

Product Information

FELDER Aluminium Universal Flux ZnAl

Flux for soldering and brazing aluminium and aluminium alloys resp. soldering aluminium with copper

Art.-No.: 245200..

All information about our products are the result of our long standing experience which we would like to pass on to our customers as application support. However, as we do not have any influence on the application of the works carried out with our products, please see the warranty claims in our conditions of sale because our liability is limited.

This product information does not constitute warranted properties.

Description

Flux for brazing/soldering of pure aluminium and aluminium alloys (magnesium content < 1.2 %) as well as aluminium with copper. The working temperature range is above 430 °C.

Properties

Flux type:	EN29454-1-3.1.2.C, respectively EN1045-FL20
Consistency:	pasty
Density (20° C):	3.1 g/cm ³
Working temperature:	approx. 430 – 900 °C
Colour:	whitish

Application

After having removed the soldering points from coarse pollutions and grease, apply the **FELDER Aluminium Universal Flux ZnAl** on the surfaces which should be connected. While heating the binders of the paste will vaporise and the activators will coat the soldering area (white). After having reached the necessary soldering temperature (the colour of the flux turns into water clear), the solder is applied. While adding the solder, the solder joint can still be heated with the flame. A superheating only occurs at a temperature above 900 °C. In special cases it makes sense to heat the components first without flux, then to dip the solder wire into the flux and afterwards to add it to the soldering point.

As standard soft solder for applications with aluminium we recommend the following alloy:

Alloy	DIN 1707-100:2011	Melting range in °C	Density in g/cm ³
ZnAl4	S-Zn96Al4	382 - 387	6,80

Beside the above-mentioned alloy for aluminium to copper applications, also the alloy Sn97Cu3 (227-310 °C) can be used. Nevertheless, the above-mentioned minimum working temperature of 430°C has to be adhered to. The solder will only be added when the salt has clearly melted.

For brazing aluminium and some aluminium alloys we recommend the alloy AISi12:

Alloy	EN ISO 18273:2015	Melting Range in °C	Density in g/cm ³
AISi12	S AL4047	570-585	2,68

Brazing the material combination Al-Cu with AISi12 is not recommendable (forming of brittle CuSi-phases)!

Cleaning advices

The flux residues are not corrosive and can remain on the soldering point if needed. But they also can be mechanically removed with hot water. In general soft solder connections on aluminium are not very resistant to corrosion. For applications in wet surroundings or in outdoor areas a painting or coating is unavoidable!

Storage advices

Store in tightly closed containers protected against humidity, insulation and heat exposure. Unopened the **FELDER Aluminium Universal Flux ZnAl** is durable for 12 months.

After using, the jar has to be kept close as the solvents could evaporate and the paste could thicken.

Delivery forms

0.1 kg bottle
0.25 kg bottle

Other package sizes and bulk container are available on demand.