



# UNITED STATES WELDING CORPORATION

<b>USW ALLOY DESIGNATION AND BRIEF DESCRIPTION</b>	<p style="text-align: center;"><b>AZ61A</b></p> <p style="text-align: center;"><b>GTAW SOLID BARE WELDING WIRE MAGNESIUM BASE</b></p>	<p style="text-align: center;">ISO 9001 AS 9100</p>	<p style="text-align: center;"><b>DATA SHEET 4350</b></p>																																				
<b>CROSS-REFERENCE CONFORMANCE SPECIFICATIONS</b>	<p>AMS 4350                      AWS A5.19 R-AZ61A AZ61A                              AFNOR G-A6Z1 MIL-R-6944 UNS M11610</p>																																						
<b>METALLURGICAL BACKGROUND INFORMATION</b>	<p>AZ61A is used for welding wrought base materials of similar composition.</p> <p>AZ61A has good weldability when used with wrought alloys for ambient use.</p>																																						
<b>MATERIALS TO BE WELDED APPLICATION AND ADVICE</b>	<p>AZ61A, AZ31B, AZM, AZ10A, AZ80A</p> <p>ASTM B107, QQ-M-31, AMS 4350</p>																																						
<b>WIRE CHEMISTRY WT%</b>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Aluminum</td> <td style="width: 10%;">5.80</td> <td style="width: 10%;">7.20</td> <td style="width: 10%;">Other elements</td> <td style="width: 10%;">-</td> <td style="width: 10%;">0.3 Total</td> </tr> <tr> <td>Manganese</td> <td>0.15</td> <td>-</td> <td>Magnesium</td> <td>-</td> <td>Balance</td> </tr> <tr> <td>Zinc</td> <td>0.40</td> <td>1.50</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Copper</td> <td>-</td> <td>0.05</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Nickel</td> <td>-</td> <td>0.005</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Silicon</td> <td></td> <td>0.05</td> <td></td> <td></td> <td></td> </tr> </table>			Aluminum	5.80	7.20	Other elements	-	0.3 Total	Manganese	0.15	-	Magnesium	-	Balance	Zinc	0.40	1.50				Copper	-	0.05				Nickel	-	0.005				Silicon		0.05			
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<b>PACKAGING</b>	<p>Sealed, air-evacuated, argon filled Vapor Barrier containers with desiccants ensure full protection from atmospheric contamination and prolonged shelf-life.</p>																																						
DFARS Compliant		www.usweldingcorp.com																																					