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|----------|------------|
| Date | 2021.06.28 |
| Language | English |
| SDS | 950608 |



SUMMARY

Pb-free - Halide-free - No-Clean solder paste - Anti tombstoning

| PASTE | S9M-XF3+ |
|----------------------|----------|
| PROCESS | |
| No-Clean process | 9 |
| Post-solder cleaning | 6 |

| INDUSTRY APPLICATION | |
|---------------------------------|---|
| Standard electronics | 8 |
| Industrial electronics | 9 |
| Hi-Rel electronics (automotive) | 8 |

| PROCESS CAPABILITY | |
|----------------------------|-----|
| Squeegee | 9 |
| ProFlow | TBD |
| Pb-free Profile Air, short | 8 |
| Pb-free Profile Air, long | 8 |
| Pb-free process N2 | 9 |
| Vapor phase process | 9 |
| Shiny joint appearance | 6 |
| Cosmetic cleanliness | 8 |
| ICCT compatible | 9 |
| Conformal coating | 6 |

| Legend | |
|--|--------|
| <i>Especially made for this purpose</i> | 9 - 10 |
| <i>Generally qualified for this purpose</i> | 7 - 8 |
| <i>Generally usable, but not the best choice</i> | 5 - 6 |
| <i>Generally not usable for this purpose</i> | 3 - 4 |
| <i>Wrong choice</i> | 1 - 2 |

Check material compatibility with every process change!

Industrial chemical product.

Read MSDS before use.

| CLASSIFICATION | |
|------------------------------|------------|
| DIN-EN-29454-1: 1994 | 1.2.3.C |
| IPC-J-STD-004-A: 2004 | RELO |
| IPC-J-STD-005: 1995 (Powder) | T3 |
| Particle size | [µm] 25-45 |

| PROPERTIES | |
|------------------------|--------------------------|
| Flux code | F3+ |
| Alloy Code | S9M |
| Alloy composition | Sn96Ag3.75Cu0.25 |
| Liquidus | [°C] 221 |
| Solidus | [°C] 217 |
| Recommended peak temp. | [°C] 232-250 |
| Acid number | [mg KOH/g] 124.3 |
| Flux | [% w/w] 11.8 |
| Residues | Colorless |
| Tackiness Malcom TK1 | JIS-Z-3284 [gf] @ 0h 110 |

| TEST REPORTS | | | |
|---|---------------------|--------------------|-----------|
| IPC/ANSI-J-STD-005 | | | Compliant |
| Certificate of Compliance | | | Website |
| Declaration of Conformity 2011/65/EU (RoHS) | | | Available |
| Application Note | | | EN/DE |
| Copper Mirror | IPC-TM-650 2.3.32 | | Pass |
| Halides | IPC-TM-650 2.3.33 | [Silver Chromate] | Pass |
| Halide | IPC-TM-650 2.3.35.1 | [Fluoride by Spot] | Pass |
| Copper Corrosion | IPC-TM-650 2.6.15 | | Pass |
| SIR | IPC-TM-650 2.6.3.3 | | Pass |
| ECM | IPC-TM-650 2.6.14.1 | | Pass |

| PACKAGING AND STORAGE | | |
|------------------------------|----------|------|
| Packaging jar | PP [g] | 500 |
| Packaging cartridge | HDPE [g] | 650 |
| Packaging cartridge | HDPE [g] | 1300 |
| Packaging Cassette Pro-Flow | [g] | 800 |
| Minimum shelf-life in months | 4-10 °C | 6 |

Disclaimer:

This information is intended as advice to the best of our knowledge. The provided data is based on our own measurements, they do not provide any guaranteed properties nor are these delivery specifications. Due to the versatility of materials, applications and taking in consideration the industrial property rights of third parties, Balver Zinn Josef Jost GmbH & Co. KG cannot take any liability.