

# **Specification**

Printed: Revision: (GB) Version:

#### **LFM-48U TM-HP 14%**

11.07.2012 06.07.2012 2.1

Trade Name: LFM-48U TM-HP 14%

**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-48U TM-HP 14%

Delivered by Almit GmbH to: \_\_\_\_\_

#### 3. Diameter & Allowance:

Weight	20g	40g	80g	100g	250g
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	86.0 ± 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			
	Sn	Ag	Cu	Pb	Sb	Bi	Au	ln
Standard	Rest	3.0	0.5	< 0.05	≤0.10	≤0.05	≤0.05	≤0.10
Composition		Components						
	Α	1	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

Type not larger than		less than 1%	at least 80%	at most 10%
		larger than	between	less than
Type 5 (U)	30 Microns	25 Microns	15 - 25 Microns	15 Microns

©Almit GmbH 1/3

**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			
110.	A := := = = := = = =	Calar	Commonles and with Harit Commission			
	Appearance	Color	Comparison with Limit Specimer	n		
2	Weight	Net Weight	-0;+5 (g)			
3	Solder Powder Size	15 - 28 μm (U)	90 ≤ (wt%)			
		Sn	Rest (wt%)			
1	Metal Composition	Ag	$3.0 \pm 0.2$ (wt%)			
4		Cu	0.5 ± 0.1 (wt%)			
			(wt%)			
5		Flux Content	14.0 ± 0.5 (wt%)			
6		Solder Balling Test	Comparison with Limit Specimer	n		
7	Characteristics	Viscosity (Spiral type, 10rpm, 25°C) (IPC-650-2.4.34.3)	170000 ± 20000 (cps) 170 ± 20 (Pa•s)			
8		Solderability on Cu-Plate	Comparison with Limit Specimer	n		
9		Dryness	Chalk powder should be easily removed from each test specime			

<sup>\*</sup>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 Catridge	-	
40g	10cc Catridge	-	
80g	30cc Catridge	-	Cardboard Box
100g	30cc Catridge	-	
250g	100cc Catridge	-	

### 11. Identification:

	Catridge	Cardboard
Name	Almit-Solder-Paste LFM-48U TM-HP 14%	same as the left
Lot Nr.	(Ex.) 120119-9	dto.
Solder Powder Size	15 - 28 μm	dto.
Date of Mfg.	(Ex.) 19.01.2012	dto.
Net Weight	(Ex.) 20g	dto.
Maker	Nihon Almit Co. Ltd.	dto.

**10.** Maker Address: Nihon Almit Co. Ltd.

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

© Almit GmbH 2/3

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).