DATE:

TO:

SPECIFICATION

NAME : almit SRC Solder Paste

Sn63 HM1-RMA V14L (H)

Item No.	Type
	Sn63 HM1-RMA V14L (H) Flux Content 9.5% Solder Powder Size: 25 – 45 (μm)

NIHON ALMIT CO., LTD

Head Office : Almit Bldg., 2-14-2 Yayoicho, Nakano-ku, Tokyo, 164-8666 Japan

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TEL: 052-323-3971 FAX: 052-323-3991

1. Product Name：
Sn63 HM1-RMA V14L (H)

2. Scope：
This spec. is specified for almit solder paste Sn63 HM1-RMA V14L (H) delivered by Nihon Almit Co., Ltd. to Messrs. ________________________________ .

3. Weight & Allowances: (kg)

Weight	0.5	1.0
Allowance	+0.01, -0	+0.01, -0

4. Chemical Composition：(wt%) (QQ-S-571F)

Comp.	Sn	Pb	Ag	Sb	Cu	Bi	Zn	Fe
Sn63	62.5/63.5	Bal	≦0.10	≦0.12	≦0.08	≦0.1	≦0.005	≦0.02
	Al	As	Cd	Au	In	Ni	P	S
	≦0.005	≦0.03	≦0.005	≦0.08	≦0.1	≦0.01	≦0.01	≦0.005

5. Solder Powder Size & Distribution:

Size (μm)			
25/45	Powder Size (μm)	+45	-20
	Distribution (wt%)	≦5.0	≦1.0

6. Characteristics：

Items	Characteristics	Test Methods
Flux Content (wt%)	9.5±0.5	JIS-Z-3197
Chloride and Bromide	Pass	QQ-S-571F
Water Extract Resistance (Ωcm)	≧100,000	QQ-S-571F
Cu Mirror Test	Pass	QQ-S-571F
SIR (Ω)	$\geqq 1\times10^{12}$	JIS-Z-3197
Spreadability on Cu Plate (%)	≧80	JIS-Z-3197
Cu Plate Corrosion Test	Pass	JIS-Z-3284
Dryness	Pass	JIS-Z-3197

7. Physical Properties:

Solidus (℃)	Liquidus (℃)	Specific Gravity
183	183	8.4

8. Lot Size：
A single lot is consisted of, and may vary between 10 ～ 100kg, depends upon the production plan.

9. Quality and Inspection：

Inspection items are applied to each lot as follows:

Item No.	Inspection Item		
1	Appearance	Color	Comparison with Limit Specimen
2	Weight	Net Weight	-0, +0.01 (kg)
3	Solder Powder Size	25/45	≧90 (wt%)
4	Metal Composition	Sn	63.0±0.5 (wt%)
		Pb & Impurities	Rest
5	Characteristics	Flux Content	9.5±0.5 (wt%)
6		Solder Balling Test (*Almit Method)	Comparison with Limit specimen
7		Viscosity (S type, 10rpm, 25℃)	150～300 (Pa・s)
8		Solderability on Cu Plate	Comparison with Limit Specimen
9		Dryness	Chalk powder should be easily removed from each test specimen.

*Straight lines of solder paste are printed on to a JIS-2 type substrate then reflowed. The reflowed solder is examined with a stereo microscope at 30X magnification. No more than 2 solder balls larger than one fifth the size of the pattern gap is allowed per gap.

10. Packing：

Individual Packaging		Outer Packaging	
Unit	Packaging	Unit	Packaging
500 g	Polyethylene bottle with inner lid	10.0 kg	Cardboard box
1,000 g	Polyethylene bottle with inner lid	20.0 kg	

11. Identification：

	Polyethylene Bottle	Cardboard Box
Name	almit SRC Solder Paste Sn63 HM1-RMA V14L (H)	Same as the left
Sn Content	Indicate “Sn63” in the product name	Ditto
Lot No.	(Ex.) 021101-1	Ditto
Solder Powder Size	25-45 μm	Ditto
Date of Mfg.	(Ex.) 02-11-1 (Indicate in the Christian era)	Ditto
Weight (Net)	(Ex.) 500 g	Ditto
Company Name	NIHON ALMIT CO., LTD.	Ditto

12. Maker Address：

Nihon Almit Co., Ltd.

Almit Bldg., 2-14-2 Yayoicho, Nakano-ku, Tokyo, Japan

13. In case of changing this spec., it must be accepted by ______________________ .

≪HOW TO HANDLE Sn63 HM1-RMA V14L (H)≫

1. Storage:
   - Hold in a refrigerator.
   - It is recommended to use within 6 months from manufacturing date.
   - The solder paste should be used as quickly as possible once lid has been opened.
   - Unused solder paste in the jar should be refrigerated after re-applying the inner and outer lids.

2. How to Use:
   - Prior to usage, solder paste should be removed from refrigeration for over 2 hours until it reaches room temperature.
   - After reaching room temperature, stir it slowly to be homogeneous with a stainless spatula. Caution must be taken not to roll in air. Use of mixing machine is recommended.
   - After printing the solder paste, mount components immediately and let it pass through reflow furnace.
   - Slowly heat the reflow furnace at 1.5 to 2.0℃/second till reaching 120℃. Set peak temperature at 160 to 170℃ during pre-heating and 210 to 230℃ during reflowing.
   - This solder paste corresponds to No-Clean process, however confirmation may be required whether No-Clean process is applicable user's expectancy.
   - White residue (insulator) may appear after cleaning.
   - Solder paste must be wiped off from metal mask, squeegee and spatula by applying solvent such as alcohol immediately after use.

3. Caution:
   - The solder paste contains lead.
   - The solder paste is not edible.
   - The solder paste is for the industrial use only.
   - Avoid contact with eyes and skin.
   - Avoid inhalation of gases emitted by solder paste during use.
   - Provide proper ventilation.

4. Notice:
   - If contact with skin, wipe off with like alcohol and wash with soap and water, immediately.
   - Use rubber gloves and protective glasses, if necessary.

5. Law:
   - Treat this product according to "RULE ON THE PREVENTION FROM LEAD POISONING".

6. Delivery:
   - Usually 2 weeks from acceptance of order

Approved	Prepared
Yoshihito Senga	Hideto Takayama

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