HYTAC® -LPXT

HYTAC-LPXT is a PTFE-impregnated epoxy syntactic plug assist material aimed at providing heavy gauge thermoformers with a robust solution to challenges associated with large, complex part geometries.

HYTAC-LPXT is available as a solid syntactic or as the outer layer of a two-part system consisting of a core of epoxy coated large, hollow composite spheres and an exterior of high-performance syntactic foam. It has been designed to enhance the cosmetic appearance of formed parts made from TPO and other capped materials.

Low thermal conductivity and specific heat

The syntactic foam structure of HYTAC-LPXT maintains low thermal conductivity while providing the release characteristics associated with PTFE.

Easily machined or formed

HYTAC-LPXT may be cast to near net shape and/or machined using conventional equipment.

Applications

HYTAC-LPXT now makes it possible for heavy gauge thermoformers to form engineered plastics such as TPO without mark-off or thin spots while improving cosmetic appearance.

Machining and Polishing Guides

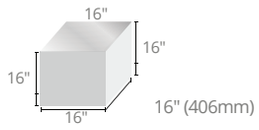
HYTAC materials are generally easy to machine and polish. Following the CMT guidelines will improve surface quality and consistency in plug performance.

THERMOSET	
Color	Light green
Density (ρ)	53-57 lb/ft3 [848-913 kg/m3]
Thermal Conductivity (k)	0.10 BTU/hr-ft-°F [0.17 W/m°K]
Coefficient of Thermal Expansion(CTE)	22 x 10-6 in/in/°F [41 x 10-6 m/m/°C]
Compressive Strength	16,800 psi [115.8 MPa]
Service Temperature	350°F [176° C]
Flexural Toughness (ASTM D790)	4.9 psi [33.9 kPa]

Custom Cast Service

HYTAC LPX is only available as a custom-cast solution. LPX can be used as mold or as a plug. It is fabricated as either a solid syntactic or as a 2-part system with a thick syntactic outer layer and a core of hollow composite spheres. As long as all dimensions are 16" or less, a solid casting will be used. Otherwise, a 2-part system will be used.

Dimensional Guidance



16" (406mm)