

## Aleris Hokotol Aluminum Alloy, 100 mm Thickness

Category : Metal , Nonferrous Metal , Aluminum Alloy , 7000 Series Aluminum Alloy

### Material Notes:

Sample treatment not specified for property data. Applications include molds for blow forming and injection molding for plastics; bolsters and force plates; high strength/low weight machine parts; and mechanical components with elevated mechanical properties. Poor weldability and corrosion resistance. Very good machinability.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Aleris-Hokotol-Aluminum-Alloy-100-mm-Thickness.php](http://www.lookpolymers.com/polymer_Aleris-Hokotol-Aluminum-Alloy-100-mm-Thickness.php)

Physical Properties	Metric	English	Comments
Density	2.83 g/cc	0.102 lb/in <sup>3</sup>	

Mechanical Properties	Metric	English	Comments
Hardness, Brinell	180	180	
Hardness, Knoop	232	232	Estimated from Brinell
Hardness, Rockwell A	59	59	Estimated from Brinell
Hardness, Rockwell B	96	96	Estimated from Brinell
Hardness, Vickers	217	217	Estimated from Brinell
Tensile Strength, Ultimate	>= 550 MPa	>= 79800 psi	Minimum
	575 MPa	83400 psi	Typical
	120 MPa	17400 psi	Typical, after 10,000 hours
	@Temperature 200 °C	@Temperature 392 °F	
	225 MPa	32600 psi	Typical, after 10,000 hours
@Temperature 150 °C	@Temperature 302 °F		
Tensile Strength, Yield	450 MPa	65300 psi	Typical, after 10,000 hours
	@Temperature 100 °C	@Temperature 212 °F	
	>= 495 MPa	>= 71800 psi	Minimum
	@Strain 0.200 %	@Strain 0.200 %	
	535 MPa	77600 psi	Typical
Elongation at Break	@Strain 0.200 %	@Strain 0.200 %	
	>= 4.0 %	>= 4.0 %	Minimum
	7.5 %	7.5 %	Typical

Mechanical Properties	Metric	English	Comments
Machinability	90 %	90 %	
Shear Strength	340 MPa	49300 psi	Calculated

Thermal Properties	Metric	English	Comments
CTE, linear	23.5 $\mu\text{m}/\text{m}\cdot\text{°C}$	13.1 $\mu\text{in}/\text{in}\cdot\text{°F}$	
	@Temperature 20.0 - 100 $\text{°C}$	@Temperature 68.0 - 212 $\text{°F}$	
Thermal Conductivity	154 W/m-K	1070 BTU-in/hr-ft <sup>2</sup> - $\text{°F}$	

Component Elements Properties	Metric	English	Comments
Aluminum, Al	86 - 90.9 %	86 - 90.9 %	as balance
Chromium, Cr	<= 0.10 %	<= 0.10 %	
Copper, Cu	1.5 - 2.6 %	1.5 - 2.6 %	
Iron, Fe	<= 0.30 %	<= 0.30 %	
Magnesium, Mg	1.8 - 2.6 %	1.8 - 2.6 %	
Manganese, Mn	<= 0.15 %	<= 0.15 %	
Other, total	<= 0.15 %	<= 0.15 %	
Silicon, Si	<= 0.20 %	<= 0.20 %	
Titanium, Ti	<= 0.060 %	<= 0.060 %	
Zinc, Zn	5.7 - 7.6 %	5.7 - 7.6 %	
Zirconium, Zr	0.080 - 0.25 %	0.080 - 0.25 %	

Electrical Properties	Metric	English	Comments
Electrical Resistivity	0.00000430 ohm-cm	0.00000430 ohm-cm	

## Contact Songhan Plastic Technology Co.,Ltd.

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