



# BROTHER FLe Tape – Technical Data Sheet

BROTHER INDUSTRIES LTD.

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## Contents

1. General.....	2
2. Regulatory/Agency Approvals.....	2
3. Colors and Sizes.....	2
4. Physical Properties.....	3
5. Test Results.....	3
5.1 Cable Surface Adhesion.....	3
5.2 Indoor Readability Against Light.....	5
6. Notes.....	6

## 1. General

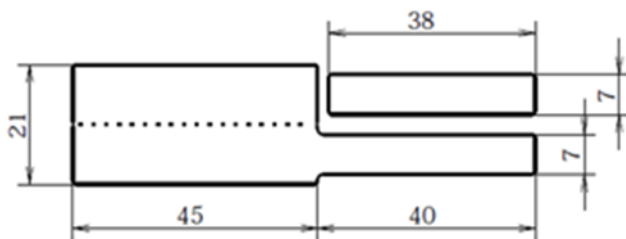
Printing Technology: Thermal Transfer  
 Label Type: Consists of a printable flag part and a non-printable wrapping part  
 Application: Cable identification (flag type)

## 2. Regulatory/Agency Approvals

The FLe Tape complies with the regulations for hazardous chemicals described in the EU RoHS directive. For more information, see “BROTHER GROUP GREEN PROCUREMENT STANDARD” at <http://global.brother>.

## 3. Colors and Sizes

(Size in mm)



Printable area

Cassette Model Number	Print Color	Tape Color	Available Widths
FLe-2511	Black	White	24 mm (0.94 in)
FLe-6511	Black	Yellow	24 mm (0.94 in)
FLe-7511	Black	Green	24 mm (0.94 in)

## 4. Physical Properties

- Including the backing paper: approximately 96  $\mu\text{m}$
- Excluding the backing paper: approximately 46  $\mu\text{m}$

## 5. Test Results

### 5.1 Cable Surface Adhesion

#### Test Method

1. Apply the flag label to a polypropylene tube ( $\phi 2$  mm and  $\phi 6$  mm). Mark the location on the tube's surface where the label will be applied.
2. Measure the amount of dislocation of the label from the mark after leaving the label under the test conditions described below.



#### Test Conditions

- Label size (wrapping part): 7 mm (width)  $\times$  40 mm (length)
- Cassette condition: Three months after production, stored at room temperature ( $23\pm 2^\circ\text{C}$ )
- Application conditions: Applying the label with a pressure of approximately 200 g/label width
- Environmental conditions:
  - During application:
    - Exhibit A: Room temperature  $35^\circ\text{C}$ , humidity 80%
    - Exhibit B: Room temperature  $5^\circ\text{C}$ , no humidity control
  - Storage temperature after application (stored in upright position):
    - Exhibit A: Room temperature  $40^\circ\text{C}$ , humidity 80%
    - Exhibit B: Room temperature  $5^\circ\text{C}$ , no humidity control

- Measurement method: Standard observation

Test Results – Exhibit A

No dislocation observed

Storage Temperature	Cable diameter (mm)	Immediately After Application	Two Weeks	One Month	Three Months	Six Months	One Year
5°C	φ2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	φ6	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40°C	φ2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	φ6	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Test Results – Exhibit B

No dislocation observed

Storage Temperature	Cable diameter (mm)	Immediately After Application	Two Weeks	One Month	Three Months	Six Months	One Year
5°C	φ2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	φ6	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40°C	φ2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	φ6	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 5.2 Readability After Exposure To Light

### Test Method

Expose the printed contents to light and evaluate their readability after 118 hours, 236 hours, and 472 hours.

### Test Conditions

- Cassette condition: Three months after production, stored at room temperature ( $23\pm 2^{\circ}\text{C}$ )
  - Environmental conditions during application: Room temperature  $23\pm 2^{\circ}\text{C}$ , humidity  $50\pm 10\%$
  - Exposure to light: illuminance 50,000 lux, distance 250 mm
- Readable and not peeling off

	118 Hours	236 Hours	472 Hours
FLe-2511	○	○	○
FLe-6511	○	○	○
FLe-7511	○	○	○

## 6. Notes

1. From among the many different types of available tapes, a random sample was selected and used to perform these tests. Accordingly, the results of these tests may differ slightly, depending on the type of tape used.
2. The test results were acquired under specific conditions arranged by Brother. Brother does not guarantee the strength, safety, or accuracy of the numerical data presented in this report.
3. The tape adherence performance can be affected by the material that the tape is attached to, the material's surface condition (whether it is greasy, dusty, rough or curved), the material's shape, and the environmental conditions. Users should confirm the adherence performance under their actual usage conditions after purchasing this product and use the product under their own responsibility.
4. We assume no responsibility for any damage, injuries, or lost profit arising from the use of labels created according to the information contained in this document.