



Product Information

Lead-free Nickel Concentrate Sn97Ni3

Nickel Concentrate for FELDER ISO-Tin® NiGe-electronic solder alloys

Art.-No. 5512 011089

FELDER Lead-free Nickel Concentrate does not contain any substances that are subject to restriction by directive 2011/65/EU ("RoHS II").

All information about our products is 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

Nickel act at the soldering process as a diffusion barrier and is concentrated at the surface of the molten alloy and at the intermetallic zone of the solder joint. Thereby a long-term decrease at the solder bath is expected.

FELDER Nickel concentrate Sn97Ni3 adjusts the Ni-content to the necessary value in wave soldering-, selective soldering- and HASL- machines.

FELDER Nickel concentrate Sn97Ni3 is also used for the changeover of lead-free standard solder to FELDER NiGe-Electronic solder.

Application

Addition of Ni-concentrate in NiGe-solder bathes per 100 kg capacity

Current Ni-value in %	0,06	0,055	0,05	0,045	0,04	0,035
Ni-Concentrate addition in kg	-----	0,17	0,34	0,5	0,66	0,84
Current Ni-value in %	0,030	0,025	0,020	0,015	0,010	0
Ni-Concentrate addition in kg	1,0	1,2	1,35	1,5	1,67	2,0

By adding the advised mentioned amounts of the concentrate (Sn97Ni3) a value of 0.06 % nickel in the solder bath is adjusted.

Maximum impurities / Tolerances acc. DIN EN ISO 9453:2014

Element content (%)	Ag 0,10	Al 0,001	As 0,030	Bi 0,10	Cd 0,002	Cu 0,050	Fe 0,020
Element content (%)	Ge 0,001	Ni 3,0±0,20	Pb 0,07	Sb 0,10	Sn Rest	Zn 0,001	

Delivery Form

Rolled wire cuttings 10 mm x 150 mm, packed in 5,- kg boxes.

Advices

Minimuim durable for 60 months when stored in closed boxes and protected against humidity!