

HYTAC[®] – WF

High temperature, easily polished thermoset syntactic

HYTAC-WF is an excellent high temperature epoxy syntactic material that provides improved clarity when forming APET and other clear polymers plus reduces sticking of difficult to process polymers such as HDPE or CPET.

- **Low Thermal Conductivity and Specific Heat**

The syntactic foam structure of HYTAC-WF maintains the low thermal conductivity desired in a plug assist material.

- **High Strength and Stiffness HYTAC-WF**

Contains a high strength glass sphere providing nearly double the strength and twice the stiffness of standard epoxy syntactic foams.

- **Dimensionally Stable**

The low coefficient of thermal expansion means the plug maintains its shape over a wide temperature range.

- **Smooth Surface**

The glass sphere used in HYTAC-WF has a diameter more than 50% lower than those found in conventional syntactic materials. This translates to a smoother surface.

- **Excellent Temperature Resistance**

HYTAC-WF is specially formulated with an epoxy resin that maintains a high modulus at elevated temperatures.

- **Lightweight**

This increases the life of capital equipment due to reduced wear and tear on moving parts.

- **Easily Machined**

HYTAC-WF can be easily machined to any size or shape using conventional equipment.

- **Variety of Shapes and Sizes**

The material is provided in standard size rods or sheets and may be custom molded or custom cut to meet your specific needs.

Typical Properties

Color	White
Density (ρ)	53-57 lb/ft ³ [849-913 kg/m ³]
Thermal Conductivity (k)	0.11 BTU/hr-ft-°F [0.19 W/m ² K]
Coefficient of Thermal Expansion (CTE)	18 x 10 ⁻⁶ in/in/°F [32.0 x 10 ⁻⁶ m/m/°C]
Compressive Strength	18,000 psi [124 Mpa]
Service Temperature	450 °F [230 °C]
Flexural Toughness (ASTM D790)	4.7 Psi [32.4 kPa]



Applications

HYTAC-WF utilizes glass spheres with a diameter less than half the size of those used in conventional epoxy syntactic foams. This results in a surface that may be easily polished to a very smooth surface for improved part clarity.

Recommended for use with APET, CPET, HDPE, OPS, PC, PETG, PMMA, PP, PVC and RPET



Innovative Tooling Materials
for Thermoforming

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