

RESO

MBO SOLDER WIRE No Clean



Created Date: 19/03/2020 - Updated : 11/01/2023 Nr: 08



MBO No-clean solder wire “RESO” was developed in the MBO laboratories. It is specially formulated for soldering applications of components on most substrates, including copper, copper tinned, nickel-gold, etc..

- **High activity**
- **Fast soldering**
- **Low, clear and safe residues**
- **Low fume**
- **Low odour**
- **Low spattering**
- **Adapted for lead-free alloys first**
- **ISO 9453 and J-STD 006 compliant**

Available alloys :

| Alloy | Melting point |
|--------------------------|---------------|
| Sn95.5Ag3.8Cu0.7 | E - 217°C |
| Sn96.5Ag3Cu0.5 | 217 - 220°C |
| Sn99Ag0.3Cu0.7 | 217 – 227°C |
| Sn96.5Ag3.5 | E - 221°C |
| Sn97Cu3 | 227 – 310°C |
| Sn99.3Cu0.7 | E - 227°C |
| Sn99CuSP | E - 227°C |
| Sn99.3Cu0.7Ni0.05Ge0.006 | E – 227°C |

Also available in lead in Sn60Pb40 and Sn5Pb93.5Ag1.5 alloys only.

APPLICATION

MBO “RESO” solder wire confers fast soldering with copper, tinned copper and nickel-gold. MBO “RESO” solder wire can be used in conjunction with various methods of soldering, such as soldering iron, hot air, induction, hot plate etc. When used with a soldering iron, it is recommended to use an operating temperature between 360°C and 400°C for standard operations in lead free. Elevated temperatures can be used but a light coloration of the flux residues may result.



MBO SOLDER WIRE

No Clean



Created Date: 19/03/2020 - Updated : 11/01/2023 Nr: 08

PHYSICO-CHEMICAL CHARACTERISTICS

Alloys : Most lead free alloys conforming to international standards available on request
Flux type: Rosin
Properties: See table below

| | RES0 |
|-----------------------|--|
| Halide content | < 500 ppm (IPC TM 650 2.3.28.1) |
| Flux content | Standard: 2.2% and 3 % (other: consult us) |
| Acid number | 180 mgKOH/g (IPC TM 650 2.3.13) |
| J-STD-004 class. | ROLO |
| Rosin softening point | 70 °C to 80 °C |
| Application | General application |

| Chemical Reliability Test | Requirements | Results |
|--|-------------------------------|---------|
| Copper Mirror Test (IPC-TM-650- 2.3.32) | No complete removal of copper | PASS |
| Copper Corrosion Test (IPC-TM-650-2.6.15) | No evidence of corrosion | PASS |

| Electrical Reliability Test | Requirements | Results |
|-----------------------------------|-------------------------------------|---------|
| BONO Testing | Schneider Electric parameters | PASS |
| IPC SIR Testing (J-STD-004x) | $1.0 \times 10^8 \Omega$ minimum | PASS |
| BELLCORE SIR Test (GR-78-CORE) | $1.0 \times 10^{11} \Omega$ minimum | PASS |
| BELLCORE EM Test (GR-78-CORE) | (SIR Initial) / (SIR Final) < 10 | PASS |

(x) means the last version of the J-STD standard.

RESIDUES REMOVAL

If needed, post-soldering residues of MBO “RES0” solder wire can be removed with commercially-available solvents such as alcohols, hydrocarbons, and specific cleaners.



MBO SOLDER WIRE

No Clean



Created Date: 19/03/2020 - Updated : 11/01/2023 Nr: 08

SAFETY

Observe standard precautions for handling and use. Use in well ventilated areas. DO NOT SMOKE during use.

MBO “RESO” wire is not considered toxic. However, its use in typical soldering applications will generate a small amount of decomposition and fumes. These fumes should be adequately exhausted / vented for operator safety and comfort.

Consult the MSDS for all safety information. The most recent version of the MSDS is available on request at admin@mbosolder.com.

STORAGE

MBO solder wires should be stored in dry conditions in original packaging and within a temperature range of 5°C to 40°C. MBO guarantees the product shelf life for two years from the date of manufacture when stored in the recommended conditions. Keep away from inclemency.

ADDITIONAL INFORMATION

Our manufacturing processes have been subjected to FMECA analysis (equivalent of AMDEC in France).



We cannot anticipate any and all conditions and situations under which the information and our products or the combination of both with others will be used. We do not assume any liability in the safety and suitability of our products alone or in combination with others. Users must make their own tests to determine the safety and suitability of each product used alone or with other products for their own use. Except any previous written agreement, our products are sold without guarantee and customers must assume all liability for any loss or damage suffered by themselves or by third parties, either from handling or use of our products alone or with others. In case of any difference or variation seen during the use of the products we request that you contact our technical department.