



ENDURO THERMAL 190 G

matt 7022, 190 g/m²

Tear-resistant thermal paper. Ideal for tear-resistant hang tags and loop-lock tags for textiles, industry and logistics and durable entrance tickets.

ENDURO Thermal 190 G is a tear-resistant composite material consisting of a 40 µm PP film core, a thermal paper with a topcoat on the front and a satin-finished, extra-smooth natural paper surface on the reverse side. The three-layer product structure is durable, resistant to edge tearing and water impermeable. It can be cut, punched, perforated and folded without issue. The thermal paper has a very good resistance to light, temperature, climate, water, oil / grease and plasticisers.

The thermosensitive paper surface offers good printing results and standard sensitivity in direct thermal printing. Both sides can be printed perfectly in flexo and UV offset printing.

Thanks to the multi-layer product structure ENDURO offers an affordable, eco-friendly and sustainable alternative to fully synthetic media. It is PVC-free and FSC®-certified.

Advantages

- Tear-resistant
- Water impermeable
- Optimised for direct thermal printing
- High folding strength



General tips

For quality reasons ENDURO Thermal should be stored originally packed and be used within 12 months. 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.

Physical data

Name	Value	Tolerance	Norm
Weight [g/m ²]	190	±12	ISO 536
Thickness (total) [µm]	180	±12	ISO 534
Smoothness (Bekk) [s]	> 500		ISO 5627
ISO Brightness [%]	> 80		ISO 2470-1
Bending stiffness MD [mN]	> 700		ISO 2493-1; 15°/10mm
Bending stiffness CD [mN]	> 250		ISO 2493-1; 15°/10mm
Tensile strength MD [N/15mm]	> 170		ISO 1924-3/2/300
Tensile strength CD [N/15mm]	> 150		ISO 1924-3/2/300
Opacity [%]	> 95		ISO 2471

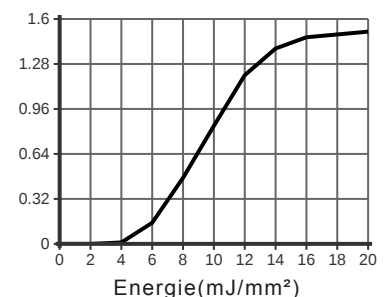
Technologies



Properties

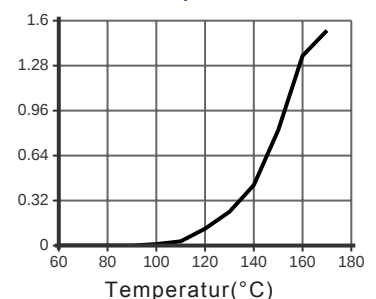
- Oil- or grease-resistant
- Plasticizer resistant
- Water-resistant / Waterfast
- Fade resistant
- Temperature resistant
- Climate proof

Dyn.Development Curve



Atlantek Model400 - ShiI Test Method

Stat.Development Curve



Sumet Statik Tester - Sihl Test Method

Sensitivity curves are for general reference only.

Stability

Oil- or grease-resistant	++
Plasticizer resistant	++
Water-resistant / Waterfast	++
Fade resistant	++
Temperature resistant	++
Climate proof	++

++ very good +good
0 Standard - not suitable

Durability

Durability of the thermal printing: At least 12 years with appropriate storage. Detailed information can be found under the download "ENDURO Thermal – Handling and storage".

Printing instructions

We always recommend comprehensive testing of materials prior to regular usage. For detailed information please refer to the download "ENDURO Thermal – printing recommendations".