

Trade Name: LFM-48X TM-HP 14%**1. Company Address**

Almit GmbH Tel.: +49 6061 96925-0
Unterer Hammer 3 Fax: +49 6061 96925-18
Deutschland
(D) 64720 Michelstadt -
bei Frankfurt

2. Validity

This specification is specified for:
Solder Paste Lead Free LFM-48X TM-HP
14%
Delivered by Almit GmbH to:

3. Diameter & Allowence

Weight	40g	80g	100g	250g	20g
Allowance	-0, +5g				

4. Deliverable Reel Size

Metal Name	Solidus °C	Liquidus °C	Specific Gravity
LFM-48	217	220	7.4

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)	≥ 1 x 10 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	L1 < 0.5%	IPC-TM-650:2.3.35
Fluorides By Spot Test	pass	IPC-TM-650 2.6.35.1

6. Characteristics

Composition	Components							
	Sn	Ag	Cu	Pb	Sb	Bi	Al	As
Standard	Rest	3.0	0.5	<0.05	≤0.10	≤0.05	≤0.001	≤0.03
Composition	Components							
	Cd	Fe	Zn					
Standard	≤0.002	≤0.02	≤0.001					

7. Solder Powder Size & Distribution

Type	larger than	less than 1%	at least 80%	at most 10%
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 Inspection

Inspection 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 ; +5 (g)
3	Solder Powder Size	25-45 μ m	90 \leq (wt%)
4	Metal Composition	Sn	Rest (wt%)
		Ag	3.0 \pm 0.2 (wt%)
		Cu	0.5 \pm 0.1 (wt%)
5	Characteristics	Flux Content	14.0 \pm 0.5 (wt%)
		Solder Balling Test	Comparison with Limit Specimen
		Viscosity (Spiral type, 10rpm, 25°C) (IPC-650-2.4.34.3)	90000 \pm 30000 90 \pm 30 (cps) (Pa.s)
		Solderability on Cu-Plate	Comparison with Limit Specimen
		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
20g	5cc Cartridge		Cardboard box
40g	10cc Cartridge		
80g	30cc Cartridge		
100g	30cc Cartridge		
250g	100cc Cartridge		

11. Identification

	Polyethylene bottle	Cardboard
Name	LFM-48X TM-HP 14%	same as the left
Lot Nr.	(Ex) 120119-9	dto.
Solder Powder Size	(X)	dto.
Date of Mfg.	(Ex.) 19.01.2012	dto
Net-Weight	(Ex.) 500g	dto.
Maker	Nihon Almit Co. Ltd.	dto.

12. Maker Address

Nihon Almit Co. Ltd. - Productive Engineering Center
8154-227, Uenohara, Kitatsuru-gun,
Yamanashi, 409-0112 Japan

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

Signature _____ Date _____

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

15. Shelf Life

1. Refrigerating is recommended at a temperature of 2-8°C to guarantee shelf life of 4 months
2. Paste can be stored at room temperature for 1 week up to 25°C prior to use (only applicable for jars)