

RAMPF WB-0801

Polyurethane Board for Tools & Molds

Typical Properties

| | |
|---|--|
| Color | Gray |
| Density (ρ) | 49.9 lb/ft ³ [0.80 g/cm ³] |
| Hardness | 65 – 70 Shore D |
| Flexural Strength | 5,100 – 5,800 psi [35 – 40 Mpa] |
| Flexural Modulus | 220,000 – 230,000 psi [1,500 – 1,600 MPa] |
| Compressive Strength | 5,800 – 6,500 psi [40 – 45 Mpa] |
| Coefficient of Thermal Expansion (CTE) | (25-28) x 10 ⁻⁶ in/in ^o F [(45-50.4) x 10 ⁻⁶ m/m/ ^o C] |
| Deflection Temperature, HDT | 185 – 194 °F [85-90 °C] |

Machining

Cutters: *Roughing* - 1"(25.4mm) Hog Ball End Mill, 4-flute, HS Steel 8% Cobalt

Finishing - 5/8"(15.875mm) Ball End Mill, 2-flute carbide

Depth: *Roughing* - varied from 1/4"(6.35mm) to 2.5"(63.5mm) with 40% stepover

Finishing: 1/8"(3.175mm) deep leaving 0.002" (0.05mm) scallop height

Blades: Use carbide offset-tooth blade for faster cutting and less binding

Roughing speed: 1,600RPM · Roughing Feed 40IPM

Finishing speed: 10,000RPM · Finishing Feed 100IPM

Processing

The product should be machined at ambient room temperature (68-77°F (20-25°C)).

Storage

The material should be stored flat and in a dry place. Temperature variations should be avoided during storage and transportation.

Handling Precautions

Good workplace ventilation is to be ensured during processing. At the same time, the employer's liability insurance association's industrial hygiene safety regulations regarding the handling of reaction resins and their hardeners are to be observed.

Please take heed of the appropriate safety data sheets.

Available Sizes

1.0" x 19.7 x 59.1 (25mm x 500 x 1500)

2.0" x 19.7 x 59.1 (50mm x 500 x 1500)

3.0" x 19.7 x 59.1 (75mm x 500 x 1500)

3.9" x 19.7 x 59.1 (100mm x 500 x 1500)



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Key Properties

- Fine surface structure
- High HDT and very low CTE
- Good dimensional stability
- Good compressive and flexural strength

Applications

- Master Models
- Cubing Models
- Tooling Jigs and Fixtures
- Vacuum Forming Tools