

## Alpase M-5™ Aluminum Mold Plate

Category : Metal , Nonferrous Metal , Aluminum Alloy , Aluminum Casting Alloy

### Material Notes:

Excellent weldability  
Surface Condition - Machined top and bottom to reduce costly handling and machining steps  
Dimensional Stability - High dimensional stability during and after machining  
Polishing - Good polishing properties  
Good Anodizing and Hard Coating properties  
Corrosion Resistance - Excellent corrosion resistance in many applications  
Low density offers a 5% weight savings over other cast products  
Very consistent hardness and mechanical properties throughout its entire thickness range, regardless of size.  
Vacuum tight microstructure  
Applications: Injection Molds, Blow Molds, Structural Foam Molds, and Rubber Molds. Additional uses include: Vacuum Forming Tools, Compression Molds, Heating and Cooling Plates and proven Semi-conductor Transfer Chamber applications.  
Sizes: Thickness up to 30 inches; Width up to 88 inches; Length up to 195 inches. Typical data provided by Alpase.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Alpase-M-5-Aluminum-Mold-Plate.php](http://www.lookpolymers.com/polymer_Alpase-M-5-Aluminum-Mold-Plate.php)

Physical Properties	Metric	English	Comments
Density	2.66 g/cc	0.0960 lb/in <sup>3</sup>	
	2.80 g/cc	0.101 lb/in <sup>3</sup>	

Mechanical Properties	Metric	English	Comments
Hardness, Brinell	70	70	
Tensile Strength, Ultimate	283 MPa	41000 psi	
Tensile Strength, Yield	124 MPa	18000 psi	
Modulus of Elasticity	71.0 GPa	10300 ksi	
	74.5 GPa	10800 ksi	

Thermal Properties	Metric	English	Comments
CTE, linear	23.2 $\mu\text{m}/\text{m}\cdot\text{C}$	12.9 $\mu\text{in}/\text{in}\cdot\text{F}$	
	@Temperature 20.0 - 100 °C	@Temperature 68.0 - 212 °F	
	23.8 $\mu\text{m}/\text{m}\cdot\text{C}$	13.2 $\mu\text{in}/\text{in}\cdot\text{F}$	
	@Temperature 20.0 - 100 °C	@Temperature 68.0 - 212 °F	
Thermal Conductivity	139 W/m-K	962 BTU-in/hr-ft <sup>2</sup> -°F	

Electrical Properties	Metric	English	Comments
Electrical Resistivity	0.0000590 ohm-cm	0.0000590 ohm-cm	

## **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**