

Trade Name: LFM-31X MHS32 12%

1. Company Address: Almit GmbH Ph.: +49 6066 96884-0
 Dekan-Groh-Straße 4 Fax: +49 6066 96884-18
 (DE) 64720 Michelstadt - near Frankfurt

2. Validity: This specification is specified for:
 Almit-Solder-Paste LFM-31X MHS32 12%
 Delivered by Almit GmbH to: _____

3. Diameter & Allowance:

Weight	500g	500g	700g	1000g	0
Allowance	-0, +10g				

4. Deliverable Reel Size:

Metal Name	Solidus °C	Liquidus °C	Specific Gravity
LFM-31	190	199	7.3

5. Physical Properties:

Test	Characteristics	Test Methods
Metal Content	88.0 ± 1.0	IPC-TM-650 2.2.20
Silver Chromate	pass	IPC-TM-650 2.3.33
Copper Mirror Test	pass	IPC-TM-650 2.3.32
SIR (85°C, 85%, 168hr) (Ω)	≥ 1x10 ⁸	IPC-TM-650 2.6.3.3
Corrosion Test	pass	IPC-TM-650 2.6.15
Flux materials composition	RO	J-STD 004 1.2
Quantitative Halide	LO < 0.0%	IPC-TM-650 2.3.35
Fluorides By Spot Test	pass	IPC-TM-650 2.6.35.1

6. Characterisitcs:

Composition	Components							
	Sn	Ag	Cu	Pb	Sb	Bi	Au	In
Standard	Rest	≤0.10	≤0.05	<0.05	≤0.10	3.0	≤0.05	≤0.10
Composition	Components							
	Al	As	Cd	Fe	Ni	Zn		
Standard	≤0.001	≤0.03	≤0.002	≤0.02	≤0.01	8.0		

7. Solder Powder Size & Distribuon :

% of Sample by Weight – Nominal Size

Type	not larger than	less than 1% larger than	at least 80% between	at most 10% less than
Type 3 (X)	50 Microns	45 Microns	25 - 45 Microns	20 Microns

8. Lot-Size: A single lot contains 500kg which is the amount of one melting.

9. Quality and Inspecon :

Inspecon items are applied to each lot as follows :

Test No.	Inspection Item	Contents	Standard	
1	Appearance	Color	Comparison with Limit Specimen	
2	Weight	Net Weight	-0 ; +10	(g)
3	Solder Powder Size	25 - 45 μm (X)	90 \leq	(wt%)
4	Metal Composition	Sn	Rest	(wt%)
		Bi	3.0 \pm 0.2	(wt%)
		Zn	8.0 \pm 0.5	(wt%)
				(wt%)
5	Characteristics	Flux Content	12.0 \pm 0.5	(wt%)
6		Solder Balling Test	Comparison with Limit Specimen	
7		Viscosity (Spiral type, 10rpm, 25°C) (IPC-650-2.4.34.3)	200000 \pm 30000	(cps)
			200 \pm 30	(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 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 Package		Outer Package	
Unit	Packing	Unit	Packing
500g	Polyethylene bottle	10kg ; 20kg	Cardboard Box
500g	6 oz Cartridge	10kg	
700g	Proflow Cassette	7kg ; 14kg	
1000g	12 oz Cartridge	10kg	

11. Identification:

	Polyethylene bottle	Cardboard
Name	Almit-Solder-Paste LFM-31X MHS32 12%	same as the left
Lot Nr.	(Ex.) 120119-9	dto.
Solder Powder Size	25 - 45 μm	dto.
Date of Mfg.	(Ex.) 19.01.2012	dto.
Net Weight	(Ex.) 500g	dto.
Maker	Nihon Almit Co. Ltd.	dto.

10. Maker Address: Nihon Almit Co. Ltd.
Almit Bldg., 2-14-2 Yayoicho, Nakano-ku, Tokyo, Japan

11. In case of changing this specification it should be accepted by:

Signature_____ Date_____

12. This product is manufactured, using all guaranteed materials according to the legal law regulations.

13. Shelf Life:

Up to

3 month from the manufactured date (lot number).