

Product **COBAR-F3+**

No-clean solder paste

Date 10-11-11

Release 11.01

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
SN62	Sn62Pb36Ag2

ALLOY CODE	SAC3	SN100C	SCANGe	SN62
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
Flux code	F3+			
Alloy code	SAC3	SN100C	SCANGe	SN62
Particle size class IPC	T3 (25 µm - 45 µm)			
	T4 (20 µm - 38 µm)			
PROPERTIES				
Liquidus [°C]	219	227	224	179
Solidus	217	227	217	179
Recommended peak temp. [°C]	240	242	240	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	12.07	12.00	10.61
Metal [% w/w]	88.00	87.93	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!

\* This is a calculated value from the Plate/Plate determination

\*\* Certain conditions apply.

\*\*\*\* Having a vapour pressure of >0.1mm Hg at 20 °C

Industrial chemical product.  
Read MSDS before use.

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