



UNITED STATES WELDING CORPORATION

USW ALLOY DESIGNATION AND DESCRIPTION	4047 GTAW and GMAW SOLID WELDING WIRE ALUMINUM BASE	ISO 9001 AS 9100	DATA SHEET 4185 (3)																																				
CROSS-REFERENCE CONFORMANCE SPECIFICATIONS	<table border="0" style="width: 100%;"> <tr> <td style="width: 33%;">AMS 4185</td> <td style="width: 33%;">718AC</td> <td style="width: 33%;">USWC4185(C)</td> </tr> <tr> <td>UNS A94047</td> <td>N2 (NG2)</td> <td>ALLOY 4047A</td> </tr> <tr> <td>Fed - QQ - B 655</td> <td>B Al-2</td> <td>AlSi-12 (ISO)</td> </tr> <tr> <td>CLASS FS - BAL Si-4</td> <td>MSRR 9500/31</td> <td>ER4047</td> </tr> <tr> <td></td> <td></td> <td>AWS A5.10 R4047</td> </tr> </table>			AMS 4185	718AC	USWC4185(C)	UNS A94047	N2 (NG2)	ALLOY 4047A	Fed - QQ - B 655	B Al-2	AlSi-12 (ISO)	CLASS FS - BAL Si-4	MSRR 9500/31	ER4047			AWS A5.10 R4047																					
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METALLURGICAL BACKGROUND INFORMATION	<p>ALLOY 4047 is a solid welding wire produced conventionally and then surface cleaned to remove standard metal working lubricants.</p> <p>ALLOY 4047 is an Al-12Si alloy with a single melting point, eutectic composition.</p>																																						
MATERIALS TO BE WELDED AND APPLICATIONS	<p>L159, L155, LM2, LM6, LM9, LM20. Also used for gas brazing applicaitons. 1xxx, 3xxx, 6xxx, series alloys. 2014, 2219, 5005, 5050, 5052, 7005, 7039.</p> <p>Al-Si and Al-Si-Mg casting and combinations to wrought alloys as listed above.</p>																																						
WIRE CHEMISTRY WT%	<table border="0" style="width: 100%;"> <tr> <td style="width: 30%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 30%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>Silicon</td> <td>11.0</td> <td>13.0</td> <td></td> <td>Manganese</td> <td>0.15</td> </tr> <tr> <td>Iron</td> <td>-</td> <td>0.8</td> <td></td> <td>Magnesium</td> <td>0.10</td> </tr> <tr> <td>Copper</td> <td>-</td> <td>0.30</td> <td></td> <td>Other impurities</td> <td>0.05 each max</td> </tr> <tr> <td>Zinc</td> <td>-</td> <td>0.20</td> <td></td> <td>Other elements</td> <td>0.15 total max</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Aluminum</td> <td>Balance</td> </tr> </table>									Silicon	11.0	13.0		Manganese	0.15	Iron	-	0.8		Magnesium	0.10	Copper	-	0.30		Other impurities	0.05 each max	Zinc	-	0.20		Other elements	0.15 total max					Aluminum	Balance
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PACKAGING	Sealed, air-evacuated, argon purged Vapor Barrier envelopes with desiccants ensure full protection from atmospheric contamination and prolonged shelf-life.																																						
DFARS Compliant		www.usweldingcorp.com																																					