



UNITED STATES WELDING CORPORATION

USW ALLOY DESIGNATION AND DESCRIPTION	4047 GTAW and GMAW SOLID WELDING WIRE ALUMINUM BASE		ISSUED JANUARY 2007	DATA SHEET 4185 (3)
			REVISION NO. A	
CROSS-REFERENCE CONFORMANCE SPECIFICATIONS	AMS 4185 UNS A94047 Fed - QQ - B 655 CLASS FS - BAL Si-4	718AC N2 (NG2) B Al-2 MSRR 9500/31	USWC4185(C) ALLOY 4047A AlSi-12 (ISO) ER4047 AWS A5.10 R4047	
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%	Silicon 11.0 13.0 Iron - 0.8 Copper - 0.30 Zinc - 0.20	Manganese 0.15 Magnesium 0.10 Other impurities 0.05 each max Other elements 0.15 total max Aluminum Balance		
WELD PROPERTIES	Melting range 1068° - 1080°F (Eutectic point)		Density 2.66gm/cc	
SIZES AND FORMS AVAILABLE	STRAIGHT LENGTHS		SPOOLED WIRE	
	2.2 kg (5 lb) packs. 914 mm (36") lengths. Flag tagged for traceability. (Double tagging and other lengths on request). Wide range of diameters.		Precision layer wound & with controlled cast & helix. 300 mm (12") diameter spools standard. 200 mm, 100 mm and proprietary spool sizes on request Wide range of diameters and spool weights.	
PACKAGING	Sealed, air-evacuated, argon purged Vapor Barrier envelopes with desiccants ensure full protection from atmospheric contamination and prolonged shelf-life.			
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