



# Lead-free solder wire

## i-Flex 400

INTERFLUX®  
ELECTRONICS N.V.



Technical data i-Flex 400

Ver: 3.11 26-10-15

Page 1

### Very low residue, no-clean and halide free solder wire

#### Description:

Interflux® **i-Flex 400** is a no-clean, lead-free solder wire with a chemically modified rosin that has been developed to give very low residue formation.

The flux inside of the wire facilitates a quick and clean soldering process, making it the best choice for intensive hand soldering operations as well as for automated soldering (robot soldering).

**i-Flex 400** has good wetting properties on virtually all standard surface finishes in electronics assembly.

The residues after soldering are minimal and a hand soldered solder joint can hardly be distinguished from a wave soldered or reflowed solder joint.

Moreover, **i-Flex 400** is absolutely halogen free, providing for very safe residues after soldering.

**i-Flex 400** is classified as RO/L0 according to IPC J-STD-004A.



Products pictured may differ from the product delivered



#### More information:

Work instructions	2
Handling	2
Test results	3
Packaging	4

#### Key advantages:

- Very low residue
- Absolutely halogen free
- Long tip-life

#### Availability

Flux type: i-Flex 400  
Flux content: 1,6% w/w 2,2% w/w

alloy	melting point	diameters						
		0,20	0,35	0,50	0,70	1,00	1,50	2,00
Sn96,5Ag3Cu0,5	217°C–219°C	●	●	●	●	●	●	●
Sn96,5Ag3,5	221°C		●	●	●	●	●	●
Sn95,5Ag3,8Cu0,7	217°C-219°C		●	●	●	●	●	●
Sn99Ag0,3Cu0,7	217°C-227°C		●	●	●	●	●	●
Sn99,3Cu0,7	227°C		●	●	●	●	●	●

● = available

● = upon request



## Work instructions

### **Manual soldering**

The working temperature is between 320°C and 390°C. For more dense metals like Nickel, the temperature may be elevated to 420°C.

Choose the correct soldering tip: to reduce the thermal resistance, it is important to create a large contact surface with the component

and solder pad.

The use of a good soldering station is important in order to always have the correct temperature on the soldering joint. Use a soldering station with a response time as short as possible.

Heat up the surfaces of both component and island simultaneously. Slightly touch with the solder wire,

the point where component lead, soldering island and soldering tip meet (the small quantity of solder ensures a drastic lowering of the thermal resistance). Add subsequently without interruption, the correct amount of solder close to the soldering tip without touching the tip. It is important that no solder wire is making contact with

the soldering tip during soldering to avoid flux spitting and premature flux consumption!

## Handling

### **Storage**

Store the solder wire in a clean environment at ambient temperature

### **Handling**

To avoid spool and wire damage, handle package with care.

### **Safety**

Please always consult the safety data-sheet of the product.



## Test results

conform IPC J-STD-004A

Property	Result	Method
<b>Chemical</b>		
flux designator	<b>RO L0</b>	J-STD-004A
	<b>F-SW 32</b>	DIN 8511
	<b>1.1.3</b>	ISO 9454
qualitative copper mirror	<b>pass</b>	J-STD-004A IPC-TM-650 2.3.32
qualitative halide		
silver chromate (Cl, Br)	<b>pass</b>	J-STD-004A IPC-TM-650 2.3.33
spot test (F)	<b>pass</b>	J-STD-004A IPC-TM-650 2.3.35.1
quantitative halide	<b>0,00%</b>	J-STD-004A IPC-TM-650 2.3.35
<b>Environmental</b>		
SIR test	<b>pass</b>	J-STD-004A IPC-TM-650 2.6.3.3
qualitative corrosion, flux	<b>pass</b>	J-STD-004A IPC-TM-650 2.6.15



## Packaging

Spools of 10g, 100g, 500g and 1000g



Trade name : *í*-Flex 400 Lead-Free, Halide Free, No-Clean Solder Wire

D i s c l i m e r

Because Interflux® Electronics N.V. cannot anticipate or control the many different conditions under which this information and our products may be used, we do not guarantee the applicability or the accuracy of this information or the suitability of our products in any given situation. Users of our products should make their own test to determine the suitability of each such product for their particular purposes. The product discussed is sold without such warranty, either express or implied.

Copyright:

**INTERFLUX®** ELECTRONICS

Please consult the latest  
version of this document  
on:

[www.interflux.com](http://www.interflux.com)

This document in another  
language?:

[www.interflux.com](http://www.interflux.com)