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| Product | SAC3-HF3+ |
| Date | 2018.05.18 |
| Release | 15.1 |
| Language | English |

Solder paste**SUMMARY**

Pb-free - Halide-free - No-Clean solder paste - Fine Pitch

| PASTE | SAC3-HF3+ |
|----------------------|-----------|
| PROCESS | |
| No-Clean process | 5 |
| Post-solder cleaning | 3 |

| INDUSTRY APPLICATION | |
|---------------------------------|---|
| Consumer electronics | 4 |
| Standard industrial electronics | 5 |
| Hi-Rel electronics (automotive) | 4 |

| PROCESS CAPABILITY | |
|----------------------------|---|
| Squeegee | 5 |
| ProFlow | 3 |
| Pb-free Profile Air, short | 4 |
| Pb-free Profile Air, long | 4 |
| Pb-free process N2 | 5 |
| Vapor phase process | 4 |
| Shiny joint appearance | 4 |
| Cosmetic cleanliness | 4 |
| ICCT compatible | 5 |
| Conformal coating | 3 |

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

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 | REL0 |
| IPC-J-STD-005: 1995 (Powder) | T4 |
| Particle size | [µm] 20-38 |

| PROPERTIES | | |
|------------------------|------------------|---------------|
| Flux code | F3+ | |
| Alloy Code | SAC3 | |
| Alloy composition | Sn96.5/Ag3/Cu0.5 | |
| Liquidus | [°C] | 219 |
| Solidus | [°C] | 217 |
| Recommended peak temp. | [°C] | 232-250 |
| Acid number | [mg KOH/g] | 124.3 |
| Flux | [% w/w] | 12.1 |
| Residues | Colorless | |
| Tackiness Malcom TK1 | JIS-Z-3284 | [gf] @ 0h 110 |

| TEST REPORTS | | | |
|---------------------------|---------------------|--------------------|-----------|
| IPC/ANSI-J-STD-005 | | | Compliant |
| Certificate of Compliance | | | Website |
| RoHS Compliant | | | Available |
| Application Note | | | EN/DE |
| Copper Mirror | IPC-TM-650 2.3.32 | | L |
| 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 | | L |
| 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 |

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