



Rod used for the GTAW and as a brazing alloy with fusion alloys with Si content > 7%, with lower melting point and higher fluidity than AlSi5 wires. It has good mechanical properties and excellent corrosion resistance. Its low melting point ensure a very low deformations in the parent metal. The high silicon content provides increased fluidity and minimize hot cracking. The alloy is generally used for brazing aluminium sheets, extrusions and casting and in applications with sustained elevated temperatures. After anodizing the welding will be gray-black color. Applications in automotive components, radiators and air conditioning. To be used with Ar, He, pure and mixed shielding gases.

Standards: **EN ISO 18273:16** **AWS A5.10:21**  
Classification: **S Al 4047 (AlSi12(A))** **ER 4047**

**CHEMICAL COMPOSITION OF ROD (wt.-%)**

elements	Sidergas Aluminium		EN ISO		AWS	
	min.	max.	min.	max.	min.	max.
Si	11,00	13,00	11,00	13,00	11,00	13,00
Fe	-	0,30	-	0,60	-	0,60
Cu	-	0,10	-	0,30	-	0,30
Mn	-	0,10	-	0,15	-	0,15
Mg	-	0,05	-	0,10	-	0,10
Cr	-	-	-	-	-	-
Zn	-	0,05	-	0,20	-	0,20
Ti	-	0,05	-	0,15	-	0,15
Be	-	0,0003	-	0,0003	-	0,0003
other each	-	0,05	-	0,05	-	0,05
other total	-	0,15	-	0,15	-	0,15
Al	rem.		rem.		rem.	

**MECHANICAL PROPERTIES OF ALL-WELD METAL**

	Sidergas Aluminium	EN ISO	AWS
	typical values (*)	minimum values	minimum values
Tensile strength (Rm)	150 [MPa]	mechanical properties of the weld metal are not part of the classification	mechanical properties of the weld metal are not part of the classification
Yield strength (Rp0,2)	70 [MPa]		
Elongation (A%)	10 (L <sub>o</sub> =5d <sub>o</sub> )		
Impact work (ISO-V KV)	-		

(\*) Typical values are referred to EN ISO 14175 I1 (100% Ar); base material -; welding position PA; preheating T -; Interpass T -; as-welded condition. Tensile test acc. to EN ISO 4136; Charpy impact test acc. to EN ISO 9016. *Text results should not be assumed to be expected results in a particular application or weldment.*



**PHYSICAL PROPERTIES**

	Sidergas Aluminium
	typical values
Melting range (solidus-liquidus)	573 - 585 [°C]
Density	2.650 [kg/m <sup>3</sup> ]

**PRODUCT APPROVALS**

		CE
SHIELDING GASES (EN ISO 14175):	-	according to EN 13479:17and Regulation (UE) No. 305/2011
GRADING:	-	
DIAMETERS:	-	
WELDING POSITIONS (EN ISO 6947):	-	

**OPERATING DATA**

welding positions (\*):  PA, PB, PC, PD, PE, PF type of current and polarity:  = + D.C. +

(\*) according to EN ISO 6947:20

**BASE MATERIALS**

The alloy is designed for welding non heat-treatable base alloys.

EN 1780-2:02: G-AISi12; G-AISi11; G-CuAISi12(Cu); G-AISi10Mg; G-AISi10Mg(Cu); G-AISi9Mg; G-AISi9Cu3; G-AISi7Mg; G-AISi6Cu4; EN573-3:13: AlMgSi1; AlMgSi0,8.

**TECHNICAL DELIVERY CONDITIONS**

The technical delivery conditions (type of product, dimensions, tolerance and marking) are in accordance with EN 544:18 and EN ISO 14344:10.

**PACKAGING AND AVAILABLE SIZES**

mm.	cut length mm.	cardboard tube	cardboard box	cardboard box
1.60	1.000	5 kg.	5 kg.	10 kg. (2 PE bags 5 kg. each)
2.00	1.000	5 kg.	5 kg.	10 kg. (2 PE bags 5 kg. each)
2.40	1.000	5 kg.	5 kg.	10 kg. (2 PE bags 5 kg. each)
3.20	1.000	5 kg.	5 kg.	10 kg. (2 PE bags 5 kg. each)
4.00	1.000	5 kg.	5 kg.	10 kg. (2 PE bags 5 kg. each)
5.00	1.000	5 kg.	5 kg.	10 kg. (2 PE bags 5 kg. each)

Other size and packaging available upon request