

## DESCRIPTION

*Machinable slab designed for production of patterns, mock-ups, prototypes and masters by milling or machining by hand.*

## PROPERTIES

- *Non-porous material*
- *Excellent surface aspect (direct paint after sanding)*
- *Very good dimensional stability*
- *Machining by hand or by machine with wood cutting tools or aluminum cutting tools*

### PHYSICAL PROPERTIES

Color			brown
Density at 23°C	ISO 2781 : 1996	lbs/ft <sup>3</sup> (g/cc)	42 (0.65)

### MECHANICAL PROPERTIES at 23°C

Hardness	ISO 868 :2003	Shore D1	63
Tensile strength	ASTM D-638	psi (MPa)	2,400 (16)
Tensile modulus	ASTM D-638	psi (MPa)	89,000 (614)
Elongation	ASTM D-638	%	7
Flexural strength	ISO 178 :2001	psi (MPa)	4,900 (34)
Flexural modulus	ISO 178 :2001	psi (MPa)	145,000 (1,000)
Compressive strength	ISO 604 :2002	psi (MPa)	4,100 (28)
Impact strength (CHARPY)	ISO 179/1eU :1994	ft.Lbf/in <sup>2</sup> (kJ/m <sup>2</sup> )	5 (11)
Glass temperature transition (Tg)	ISO 11359 : 2002	°F (°C)	185 (85)
Coefficient of thermal expansion (CTE) from 50 – 140°F (10 - 60°C)	ISO 11359 : 1999	ppm/°F (°C)	42 (75)

## ASSEMBLY / FINISH

*Axson tooling boards can be bonded with PROCOL 2 adhesive, AL 2108 laminating system, F16, or F19 depending on the requirements for bonded boards.*

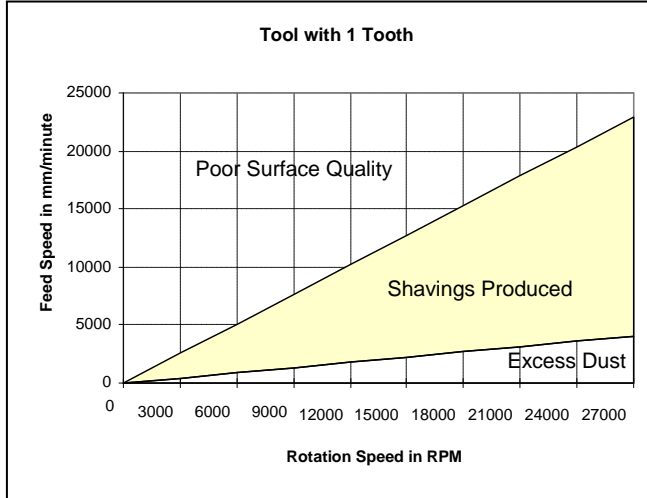
## HANDLING PRECAUTIONS

*Normal health and safety precautions should be observed when handling these products:*

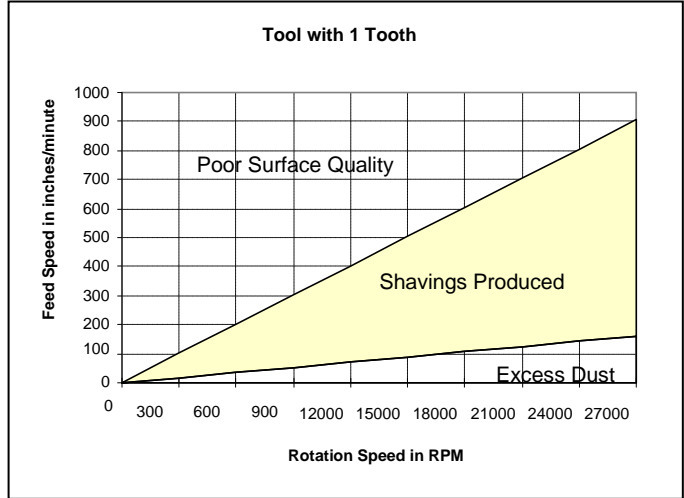
- *Ensure good ventilation to prevent dust or chip accumulation*
- *Wear gloves, and safety glasses.*
- *Do not smoke when machining.*
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*For further information, please consult the material safety data sheet.*

## Machining Recommendations



Metric Machining Envelope



English Machining Envelope

## Machining Parameters

	Cutter edge velocity (Vc in ft/min (m/min))	Feed per tooth (fz in inches (mm)/revolution)
Rough shape	328 -1640 (100 to 500)	0.006 – 0.028 (0.15 to 0.70)
Finish	1312 – 2625 (400 to 800)	0.003 – 0.004 (0.07 to 0.10)

$$n = (12 \text{ English or } 1000 \text{ metric}) \times Vc / (\pi \times Dc)$$

$$Vf = n \times fz \times Z$$

- Vc: Cutter edge velocity in ft/min (m/minute)
- Dc: Cutting diameter in inches (mm)
- n: Spindle speed in revolution/minute
- fz: Feed per tooth in inches (mm)/revolution
- Z: Number of teeth
- Vf: Feed speed in inches (mm)/minute

## STORAGE CONDITIONS

- Store flat in a dry place. Allow time for material to come to ambient temperature prior to bonding or machining.

## GUARANTEE

The information contained in this technical data sheet result from research and tests conducted in our Laboratories under precise conditions. It is the responsibility of the user to determine the suitability of AXSON products, under their own conditions before commencing with the proposed application. AXSON guarantee the conformity of their products with their specifications but cannot guarantee the compatibility of a product with any particular application. AXSON disclaim all responsibility for damage from any incident which results from the use of these products. The responsibility of AXSON is strictly limited to reimbursement or replacement of products which do not comply with the published specifications.