

# Thermal ECO 42R

## Removable

**White thermal paper without protective surface coating, FSC®-Mix Credit (economy quality)**

### Specifications

|                     |             |                  |           |
|---------------------|-------------|------------------|-----------|
| Raw material        | 1901002     |                  |           |
| Grammage            | approx. 70  | g/m <sup>2</sup> | ISO 536   |
| Caliper             | approx. 76  | µm               | ISO 534   |
| Tensile strength MD | approx. 70  | N/15mm           | DIN 53112 |
| Tensile strength CD | approx. 38  | N/15mm           | DIN 53112 |
| Stiffness MD        | approx. 220 | mN               | DIN 53121 |
| Stiffness CD        | approx. 110 | mN               | DIN 53121 |
| Opacity             | approx. 90  | %                | ISO 2471  |
| Imaging colour      | black       |                  |           |

### Application & use

The surface of Thermal ECO 42R offers a good quality of imprint provided that solvent-free inks and varnishes are applied (ink recommendation list available). The inks should be suitable for printing thermal papers, consulting of ink supplier is recommended. Basically, suitability tests should be performed under customer-specific conditions as unpredictable interactions with the ink may occur due to the lack of a protective coating. Web temperature during curing should not exceed 50° C in order to prevent premature imaging or discoloration. Printing speeds of up to 250 mm/s are possible in thermal direct printing.

Thermal ECO 42R is well suited as weight label material on food packaging and presents excellent grades with EAN and other barcodes. As economy thermal papers are not equipped with a protective surface coat, they should not be exposed to water or greasy substances. The image may fade over a period of time if applied to surfaces containing plasticizers (e.g. flexible polyvinyl chloride).

The pulp for this paper comes from FSC certified forest management. This guarantees improvements in sustainable forest management regarding ecologic, social and economic standards.

### Regulations concerning contact with food

The thermal paper grade Thermal ECO 42R according to the sample material contact with food is physiologically and toxicologically safe and may therefore be used in printers and scales for the marking of goods. However, they may only stand in direct contact with those foodstuffs which are washed and/or peeled before consumption (ISEGA Research and Development Institute, Aschaffenburg).

## Adhesive

Removable, acrylic-based adhesive.

### Specifications

|                        |   |
|------------------------|---|
| Tack                   | medium  |
| Peel adhesion          | low (removable)   |
| Shear                  | adhesion failure  |
| Min. application temp. | -20° C  |
| Service temperature    | -40° C to + 50° C (up to 200° C for short periods – hot fusing) |

**Application & use** The adhesive offers good tack combined with excellent removability from most surfaces, even after long-term labelling. Thanks to its well-balanced adhesive characteristics this removable adhesive is perfectly suited for a wide variety of applications. However, the low adhesion of it is likely to be insufficient for applications on curved surfaces. The adhesive is resistant to light, heat and ageing.

**Processing** Excellent die-cutting characteristics on all customary machines.

**Regulations concerning contact with food** All ingredients of the adhesive comply with recommendation BfR XIV or FDA 21 CFR 175.105 (Adhesives).

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## PH (515)

Honey, supercalandered glassine.

### Specifications

|                     |            |                  |           |
|---------------------|------------|------------------|-----------|
| Grammage            | approx. 57 | g/m <sup>2</sup> | ISO 536   |
| Caliper             | approx. 50 | µm               | ISO 534   |
| Tensile strength MD | approx. 78 | N/15mm           | DIN 53112 |
| Tensile strength CD | approx. 35 | N/15mm           | DIN 53112 |
| Transparency        | approx. 50 | %                | DIN 53147 |

**Application & use** The supercalandered glassine is perfectly suited for assignment in labelling machines equipped with optical or mechanical scanners.

**Processing** As part of a self-adhesive compound PH (515) offers excellent die-cutting characteristics with all customary flatbed and rotary die-cutting tools.

**Storage conditions &** 12 months – storing at a temperature of  $20 \pm 5^\circ \text{C}$ , a relative humidity of  $45 \pm 5\%$  and shelf life a dark storage is recommended. Moisture, heat and direct sunlight have to be avoided.

If the storage conditions and the conditions at the place of converting are different, the material should have enough time for acclimatisation. Otherwise this might lead to converting problems. Generally the material should be unpacked just before converting.

Self-adhesive materials should be converted systematically based on the principle “first-in-first-out”. Also the shelf-life should be taken into account.

**Regulations concerning  
Contact with food** The paper complies with recommendation BfR XXXVI.

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## Disclaimer

The performance of the product should always be tested in the actual application conditions. Our recommendations are based on our most current knowledge and experience. As our products are used in conditions beyond our control, we cannot assume any liability for damage caused through their use. Users of our products are solely responsible that the product is suitable for its intended application, and have determined such at their sole discretion. Users must comply with any applicable legislation and/or testing requirements for the finished article, and are responsible for bringing their products to market.

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