

# Lastek 71

## TIG welding and brazing of aluminium and its alloys

### CLASSIFICATION

EN ISO 18273 : S Al 4047A (AlSi12(A))

AWS A5.10 : ER 4047

### GENERAL DESCRIPTION

The excellent fluidity and the working temperature below the melting point of most Aluminium alloys makes this rod very suitable for brazing with the oxy-acetylene flame on thin sheets and profiles of aluminium.

Penetrates very well in the tightest lap-joints.

Suitable for joining aluminium to copper after tinning the copper with Lastek 3000P.

### APPLICATIONS

Aluminium and its alloys (less than 2 % Mg).

Pure Al, AlMn, AlMgMn, AlMg1, AlMgSi1, AlMgSi0.5 (AA1100, 1060, 3003, 3004, 5005, 5050, 6063, 6951 aso...)

Profile constructions, tube joinings (lap-joints), window frames, carriage work.

Remark: Anodic oxidation can darken the deposit. When this is not acceptable, use welding rod lastek 74 (or another one in function of the base metal).

### CHEMICAL COMPOSITION (%) (Typical values, all weld metal)

<b>Si</b> : 10.50 - 13.50	<b>Fe</b> : < 0.55	<b>Cu</b> : < 0.05	<b>Mn</b> : < 0.35	<b>Zn</b> : < 0.10
<b>Ti</b> : < 0.15				

### MECHANICAL PROPERTIES (Typical values, all weld metal)

Yield Strength N/mm <sup>2</sup>	Tensile Strength N/mm <sup>2</sup>	Elongation 5d (%)	Impact Strength Charpy V notch (ISO-V)

### GENERAL INFORMATION

**Welding positions** NA

**Shielding gas** Argon

**Packing** 5 kg in a cardboard box

**Polarity** AC

**Diameter (mm)** 2.0 3.2 4.0

**Lenght (mm)** 1000 1000 1000

#### Tips & tricks

Clean and degrease the work pieces and slightly bevel the edges. Apply the flux Lastek 71A (or make a paste with distilled water) and heat the work pieces with a slightly carburizing flame until the flux becomes transparent. Melt the rod along the joint.

Remove flux residues in order to prevent corrosion afterwards (brush it away with hot water or if necessary plunge it in nitric acid or other appropriate acids followed by rinsing in water).

For normal lap-joints: recommended brazing gap 0.15 - 0.25 mm (0.006 - 0.01inch). For larger lap-joints (> 10 mm (> 0.4 inch)): gap 0.5 mm (0.02 inch).

Furnace brazing: temperature at 600 - 650 °C (1120 - 1200 °F).

Lastek 71 is also suitable for TIG welding of AlSi alloys.

The information in this document is based on intensive tests and is accurate to the best of our knowledge. Do note that these values are only typical values for tests in accordance to prescribed standards. The suitability of the product should always be confirmed by qualification tests before use in any application. The information can be changed without previous notice.