

## PCP-Canada ALCA MAX® 2XXX Cast Aluminum Mold Blocks/Plate

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

### Material Notes:

ALCA MAX® is a 2xxx series mold blocks and plates ideal for large molds requiring extensive machining. It is characterized by an excellent dimensional stability, a high Brinell hardness and a good resistance to heat (less than 230°C). The low level of internal stress reduces considerably the deformation during and after machining. Typical applications include automotive, structural foam molds, rubber molds, investment cast, low-pressure injection molds, R.T.M. and R.I.M. molding. It provides strength, good hard anodizing response, weldability, and machinability (with sintered carbide materials). Information provided by PCP-Canada.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_PCP-Canada-ALCA-MAX-2XXX-Cast-Aluminum-Mold-BlocksPlate.php](http://www.lookpolymers.com/polymer_PCP-Canada-ALCA-MAX-2XXX-Cast-Aluminum-Mold-BlocksPlate.php)

Physical Properties	Metric	English	Comments
Density	2.77 g/cc	0.100 lb/in <sup>3</sup>	

Mechanical Properties	Metric	English	Comments
Hardness, Brinell	81	81	
Tensile Strength, Ultimate	262 MPa	38000 psi	
Tensile Strength, Yield	138 MPa	20000 psi	
Elongation at Break	7 %	7 %	in 2 inches
Modulus of Elasticity	71.0 GPa	10300 ksi	

Thermal Properties	Metric	English	Comments
CTE, linear	22.3 µm/m-°C @Temperature 20.0 - 100 °C	12.4 µin/in-°F @Temperature 68.0 - 212 °F	
Thermal Conductivity	162.5 W/m-K	1128 BTU-in/hr-ft <sup>2</sup> -°F	
Maximum Service Temperature, Air	230 °C	446 °F	

Component Elements Properties	Metric	English	Comments
Aluminum, Al	92.38 - 94.56 %	92.38 - 94.56 %	as remainder
Chromium, Cr	0.050 - 0.25 %	0.050 - 0.25 %	
Copper, Cu	2.7 - 3.25 %	2.7 - 3.25 %	
Iron, Fe	0.85 - 1.15 %	0.85 - 1.15 %	
Magnesium, Mg			

Component Elements Properties	0.95 - 1.25 % Metric	0.95 - 1.25 % English	Comments
Manganese, Mn	<= 0.070 %	<= 0.070 %	
Nickel, Ni	0.85 - 1.2 %	0.85 - 1.2 %	
Silicon, Si	<= 0.20 %	<= 0.20 %	
Titanium, Ti	0.040 - 0.10 %	0.040 - 0.10 %	
Zinc, Zn	<= 0.15 %	<= 0.15 %	

Electrical Properties	Metric	English	Comments
Electrical Resistivity	0.0000044 ohm-cm	0.0000044 ohm-cm	

## Contact Songhan Plastic Technology Co.,Ltd.

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