/MITI (Japan), IECSC (China).
Polymer Exempt: EINECS (EU)

PACKAGING, STORAGE AND HANDLING

Gabriel Phenoxy PK™HH is sold as pellet form in 55 pound (25 KG) net weight lined bags. The resin is indefinitely stable in unopened containers when stored at normal warehouse conditions. Phenoxy resins may absorb water, ~1% by weight, if exposed for long periods of time to the atmosphere. Pellets can be dried at 80 – 90 °C if desired.

Phenoxy PKHH meets USFDA requirements for use in food contact and packaging applications (21 CFR 175.300).

Consult the product SDS for additional information on properties, hazards, and handling.

MANUFACTURING LOCATION

Rock Hill, South Carolina, USA.