

# Product Data Sheet



Product **COBAR-OT2** No-clean solder paste  
 Date 21-08-12  
 Release 12.01

| LEGEND |   |
|--------|---|
| 5      | Especially made for this purpose          |
| 4      | Generally qualified for this purpose      |
| 3      | Generally usable, but not the best choice |
| 2      | Generally not usable for this purpose     |
| 1      | Wrong choice                              |

| ALLOY CODE | ALLOY COMPOSITION  |
|------------|--------------------|
| SAC3       | Sn96.5Ag3Cu0.5     |
| SN100C     | Sn99.3Cu0.7NiGe    |
| SCANGe     | Sn98.3Cu0.7Ag1NiGe |
|            |                    |
|            |                    |

| ALLOY CODE                      | SAC3 | SN100C    | SCANGe |
|---------------------------------|------|-----------|--------|
| ISO 9454-1                      |      | 1.1.3.C   |        |
| IPC-ANSI-J-STD-004              |      | ROL0      |        |
| IPC-ANSI-J-STD-005 (Powder)     |      | compliant |        |
|                                 |      |           |        |
| No-Clean process                |      | 5         |        |
| Post-solder cleaning            |      | 4         |        |
| Vapor phase process             | 4    | 3         | 5      |
| Consumer electronics            |      | 5         |        |
| Standard industrial electronics |      | 5         |        |
| Hi-Rel electronics (automotive) |      | 5         |        |
| Fine-pitch (= < 0.5 mm)         |      | 5         |        |
| OSP compatible                  |      | 5         |        |
| Ni/Au compatible                |      | 5         |        |
| Ag/Pd compatible                |      | 5         |        |
| Ni/Pd compatible                |      | 5         |        |
| Ag compatible                   |      | 5         |        |
| Sn compatible                   |      | 5         |        |
| SnPb Profile Air                |      | 1         |        |
| SnPb Profile N2                 |      | 1         |        |
| Lead-free Profile Air, short    |      | 5         |        |
| Lead-free Profile Air, long     |      | 5         |        |
| Lead-free Profile N2            |      | 5         |        |
| Squeegee                        |      | 5         |        |
| ProFlow                         |      | 4         |        |
| Rheopump                        |      | 3         |        |
| Dispensing [ > awg 22]          |      | 2         |        |
| Short cycle time                |      | 5         |        |
| Long stencil-life               |      | 5         |        |
| Long open time                  |      | 5         |        |
| Sharp print definition          |      | 5         |        |
| Reduces dog ears                |      | 5         |        |
| Reduces smearing                |      | 5         |        |
| Reduces stencil wiping          |      | 4         |        |
| Reduces solder balling          |      | 5         |        |
| Reduces solder beading          |      | 4         |        |
| Reduces bridging                |      | 5         |        |
| Reduces tombstoning             | 4    | 3         | 5      |
| Reduces de-wetting              |      | 5         |        |
| Reduces slumping                |      | 5         |        |
| Reduces voiding                 |      | 4         |        |
| Brilliant joint appearance      |      | 5         | 3      |
| Cosmetic cleanliness            |      | 5         |        |
| ICCT compatible                 |      | 5         |        |
| Conformal coating               |      | 5         |        |

| ALLOY CODE                      | SAC3               | SN100C | SCANGe |
|---------------------------------|--------------------|--------|--------|
| Flux code                       | OT2                |        |        |
| Alloy code                      | SAC3               | SN100C | SCANGe |
| Particle size class IPC         | T3 (25 µm - 45 µm) |        |        |
|                                 | T4 (20 µm - 38 µm) |        |        |
| PROPERTIES                      |                    |        |        |
| Liquidus [C]                    | 219                | 227    | 224    |
| Solidus                         | 217                | 227    | 217    |
| Recommended peak temp. [°C]     | 240                | 242    | 240    |
| Oxide content powder [ppm]      | 100                |        |        |
| Acid number [mg KOH] +/- 2.5%   | 60.6               |        |        |
| Halides [Silver-Chromate Test]  | PASS               |        |        |
| Halides [Potentiometric]        | PASS               |        |        |
| Flux [% w/w]                    | 11-12              |        |        |
| Metal [% w/w]                   | 88-89              |        |        |
| Filmformer(s)                   | Rosin              |        |        |
| Color of the residue            | none               |        |        |
| Viscosity @ 25°C [Pa.s]         |                    |        |        |
| Plate/Plate To+/-[%]            | 18                 | 220    |        |
| Malcom PCU205 To+/-[%] *        | 18                 | 210    |        |
| Max. speed [mm/sec]             | 0.4mm QFP          | 250    |        |
| Rec.separation speed [mm/sec]   | 10                 |        |        |
| Tackiness time 20°C/ 70%RH [H]  | 32                 |        |        |
| Tackiness force Malcom TK1 [gr] | 100                |        |        |
| TEST REPORTS                    |                    |        |        |
| Bellcore TR-NWT-000078/3        | compliant          |        |        |
| IPC/ANSI-J-STD-005              | compliant          |        |        |
| Certificate of Compliance       | website            |        |        |
| SPC-data                        | auditable          |        |        |
| RoHS-Compliant                  | Yes                |        |        |
| User's Guidelines               | english            |        |        |
| VOC content [% w/w]             | 0                  |        |        |
| PACKAGING AND STORAGE           |                    |        |        |
| Packaging jar                   | 500                |        |        |
| Packaging cartridge             | 650                |        |        |
| Packaging cartridge             | 1300               |        |        |
| Packaging Cassette Pro-Flow     | 800                |        |        |
| Recommended shelf-life in weeks |                    |        |        |
| Storage temperature [°C]        | 8                  | 25     |        |
| Storage temperature [°C]        | 20                 | 6      |        |

Check material compatibility with every process change!

Industrial chemical product.

Read MSDS before use.

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