PROMASTER 552

Polyurethane board
Thermoforming Moulds
(52 lbs/pi^3)

DESCRIPTION

Unleash Precision and Quality with PRO MASTER 552 - 52 lbs/pi3

Section 1: Unmatched Heat Dissipation for Thermoforming Moulds

When it comes to crafting intricate thermoforming moulds, heat dissipation is the key to success. That's where PRO MASTER 552 steps in as your ultimate ally. Engineered with medium density polyurethane, this board boasts exceptional heat dissipation properties that are second to none. Imagine the precision you can achieve when your mould remains at the optimal temperature throughout the forming process. Say goodbye to inconsistencies and hello to flawless results.

Key Benefits:

- **Unrivaled heat dissipation for optimal moulding conditions.**
- **Consistent and reliable results, thanks to controlled temperature.**
- **Craft complex shapes with ease, as heat-sensitive areas are now a thing of the past.**
- **Section 2: Crafting Perfection with Industry-Leading Glass Transition**

Craftsmanship knows no bounds with PRO MASTER 552. Our medium density polyurethane board redefines excellence with its industry-leading glass transition level. At 110ºC, while other materials may falter, our PRO MASTER 552 stands rigid with a hardness of 59 shore D. This unparalleled strength and stability give you the confidence to tackle even the most intricate designs and demanding applications, delivering results that are nothing short of perfection.

Key Benefits:

- **Industry's highest glass transition level for remarkable structural integrity.**
- **Maintain rigidity and stability under high temperatures for precise craftsmanship.**
- **Experience a new level of creative freedom as you explore intricate designs without limitations.**

Section 3: Elevate Your Surface Finish to Unprecedented Heights

It's not just about functionality – it's about aesthetics too. PRO MASTER 552 takes your projects to new heights by delivering a flawless surface finish that exceeds expectations. Whether you're creating foundry models, jigs, or other industrial masterpieces, this medium density polyurethane board ensures that your end product boasts a quality finish that captures attention. Elevate your work to the next level and leave a lasting impression with every project you undertake.

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POLYMÈRES technologies

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FEATURES

- MEDIUM DENSITY
- HIGH TEMPERATURE RESSITANCE
- EXCELLENT SURFACE QUALITY (AFTER MACHINING)
- AVAILABLE IN 24" X 60" X 1-2-3-4"
- VERY GOOD DIMENSIONAL STABILITY
- HIGH IMPACT RESISTANCE
- PRODUCTS IN STOCK IN OUR WAREHOUSES

ASSEMBLY / FINISH

Achieving the utmost precision requires not just exceptional materials, but also advanced assembly techniques. When it comes to joining PRO MASTER 552 boards seamlessly, our recommended choice is clear: TECHNO LAM adhesives. Specifically, the TECHNO LAM 8090 and TECHNO LAM 8090 HT adhesives stand as the ideal companions for assembling these boards to perfection.

Rest easy knowing that your assembled components will maintain their integrity even **in high-temperature environments.**

Communiquer avec **POLYMÈRES TECHNOLOGIES** pour de plus amples informations.

TYPICAL PROPERTIES

Colour	VISUAL		GREY
Density	ASTM D-792	lb/pi^3	52

PHYSICAL PROPERTIES

TESTS	METHOD	RESULTS	
Hardness (SHORE D)	ASTM D-2240	Shore D	75
Compressive stress	ASTM D-695	MPa	61
Modulus of elasticity in bending	ASTM D-790	MPa*	2475
Breaking stress in bending	ASTM D-790	MPa	46
Coefficient of thermal expansion (-30°C to +30°C)	PER TMA/ASTM D-3386	po/po/°C	27 x 10^{-6}
Glass transition temperature (Tg)	ASTM D-4065	(°C)	103

* 1 MPa = 145 lb

Formula of conversion	n=	V_c X 1000 / D X π	[min^{-1}]	V_c=	N X π X D / 1000	[m/min]	V_f = fz X z X n [mm/min]	f_z= V_f / Z X n [mm]

MACHINING PARAMETERS (RECOMMENDATIONS)

Roughing (Ball end Mill/flute)	2,000 to 5,000 revolutions per minute
Finishing (Ball end Mill/flute)	10,000 to 15,000 revolutions per minute

OPERATION PARAMETERS

Cutting speed	4,500 revolutions per minute
Forward feed per tooth	5,000 mm/s
Cutting depth	3 to 5 mm
Width of cut/line spacing	4,000 – 8,000/s
Number of tool teeth	350
Tool diameter – Ball end Mill	16 to 30 mm
Revolutions	200 to 300 mm
Forward feed rate	250 to 300M per minute

PRECAUTIONS

- CONSULT MATERIAL SAFETY DATA SHEETS BEFORE USING.
- IT IS ESSENTIAL DURING HANDLING TO STRICTLY OBSERVE THE APPROPRIATE WORK HYGIENE MEASURES:
- ENSURE GOOD VENTILATION.
- WEARING GLOVES AND PROTECTIVE GOGGLES.
- DO NOT SMOKE DURING MACHINING.
- THE BOARDS MUST BE STORED IN A DRY AND TEMPERATE PLACE.

AVOID ALL CONTACT WITH SKIN AND EYES. IN CASE OF CONTACT WITH EYES, RINSE WELL WITH WATER AND CONSULT A DOCTOR IMMEDIATELY. IN CASE OF SKIN CONTACT, RINSE WELL WITH SOAP AND WATER.