



UNITED STATES WELDING CORPORATION

USW ALLOY DESIGNATION AND BRIEF DESCRIPTION	<p style="text-align: center;">AZ92A</p> <p style="text-align: center;">GTAW SOLID BARE WELDING WIRE MAGNESIUM BASE</p>	<p style="text-align: center;">ISO 9001 AS 9100</p>	<p style="text-align: center;">DATA SHEET 4395</p>																																																	
CROSS-REFERENCE CONFORMANCE SPECIFICATIONS	<p>AMS 4395 AWS A5.19 R-AZ92A AZ92A MSRR 9500/51 MIL-W-6944 UNS M11922</p>																																																			
METALLURGICAL BACKGROUND INFORMATION	<p>AZ92A is Mg - 9 Al - 2 Zn welding alloy which finds wide use for fabricating and repair welding of many similar compositions. Casting repair & refurbishment is the most common application.</p> <p>AZ92A is preferred for joining many casting alloys.</p>																																																			
MATERIALS TO BE WELDED APPLICATION AND ADVICE	<p>2L124, 2L125, L122. AMS 4484, 4434, 4453</p> <p>AZ31B, AZ10A, ZK21A, AM100A, AZ61A, AZ63A, AZ80A, AZ81A, AZ91A, AMS 4360</p> <p>AZ casting alloys to: EK41A, EZ33A, HK31A, HM21A, HM31A, HZ32A, K1A (except AZ61A)</p>																																																			
WIRE CHEMISTRY WT%	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Aluminum</td> <td style="width: 10%;">8.30</td> <td style="width: 10%;">9.70</td> <td style="width: 10%;">Silicon</td> <td style="width: 10%;">-</td> <td style="width: 10%;">0.05</td> <td style="width: 10%;"></td> </tr> <tr> <td>Manganese</td> <td>0.15</td> <td>-</td> <td>Other elements</td> <td>-</td> <td>0.30</td> <td>total</td> </tr> <tr> <td>Zinc</td> <td>1.70</td> <td>2.30</td> <td>Magnesium</td> <td></td> <td>Balance</td> <td></td> </tr> <tr> <td>Copper</td> <td>-</td> <td>0.05</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Nickel</td> <td>-</td> <td>0.005</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Iron</td> <td>-</td> <td>0.005</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Beryllium</td> <td>2 ppm</td> <td>8 ppm</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>			Aluminum	8.30	9.70	Silicon	-	0.05		Manganese	0.15	-	Other elements	-	0.30	total	Zinc	1.70	2.30	Magnesium		Balance		Copper	-	0.05					Nickel	-	0.005					Iron	-	0.005					Beryllium	2 ppm	8 ppm				
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WELD PROPERTIES	<p>Melting Point 1112 ° F</p>																																																			
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PACKAGING	<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																																																		