

**Specification** Printed: Revision: (GB) Version:

LFM-48X TM-HP 12% 11.07.2012 06.07.2012 2.1

# Trade Name:

# LFM-48X TM-HP 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-48X TM-HP 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-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)	≥ 1x10 <sup>8</sup>	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. Characterisitcs:

Composition	Components							
composition	Sn	Ag	Cu	Pb	Sb	Bi	Au	In
Standard	Rest	3.0	0.5	<0.05	≤0.10	≤0.05	≤0.05	≤0.10
Composition	Components							
composition	A	l.	As	Cd	Fe	Ni	Zn	
Standard	≤0.0	001	≤0.03	≤0.002	≤0.02	≤0.01	≤0.001	

# 7. Solder Powder Size & Distribuon :

% of Sample by Weight – Nominal Size

Туре	not less than 1% at least 80% larger than larger than between		at most 10% less than	
Туре 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 Specime	
2	Weight	Net Weight	-0 ; +10	(g)
3	Solder Powder Size	25 - 45 µm (X)	90 ≤	(wt%)
		Sn	Rest	(wt%)
4		Ag	3.0 ± 0.2	(wt%)
4	Metal Composition	Cu	0.5 ± 0.1	(wt%)
			0	(wt%)
5		Flux Content	12.0 ± 0.5	(wt%)
6		Solder Balling Test	Comparison with Limit Specime	
7	Characteristics	Viscosity (Spiral type, 10rpm, 25°C) (IPC-650-2.4.34.3)	200000 ± 30000 200 ± 30	(cps) (Pa•s)
8		Solderability on Cu-Plate	Comparison with	n Limit Specimen
9		Dryness	Chalk powder s removed from ea	5

\*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		
500g	6 oz Catridge	10kg		
700g	Proflow Cassette	7kg ; 14kg	Cardboard Box	
1000g	12 oz Catridge	10kg		

#### 11. Identification:

	Polyethylene bottle	Cardboard
Name	Almit-Solder-Paste	same as the left
Name	LFM-48X TM-HP 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

- 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

6 month from the manufactured date (lot number).