

TECHNICAL BULLETIN

PRODUCT: POLYSET 3002

POLYSET 3002 is a high molecular weight thermosetting polyester resin. It possesses both acrylate and methacrylate functional groups that are designed to cure via free radical cure. As full cure is achieved, POLYSET 3002 exhibits excellent low shrinkage properties. Coatings based on POLYSET 3002 exhibit toughness and abrasion resistance. POLYSET 3002 can be cured with or without catalyst. Optimum uncatalyzed cure takes place at 200°C or above. Depending on the end-users formulation, and choice of catalyst or coreactants, cure rates will vary. A typical uncatalyzed cure schedule may be 15-30 minutes at 200°C.

POLYSET 3002 is recommended for abrasion-resistant protective coatings. It is also recommended for decorative, marine and many heat-resistant applications where thermal expansion issues are key determinants in performance.

PHYSICAL PROPERTIES:

Density (g/cm³) 1.2000 ± 0.0025 $50.0^{\circ} \pm 2.5^{\circ} C$ Tg Coefficient of Thermal Expansion $\alpha_1 = 70 \pm 2$ Shrinkage (TGA @ 300°C) < 1.0% Molecular weight (avg.) 3000 g/mol. Weight Solids >99.9% Viscosity (@ 40°C) >100000 m·Pa

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