FELDER seit 1979 LÖTTECHNIK

Product information

FELDER-ISO-Core® "Clear", LEAD FREE

Flux filled, lead free no clean soft solder wire for soldering in the electronic production.
Flux type according to IPC J-STD-004/ DIN EN 61190-1-1: REM1, according to EN 29454-1: 1.2.2.B

Art.-Nr.: (55/56)52.....

Description

High quality solder wire for hand- and robot-soldering in the field of electro-technic, electro-mechanics and also electronic applications . The flux characterises itself by its **high temperature resistance** and **no** spattering during the soldering. An **optimal wetting** as well as **standard exceeding spreading values** lead this lead-free solder wire to a top-quality product among the cored solder wires.
The solder joints show the **shininess** known from the lead-containing alloys.

The new flux recipe „Clear" is build up perfectly upon a basis of synthetic resins and on the new requirements of the lead-free soldering technique:

- **fast wetting and high spreading** on all well-known surfaces in the electronic field
- **no flux spatters** to reduce cleaning effort in soldering machines and for the prevention of injuries
- **crystal clear flux residues** to enhance the optical impressions
- **lowest outgassing and neutral exhalation** reduces the workplace exposure and protects the soldering surrounding area
- **easy removable flux residues from the solder iron tips,** they can easily be removed with conventional methods (FELDER Tinner, wet sponge, metal wool)
- **100MΩ-Test passed-** also applicable in assembly manufacturing
- **The durability of the solder iron tips will be extended considerably**

Available lead free alloys

Alloy	DIN EN ISO 9453:2014	DIN EN 61190	Melting range	Articel- No.
Sn100Ni+*	Sn99.25Cu0.7Ni0.05(Ge)	Sn99Cu.7	227°C	555294....
SN100C*	Sn99,25Cu0,7Ni0,05	Sn99Cu.7	227°C	565294….
Sn99Ag+*	Sn99Cu0.7Ag0.3(NiGe)	-	217-227°C	555281....
Sn96,5Ag3Cu0,5	Sn96.5Ag3Cu0.5	Sn96Ag03Cu0,4	217-219°C	5276….
Sn95,5Ag3,8Cu0,7	Sn95.5Ag4Cu0.5	Sn96Ag04Cu0,7	217°C	5284....
Sn99,3Cu0,7	Sn99.3Cu0.7	Sn99Cu.7	227°C	5294....
Further lead-free alloys are deliverable on request.				

Patents

*FELDER GMBH produces all NiGe-alloys with the licence for Fuji-patents (JP 3296289, USP 6.179.935 B1 and DE 198 16 671 C2), as well as for Nihon Superior patents (DE 69918758 and EP 0985486)

 Stand:08/15

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Tolerances / impurities according to DIN EN ISO 9453:2014

e.g.: SAC 305

Element	Ag	Al	As	Bi	Cd	Cu	Fe
Content (%)	3,0± 0,2	0,001	0,03	0,1	0,002	0,5± 0,2	0,02
Element	**Pb***	**Sb**	**Sn**	**Zn**			
Content (%)	0,07	0,1	balance	0,001			

e.g.: Sn100Ni+

Element	Ag	Al	As	Bi	Cd	Cu	Fe
Content (%)	0,06	0,001	0,03	0,1	0,002	0,7± 0,2	0,02
Element	**Ge**	**Ni**	**Pb***	**Sb**	**Sn**	**Zn**	
Content (%)	0,01±0,002	0,07±0,02	0,07	0,1	balance	0,001	

***The maximum lead content in FELDER lead free solder wires is 0,07% (RoHS-conformity 0,1%)**

Properties

Copper mirror test

acc. to IPC-TM-650, 2.3.32 : passed (no mirror brake trough)

Corrosion test

acc. to IPC-TM-650, 2.6.15 : no corrosion

SIR-test

acc. to IPC-TM-650, 2.6.3.3 : >100 MΩ at 85°C/85% RH, 168h

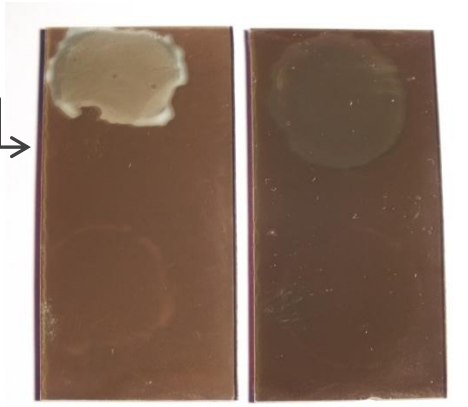
Migration-test : no e-corrosion

Flux content : 3,5 % standard

Flux distribution : single cored

Ø in mm : 0,25, 0,35, 0,50, 0,75, 1,00, 1,50, 2,00

Spool sizes in kg : 0,10, 0,25, 0,50, 1,00, 2,50, 5,00



Competitor ISO-Core® "Clear"

Cleaning

The crystal clear, solid flux residues are non-corrosive on non-ferrous metals. Therefore, they may remain on the solder joint.

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Advices

Lead-free FELDER-ISO-Core® "Clear" solder wires do not contain any substances that are subject to restriction by directive 2011/65/EU ("RoHS").

We are delighted to produce all solder wires according to your company standard.

Storage

Keep dry and dust-free at room temperature. Minimum durability: 60 months.

Handling advice

We refer to the MSDS!

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