

# Technical Data Sheet

## 7003 – ENDURO Thermal 190 High sensitivity

### DESCRIPTION

Laminate: Thermal paper / 40 µm OPP Film / Paper  
 Sihl ENDURO Thermal 190 High sensitivity is a tear resistant thermal paper laminate, top coated with high sensitivity and good resistance against external influences.

### APPLICATIONS

Tickets  
 Textile tags  
 Entrance tickets

### IMAGE DURABILITY

min. 12 years, under adequate storage conditions  
 (see note)

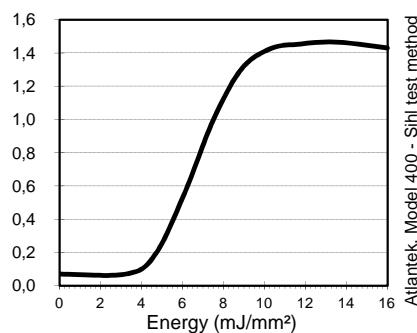
### PHYSICAL PROPERTIES

|                        | Test method          | Unit             | Tolerance | Min.  | Target |
|------------------------|----------------------|------------------|-----------|-------|--------|
| Weight                 | ISO 536              | g/m <sup>2</sup> | ± 10      |       | 170    |
| Thickness              | ISO 534              | µm               | ± 9       |       | 185    |
| Smoothness             | ISO 5627             | s                |           | > 300 |        |
| ISO Brightness         | ISO 2470-1           | %                |           | > 80  |        |
| Bending stiffness m.d. | ISO 2493-1; 15°/10mm | mN               |           | > 550 |        |
| Bending stiffness c.d. | ISO 2493-1; 15°/10mm | mN               |           | > 250 |        |
| Tensile strength m.d.  | ISO 1924-3/2/300     | N/15mm           |           | > 150 |        |
| Tensile strength c.d.  | ISO 1924-3/2/300     | N/15mm           |           | > 150 |        |
| Opacity                | ISO 2471             | %                |           | > 95  |        |

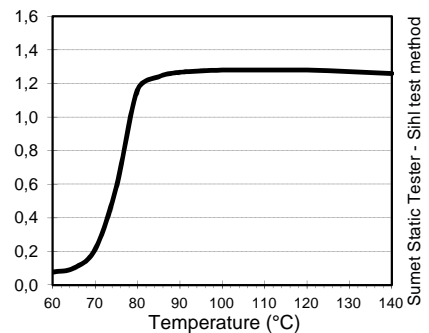
### STABILITY

- Light +
  - Temperature +
  - Humidity +
  - Water +
  - Oil / Fat +
  - Plasticizer +
- ++ very good      + good  
 o standard        - not suitable

### DYNAMIC DEVELOPMENT CURVE



### STATIC DEVELOPMENT CURVE



Sensitivity curves are for general reference only

### STORAGE AND CONVERTING

For quality reasons ENDURO Thermal should be stored originally packed.  
 The material should be used within 12 months. Intermediate materials, pre- or partially printed materials should be finished within 4 weeks. Storage & converting conditions of 23±5°C and 50±10% relative humidity are recommended. Exposure to strong artificial light or direct sunlight and any contact with aggressive chemicals should be avoided.



We always recommend comprehensive testing of materials prior to regular usage.

All information is based on current quality level. We reserve the right to change this as part of our continual product development.  
 Any guarantee of product characteristics or suitability for specific application requires separate written confirmation from SIHL.

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