

## Product Specification

### FLEXILINE

#### Quality and Specification of thermoplastic material and tape product.

##### Scope

This specification covers Flexiline thermoplastic material and Flexiline tape. The specification is in two parts, first to define the material used to make Flexiline and second to define the finished tape product.

##### Definition

Flexiline is a preformed tape manufactured using a modified thermoplastic road marking compound. The tape which is pre-cut to 10, 15 and 20 cms width, symbols, arrows etc., is applied to the road using a 'torch-on method' involving application of heat using a gas burner. Normally when applied to asphalt the product does not required primer. Applied to concrete the product requires a primer. The following products are covered:

Base materials: white, yellow, deep cream, primrose, colour base (for red, black)  
Perform material: strips, rolls, symbols, letters, arrows

#### Specification of the Flexiline Thermoplastic Material for manufacturing:

PROPERTY	TEST METHOD	SPECIFICATION
Luminance	(CIE Y, x, y system) EN1871  β value	White = 0.75 min Yellow = 0.50 min Deep Cream = 0.60 min Primrose = 0.55 min Red = 0.12 min Black = 0.06 max
Colour	(CIE Y, x, y system) EN1871  References: Table 2 Colour box BS381c reference	White: Table 2 Yellow: Table 2 Deep Cream: BS381c 353 Primrose: BS381c 310 Red (x,y): x=0.542, y=0.339
Indentation	EN1871 Table 8	≥ Class IN2 @ 30 °C
Cold Impact	EN1871 Table 7	≥ Class CI1 @ 0 °C
Softening Point	EN1871 Table 6	≥ 90 °C
Viscosity	Brookfield	4000 cps @ 200 °C
Heat stability	EN1871	Δ Spt 10 °C max Δ β value 0.10 max

**Specification of the Flexiline Tape Finished Product:**

PROPERTY	TEST METHOD	SPECIFICATION
Luminance	(CIE Y, x, y system) EN1871 β value	White = 0.75 min Yellow = 0.50 min Deep Cream = 0.60 min Primrose = 0.55 min Red = 0.12 min Black = 0.06 max
Colour	(CIE Y, x, y system) EN1871 Table & Colour box definition	White: Table 2 Yellow: Table 2 Deep Cream: BS381c 353 Primrose: BS381c 310 Red (x,y): x=0.542, y=0.339
Flexibility	Mandrel 180°	No cracking @ 5 °C
Storage stability / Stress cracking	Roll stored at 20 °C	Check at 24 hours and 7 days No cracking
Application / workability	Melt tape on to textured substrate (2mm texture depth)	Melts to take contours and forms good adhesion when cooled
Thickness	Micrometer gauge	2mm (+/- 0.2mm)
Backing tape removal	Visual	Remove tape. No snagging or tearing of backing tape

**Quality Control requirements for Flexiline Tape Finished Product:**

PROPERTY	TEST METHOD	SPECIFICATION	FREQUENCY
Luminance	(CIE Y, x, y system) EN1871 β value	White = 0.75 min Yellow = 0.50 min Deep Cream = 0.60 min Primrose = 0.55 min Red = 0.12 min Black = 0.06 max	Each batch
Colour	(CIE Y, x, y system) EN1871 Table & Colour box definition	White: Table 2 Yellow: Table 2 Deep Cream: BS381c 353 Primrose: BS381c 310 Red (x,y): x=0.542, y=0.339	Each batch
Flexibility	Mandrel 180°	No cracking @ 5 °C	Each batch
Thickness	Micrometer gauge	2mm (+/- 0.2mm)	Each batch
Backing tape removal	Visual	Remove tape. No snagging or tearing of backing tape	Each batch