

Product COBAR-M3S

No-clean solder paste

Date 10-11-11
Release 11.01

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

Alloy code	Alloy composition
SAC3	Sn96.5Ag3Cu0.5
S9M	Sn96Ag3.75Cu0.25
SN62	Sn62Pb36Ag2
SN63	Sn63Pb37
S6M	Sn62.5Pb36.5Ag1

ALLOY CODE	SAC3	S9M	SN62	SN63	S6M
ISO 9454-1	1.2.3.C				
IPC-ANSI-J-STD-004	REL1				
IPC-ANSI-J-STD-005 (Powder)	compliant				
No-Clean process	5				
Post-solder cleaning	3				
Vapor phase process	4	5	4		5
Consumer electronics	4				
Standard industrial electronics	4		5		
Hi-Rel electronics (automotive)	5				
Fine-pitch (≤ 0.5 mm)	5				
OSP compatible	4				
Ni/Au compatible	5				
Ag/Pd compatible	3				
Ni/Pd compatible	3			4	
Ag compatible	3				
Sn compatible	4			3	
SnPb Profile Air	1			5	
SnPb Profile N2	1			5	
Lead-free Profile Air, short	5			3	
Lead-free Profile Air, long	5			3	
Lead-free Profile N2	5			3	
Squeegee	5				
ProFlow	4				
Rheopump	3				
Dispensing [≥ awg 22]	2				
Short cycle time	5			4	
Long stencil-life	5				
Long open time	5				
Sharp print definition	5				
Reduces dog ears	4				
Reduces smearing	4				
Reduces stencil wiping	4				
Reduces solder balling	4		5		
Reduces solder beading	4		5		
Reduces bridging	4		5		
Reduces tombstoning	4	5	4		5
Reduces de-wetting	4		5		
Reduces slumping	5		4		
Reduces voiding	5				
Brilliant joint appearance	4	3	5		3
Cosmetic cleanliness	4			5	
ICCT compatible	5				
Conformal coating	5				

ALLOY CODE	SAC3	S9M	SN62	SN63	S6M
Flux code	M3S				
Alloy code	SAC3	S9M	SN62	SN63	S6M
Particle size class IPC	T3 (25 µm - 45 µm) - X				
	T4 (20 µm - 38 µm) - H				
PROPERTIES					
Liquidus [C]	219	221	179	183	183
Solidus	217	217	179	183	179
Recommended peak temp. [°C]	240		215		
Oxide content powder [ppm]	100				
Acid number [mg KOH] +/- 2.5%	59.70		80.70		
Halides [Silver-Chromate Test]	PASS				
Halides [Potentiometric]	Detected				
Flux [% w/w]	10.88	10.75	9.70		
Metal [% w/w]	89.12	89.25	90.30		
Filmformer(s)	RESIN				
Color of the residue	none				
Viscosity @ 25°C [Pa.s]					
Plate/Plate Tol+/-[%] 18	190		210		180
Malcom PCU205 Tol+/-[%] * 18	180		200		170
Max. speed [mm/sec] 0.4mm QFP	100				
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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