



With an advanced range of thermoforming plug assist materials designed to increase your productivity, reduce downtime and maintain high product quality, Trelleborg Applied Technologies strives to perform at every level.

Syntac® 350 is the industry standard white syntactic foam made from high grade epoxy resin and hollow glass microspheres designed specifically for fabricating thermoforming plugs and other associated tooling.

Features & Benefits:

- Cost effective
- Industry standard
- FDA compliant CFR 177.1630 for packaging which contacts:
 - Food packaging < 250 °F / 121 °C
 - Alcoholic beverages
 - Dry food packaging
- Available in a wide range of block, rods and sheets



Machining:

There are no special tools required to machine this material, however we do recommend the use of carbide tools.

- Speeds: 3,000 - 3,500 rpm
- Cut Size: 0.25 inches / 6 mm maximum
- Feed: 20 - 25 inches / 508 - 635 mm per min
- Tooling: Carbide or high speed steel, maintain sharp edge with slight chip breaker
- Flutes: 2 - 3 for optimum performance

Polishing:

Syntac® 350 materials can be polished to achieve an extremely smooth surface finish. Please follow the tips below to achieve the desired surface quality of the finished plug and to guarantee the consistency in the plug performance.

- Tooling: Sandpaper (wet or dry)
- Speeds: Rub in random motion
- Grits: Start with 220 - 600 grit and then progressively go to finer grits until you reach the desired finish

TYPICAL PROPERTIES		
Syntac® 350	Imperial	Metric
Color	White	White
Density	42 lb/ft ³	672 kg/m ³
Service Temperature	350 °F	177 °C
Thermal Conductivity	0.07 BTU/hr-ft-°F	0.12 W/m ² K
Specific Heat	0.50 BTU/lb-°F	2090 J/kg-K
Coefficient of Thermal Expansion	17x10 ⁻⁶ in/in-°F	31x10 ⁻⁶ cm/cm-°C
Compressive Strength	6,500 psi	45 MPa
Compressive Modulus	339,000 psi	2337 MPa
Shore D Hardness	55 °D @ 350 °F	55 °D @ 117 °C

Advisory

Trelleborg Applied Technologies operates a strict quality control process, but we realise that it is not possible to completely remove internal voids in our rods and sheets. We guarantee that there will be no internal voids larger than 1/8" (3.18 mm) and no more than 2 per linear foot between 1/6" (1.58 mm) and 1/8" (3.18 mm). Surface color may vary due to; sunlight exposure, frequent handling or rod/sheet thickness. The color does not impact the performance of the material.

Contact Us

Trelleborg's Applied Technologies division is an industry expert in delivering innovative and reliable solutions that maximize performance for our customers. Our vast range of specialized, customizable materials ensure peace of mind at every stage of your project. With reliable and efficient project management and manufacturing we endeavor to take performance to new levels by achieving your goals safely, on time and within scope.

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