

## SPECIFICATION

NAME : BT-19 LFM-48-S 3,5% Cored Solder Wire

| Lot No. | Type                                                                                                         |
|---------|--------------------------------------------------------------------------------------------------------------|
|         | BT-19 LFM-48-S 3.5%<br>Flux Content 3.5%<br>Dia(mm): 0.2, 0.3, 0.38, 0.5, 0.65, 0.8, 1.0, 1.2, 1.6, 2.0, 2.7 |

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**1. Product Name :** BT-19 LFM-48-S 3.5%

**2. Scope :** This spec. is specified for Almit BT-19 LFM-48-S 3.5% delivered by  
Nihon Almit Co., Ltd. to Company \_\_\_\_\_.

**3. Chemical Composition (%) :**

| Composition | Principal Component |             |             | Impurities |       |       |        |       |
|-------------|---------------------|-------------|-------------|------------|-------|-------|--------|-------|
|             | Sn                  | Ag          | Cu          | Pb         | Sb    | Bi    | Zn     | Fe    |
| Standard    | Remainder           | 3.0<br>±0.2 | 0.5<br>±0.2 | ≤0.05      | ≤0.10 | ≤0.05 | ≤0.001 | ≤0.04 |
| Composition | Impurities          |             |             |            |       |       |        |       |
|             | Al                  | As          | Cd          | Co         | Ni    |       |        |       |
| Standard    | ≤0.001              | ≤0.03       | ≤0.002      | ≤0.02      | ≤0.02 |       |        |       |

**4. Physical Properties :**

| Solidus | Liquidus | Specific Gravity |
|---------|----------|------------------|
| 217°C   | 221°C    | 7.4              |

**5. Characteristics :**

|                                                      | Characteristics      | Test Methods       |
|------------------------------------------------------|----------------------|--------------------|
| Solids Content, Flux (%)                             | 3.5 (3.0 - 4.0)      | IPC-TM-650:2.3.34  |
| Copper Mirror Test                                   | Pass                 | IPC-TM-650:2.3.32  |
| Silver Chromate                                      | Pass                 | IPC-TM-650:2.3.33  |
| Corrosion Test                                       | Pass                 | IPC-TM-650:2.6.15  |
| SIR (85°C,85%,168hr,<br>measured out of Chamber) (Ω) | $\geq 1 \times 10^9$ | IPC-TM-650:2.6.3.3 |
| Quantitative Halide                                  | L1<0.5%              | IPC-TM-650:2.3.35  |
| Flux materials composition                           | RE                   | J-STD-004:1.2      |

**6. Diameter, Net Weight and Allowance:**

| Diameter (mm) |     |      |     |      |     |     |     |     |     |     | Net Weight of one Reel (kg) |     |     |
|---------------|-----|------|-----|------|-----|-----|-----|-----|-----|-----|-----------------------------|-----|-----|
| 0.2           | 0.3 | 0.38 | 0.5 | 0.65 | 0.8 | 1.0 | 1.2 | 1.6 | 2.0 | 2.7 | 0.5                         | 0.8 | 1.0 |
| ±0.05         |     |      |     |      |     |     |     |     |     |     | +0.01<br>-0                 |     |     |

0.2 mm =0.1 Kg reel

0.3mm – 2.0 mm =0.5 Kg reel

2.7 mm = 1.0 kg reel

**7. Lot Size :** 500 kgs (amount of single melting)

**8. Packing :**

| Individual Package |             | Outer Package |           |
|--------------------|-------------|---------------|-----------|
| Unit               | Packing     | Unit          | Packing   |
| 0.5, 0.8, 1.0 kg   | Plastic Bag | 5, 8, 10 kg   | Cardboard |

**9. Identification :**

| Spool        |                       | Cardboard    |                       |
|--------------|-----------------------|--------------|-----------------------|
| Name         | BT-19 LFM-48-S 3.5%   | Name         | BT-19 LFM-48-S 3.5%   |
| Flux Content | 3.5%                  | Flux Content | 3.5%                  |
| Diameter     | mm                    | Diameter     | Ø                     |
| Net Weight   | Ex. 500 g             | Net Weight   | Ex. 5 kg              |
| Lot No.      | Ex. 04.5.-1           | Lot No.      | Ex. 04.5.-1           |
| Maker        | Nihon Almit Co., Ltd. | Maker        | Nihon Almit Co., Ltd. |

**10. Maker Address :**

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

**11.** In case of changing this spec., it must be accepted by \_\_\_\_\_ .

**12.** This product is manufactured, using all guaranteed materials according to the "LAW ON INSPECTION AND MANUFACTURING OF CHEMICAL SUBSTANCES".

**13. Shelf Life :**

Up to two (2) years from the manufactured date (lot number).