



# HexTool® M61

## Tooling Material



### Product Data Sheet

#### Description

Hexcel's M61 bismaleimide (BMI) tooling product line provides solutions for highly machined and net surfaces. Hexcel's fourth generation BMI offers excellent out life and handling characteristics for both continuous woven fiber reinforcements and HexTool® M61 discontinuous fiber.

#### Benefits and Features

- 375°F (190°C) cure followed by free standing post cure.
- 350°F (177°C) optional cure, followed by free standing post cure. Contact Hexcel Technical Support for information.
- Proven M61 performance capable of 1000 tool thermal cycles at 355°F (180°C)
- Excellent out time at 75°F (23°C) of over 4 weeks
- Coefficient of thermal expansion matched to carbon parts for accurate part reproduction and reduced thermal stress
- 6K and 3K fabrics with Hexcel's PrimeTex® spread tow technology

#### Products Available

##### *Fabrics, Standard Modulus*

###### **ACGP380ZB; 6K; M61; 36%; 380AW; 50"**

- PrimeTex® fabric technology utilizing a 6K standard modulus fiber
- 5 HS construction for easier drape over highly contoured surfaces
- Nominal cured ply thickness of 14.5 mils
- Best suited for net cure or lightly machined carbon face sheets

###### **F8X670 2X2T; M61; 36%; 670AW; 50"**

- 12K standard fabric construction
- 2X2 Twill for both drape and stability
- Nominal cured ply thickness of 25.5 mils
- Best suited for structural backer board construction

###### **F3T282ZB; M61; 38%; 195AW; 50"**

- PrimeTex® fabric technology utilizing a 3K standard modulus fiber
- Plain weave construction for stability and low distortion
- Nominal cured ply thickness of 7.7 mils
- Best suited as a surface ply on net cured face sheets

##### *Fabric, Intermediate Modulus*

###### **RGP390-5H; M61 36%; 390AW; 50"**

- 6K standard fabric construction
- 5 harness satin construction for easier drape over complex contours
- Nominal cured ply thickness of 14.9 mils
- Intermediate modulus fiber for applications demanding increased stiffness



# HexTool® M61 Tooling Material



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### **Discontinuous Fiber, Standard Modulus**

#### **HexTool® M61, 4000gsm**

- Hexcel's unique discontinuous fiber BMI tooling material for highly machined surfaces
- Quasi isotropic construction
- Nominal cured ply thickness of 100 mils
- Best suited for highly machined face sheets or tools that will require re-contoured surfaces.

### **Prepreg Storage Life**

• Tack life	@ 75°F (23°C)	4 weeks
• Guaranteed shelf life	@ 40°F (5°C)	6 months
	@ 0°F (-18°C)	12 months

### **Precautions for Use**

The usual precautions when handling uncured synthetic resins and fine fibrous materials should be observed, a Safety Data Sheet is available for this product. The use of clean disposable inert gloves provides protection for the operator and avoids contamination of material and components.

### **For more information**

Hexcel is a leading worldwide supplier of composite materials to aerospace and industrial markets. Our comprehensive range includes:

• HexTow® carbon fibers	• HexFlow® RTM resins	• Acousti-Cap® sound attenuating honeycomb
• HexForce® reinforcements	• Redux® adhesives	• Engineered core
• HexPly® prepgres	• HexTool® tooling materials	• Engineered products
• HexMC® molding compounds	• HexWeb® honeycombs	

For US quotes, orders and product information call toll-free 1-800-688-7734. For other worldwide sales office telephone numbers and a full address list, please go to:

**<http://www.hexcel.com/contact/salesoffice>**

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