



# Lead free solder wire Flexsol 903

INTERFLUX®  
ELECTRONICS N.V.



Technical data Flexsol 903

Ver: 3.11 26-10-15



Page 1

## Lead free, no-clean and halide free solder wire

### Description:

**Flexsol 903** is a lead-free, no-clean solder wire that contains no halides and is recommended for **all class** (IPC-A-610) soldering.

It is designed to minimize flux spattering during soldering also at higher temperatures.

**Flexsol 903** can be used in both manual and automated soldering applications.



Products pictured may differ from the product delivered

### More information:

|                   |   |
|-------------------|---|
| Work instructions | 2 |
| Handling          | 2 |
| Test results      | 3 |
| Packaging         | 4 |

### Key advantages:

- Low spattering
- Classification to IPC and EN: **RO LO**
- Absolutely halogen free
- Long tip-life
- Very good wetting on Cu, Ag, Sn ...
- Suitable for automated soldering

## Availability

Flux type: IF 903  
Flux content: 1,6% w/w (0,20mm only) – 2,2% w/w – 3,5% 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   | ●         | ●    | ●    | ●    | ●    | ●    | ●    |
| Sn99Ag0,3Cu0,7 | 217°C-227°C   |           | ●    | ●    | ●    | ●    | ●    | ●    |
| Sn99,3Cu0,7    | 227°C         |           | ●    | ●    | ●    | ●    | ●    | ●    |

● = available

Other diameters 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 EN 61190-1-2(2002) and IPC J-STD-004A

| Property                                       | Result         | Method                          |
|--|----------------|---------------------------------|
| <b>Chemical</b>                                |                |                                 |
| flux designator                                | <b>RO LO</b>   | J-STD-004A                      |
|  | <b>W</b>       | EN61190-1-3 (2002)              |
|  | <b>F-SW 31</b> | DIN 8511                        |
|  | <b>1.1.1</b>   | ISO 9454                        |
| qualitative copper mirror                      | <b>pass</b>    | J-STD-004A IPC-TM-650 2.3.32    |
|  | <b>pass</b>    | TR-TSY-000078 13.1.6            |
| qualitative halide<br>silver chromate (Cl, Br) | <b>pass</b>    | J-STD-004A IPC-TM-650 2.3.33D   |
|  | <b>pass</b>    | TR-TSY-000078 13.1.4            |
| spot test (F)                                  | <b>pass</b>    | J-STD-004A IPC-TM-650 2.3.35.1A |
|  | <b>pass</b>    | TR-TSY-000078 13.1.5            |
| quantitative halide                            | <b>0,00%</b>   | J-STD-004A IPC-TM-650 2.3.35C   |
| <b>Environmental</b>                           |                |                                 |
| SIR test                                       | <b>pass</b>    | J-STD-004A IPC-TM-650 2.6.3.3B  |
| qualitative corrosion, flux                    | <b>pass</b>    | J-STD-004A IPC-TM-650 2.6.15C   |



## Packaging

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

Not all diameters are available on all spool sizes

Trade name : Flexsol 903 Lead-Free, Halide Free, No-Clean Solder Wire

D i s c l a 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)