



ENVELOPES / WALLETS /
POCKETS

ENDURO MD SHIELD 155

matt 6821, 157 g/m²

ENDURO MD SHIELD 155 is a robust tear-resistant paper-based product with an aluminum core.

It will be detected in metal-detectors. It will protect RFID chip information.

It is used as a loop-lock tag or hang tags in the food processing industry. Converted to pocket or sleeve, it will protect any RFID-document such as credit card, ID-card or biometric passport from unallowed reading and data capture.

ENDURO MD SHIELD 155 can be cut, punched, perforated, drilled, folded, glued and bound without issue.

Its high-quality paper surface offers optimized feed properties and printing results and can be printed with all common standard inks and coatings in offset and flexo printing. It is suitable for variable thermal transfer printing.

It is PVC-free and FSC®-certified. An affordable and sustainable alternative to synthetic products.

Advantages

- RFID / NFC screening function
- Metal detectable
- High opacity
- Tear-resistant
- High fold strength
- Water impermeable
- Thermostable
- Excellent printability



General tips

For quality reasons ENDURO should be stored originally packed. Storage & converting conditions of 20±5°C and 50±10% rel. humidity are recommended.

Food contact

Please inform us whenever intended use is linked to food contact.

It may be possible to provide a Declaration of Compliance confirming material suitability for your specific application.

Waste disposal

According to our experience, the majority of the paper fibres (67% of the total composite) of ENDURO Effect 155 RFID shield can be recovered in the paper recycling process. The film is separated and can be used for thermal energy recovery. When sorted using near-infrared sensors (NIR), however, this product is not identified as paper.

Therefore, it should be targeted for paper recycling as commercial waste. It is classified as "Mixed waste paper, grade 5.01" according to EN 643.

Smaller quantities can be disposed of together with household waste.

As conversion (i.e. printing) may significantly change the characteristics of a product, these recycling recommendations may only apply to ENDURO material before processing.

Technologies



Properties

- Metal detectable

Physical data

Name	Value	Tolerance	Norm
Weight [g/m²]	157	±8	ISO 536
Thickness (total) [µm]	145	±12	ISO 534
Bending stiffness MD [mN]	> 330		ISO 2493-1; 15°/10mm
Bending stiffness CD [mN]	> 140		ISO 2493-1; 15°/10mm
Tensile strength MD [N/15mm]	> 130		ISO 1924-3/2/300
Tensile strength CD [N/15mm]	> 80		ISO 1924-3/2/300
ISO Brightness, front side [%]	> 83		ISO 2470-1
ISO Brightness, reverse side [%]	> 83		ISO 2470-1
Whiteness, CIE, D65/10°, front side	> 130		ISO 11475
Whiteness, CIE, D65/10°, reverse side	> 130		ISO 11475
Opacity [%]	> 98		ISO 2471

Durability

Originally packed under recommended storage conditions ENDURO rolls and sheets can be stored for at least 3 years.

Printing instructions

Detailed recommendations for printing and processing of ENDURO can be found under [Download](#).