

DATE:

TO:

SPECIFICATION

NAME : almit SRC Solder Paste
SJ-7 HM1-RMA V14L (H)

Item No.	Type
	SJ-7 HM1-RMA V14L (H) Flux Content 9.5% Solder Powder Size: 25 – 45 (μ m)

NIHON ALMIT CO., LTD

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

1. Product Name :
SJ-7 HM1-RMA V14L (H)

2. Scope :

This spec. is specified for almit solder paste SJ-7 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%)

Comp.	Sn	Pb	Ag	Sb	Cu	Bi	Zn	Fe	Al
SJ-7	61.5/62.5	Bal	2.8/3.2	0.3/0.7	≤0.08	≤0.10	≤0.005	≤0.02	≤0.005
	As	Cd	Au	In	Ni	P	S	Additives	
	≤0.03	≤0.005	≤0.08	≤0.1	≤0.01	≤0.01	≤0.005	0.005/0.025	

5. Solder Powder Size & Distribution:

Size (μ m)			
25/45	Powder Size (μ m)	+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 (Ω cm)	≥100,000	QQ-S-571F
Cu Mirror Test	Pass	QQ-S-571F
SIR (Ω)	≥1×10 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 (°C)	Liquidus (°C)	Specific Gravity
179	187	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	62.0±0.5 (wt%)
		Ag	3.0±0.2 (wt%)
		Sb	0.5±0.2 (wt%)
		Other Additives	0.015±0.01 (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°C)	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 SJ-7 HM1-RMA V14L(H)	Same as the left
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 SJ-7 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 1.0 to 2.0°C/second till reaching 120°C. Set peak temperature at 160 to 170°C during pre-heating and 210 to 230°C during reflowing.
- This solder paste corresponds to No-Clean process, however confirmation may be required whether No-Clean process is applicable under 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

(No seal for copy)