

## CMT Materials REN Shape® 5169 Foundry Pattern Board

Category : Polymer

### Material Notes:

REN SHAPE 5169 is an extremely tough, abrasion resistant board for use in CNC-machining foundry patterns, core boxes and other tools. It can be milled with hardened-steel cutters. The material has found extensive use in the fabrication of prototype molds for clear, thin-gage thermoplastic sheets. Resultant parts show excellent transparency results. REN SHAPE 5169 features these unique qualities: Excellent Impact and Wear Resistance Superior Edge Definition and Dimensional Stability Polishable to a High Luster Good Compressive and Tensile Strength Tough and Resilient Applications: REN SHAPE 5169 applications may include prototype thermoforming molds, prototype and production foundry patters, tooling aids and fixtures, and metal forming tools. Information Provided by CMT Materials, Inc.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_CMT-Materials-REN-Shape-5169-Foundry-Pattern-Board.php](http://www.lookpolymers.com/polymer_CMT-Materials-REN-Shape-5169-Foundry-Pattern-Board.php)

| Physical Properties | Metric    | English                   | Comments   |
|---------------------|-----------|---------------------------|------------|
| Density             | 1.20 g/cc | 0.0434 lb/in <sup>3</sup> | ASTM D-792 |

| Mechanical Properties      | Metric     | English        | Comments    |
|----------------------------|------------|----------------|-------------|
| Hardness, Shore D          | 85         | 85             | ASTM D-2240 |
| Tensile Strength, Ultimate | 62.1 MPa   | 9000 psi       | ASTM D-638  |
| Flexural Strength          | 96.5 MPa   | 14000 psi      | ASTM D-790  |
| Flexural Modulus           | 2.62 GPa   | 380 ksi        | ASTM D-790  |
| Compressive Strength       | 60.7 MPa   | 8800 psi       | ASTM D-695  |
| Compressive Modulus        | 2.52 GPa   | 366 ksi        | ASTM D-695  |
| Izod Impact, Notched       | 0.481 J/cm | 0.900 ft-lb/in |             |

| Thermal Properties        | Metric                       | English                      | Comments    |
|---------------------------|------------------------------|------------------------------|-------------|
| CTE, linear               | 73.4 μm/m-°C                 | 40.8 μin/in-°F               | ASTM D-3386 |
|                           | @Temperature -30.0 - 30.0 °C | @Temperature -22.0 - 86.0 °F |             |
| Glass Transition Temp, Tg | 96.7 °C                      | 206 °F                       | ASTM D-4065 |

| Descriptive Properties | Value | Comments |
|------------------------|-------|----------|
| Color                  | Red   |          |

Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215, Fengxian District, Shanghai City, China