

Product Data Sheet



Product **COBAR-F3+** No-clean solder paste
 Date 18-10-12
 Release 12.02

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
SN62	Sn62Pb36Ag2
SN63	Sn63Pb37

ALLOY CODE	SAC3	SN100C	SCANGe	SN62	SN63
ISO 9454-1			1.2.3.C		
IPC-ANSI-J-STD-004			RELO		
IPC-ANSI-J-STD-005 (Powder)			compliant		
No-Clean process			5		
Post-solder cleaning			3		
Vapor phase process	4	5		4	
Consumer electronics			5		
Standard industrial electronics			5		
Hi-Rel electronics (automotive)			4		
Fine-pitch (<= 0.5 mm)			4		
OSP compatible			5		
Ni/Au compatible			5		
Ag/Pd compatible			4		
Ni/Pd compatible			4		
Ag compatible			5		
Sn compatible			5		
SnPb Profile Air	1			5	
SnPb Profile N2	1			5	
Lead-free Profile Air, short		5			3
Lead-free Profile Air, long		4			3
Lead-free Profile N2		5			3
Squeegee			5		
ProFlow			3		
Rheopump			3		
Dispensing (> awg 22]			2		
Short cycle time			5		
Long stencil-life			5		
Long open time			5		
Sharp print definition	4			5	
Reduces dog ears			4		
Reduces smearing		4			5
Reduces stencil wiping			4		
Reduces solder balling			4		
Reduces solder beading			4		
Reduces bridging			5		
Reduces tombstoning	4		5		4
Reduces de-wetting			5		
Reduces slumping			5		
Reduces voiding			4		
Brilliant joint appearance	4		3		4
Cosmetic cleanliness			4		
ICCT compatible			5		
Conformal coating			4		

ALLOY CODE	SAC3	SN100C	SCANGe	SN62	SN63
Flux code	F3+				
Alloy code	SAC3	SN100C	SCANGe	SN62	SN63
Particle size class IPC	T3 (25 µm - 45 µm) - X				
	T4 (20 µm - 38 µm) - H				
PROPERTIES					
Liquidus [C]	219	227	224	179	183
Solidus	217	227	217	179	183
Recommended peak temp. [C]	240	242	240	215	215
Oxide content powder [ppm]	100				
Acid number [mg KOH] +/- 2.5%	124.30				
Halides [Silver-Chromate Test]	PASS				
Halides [Potentiometric]	PASS				
Flux [% w/w]	12.00		10.61		
Metal [% w/w]	88.00		89.39		
Filmformer(s)	Resin				
Color of the residue	None				
Viscosity @ 25°C [Pa.s]					
Plate/Plate Tol+/- [%]	18		190		
Malcom PCU205 Tol+/- [%]	18		180		
Max. speed [mm/sec] 0.4mm QFP	150	160	150	160	
Rec.separation speed [mm/sec]	10				
Tackiness time 20°C/ 70%RH [H]	24				
Tackiness force Malcom TK1 [gr]	110				
TEST REPORTS					
Bellcore TR-NWT-000078/3	compliant				
IPC/ANSI-J-STD-005	compliant				
Certificate of Compliance	website				
SPC-data	auditable				
RoHS-Compliant	Yes		No		
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		850		
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.

Disclaimer:
 The information given in this publication has been worked up to the best of the knowledge of Cobar as well as taking into consideration the applicable laws and regulations. We cannot anticipate all conditions under which this information and our products or the products of other manufacturers in combination with our products may be used. We accept no responsibility for results obtained by the application of this information or the safety and suitability of our products alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each such product or product combination for their own purposes. Unless otherwise agreed in writing, we sell the products without warranty, and buyers and users assume all responsibility and liability for loss or damage arising from the handling and use of our products, whether used alone or in combination with other products.