# crystal

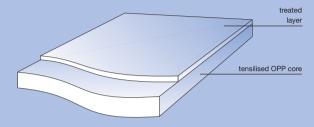
## NAT

- Base film for pressure-sensitive adhesive tapes
- High mechanical properties in machine direction
- No back treatment
- Excellent profile and roll conformity



## TREOFAN PACKAGING FILM NAT

OPP film for adhesive tapes



Treofan NAT has been designed to create an ideal base film for the pressure-sensitive adhesive tape applications and for optimal performance on high output converting lines.

## PRODUCT FEATURES

### Physical characteristics:

- high resistance to tear and puncture
- excellent resistance to low temperatures
- dimensionally stable under conditions of varying humidity

### Film characteristics:

- low water vapour permeability
- water-repellent
- resistance to biological oil and biological grease

### Optical characteristics:

- transparent
- low haze
- excellent gloss

### Special properties:

- high mechanical properties in machine direction
- no back treatment

## APPLICATIONS AND PROCESSING

- coating by suitable adhesive material
- the adhesive can be applied by water dispersions, organic solvent solutions, hot melt

## Certified according to

## DIN EN ISO 9001:2000

Compliance with industrial health and safety standards: Treofan OPP films do not present any significant danger to health and safety in the workplace, provided they are used for the intended purpose in accordance with conventional practices and that health and safety regulations are observed. Relevant guidelines can be found in our safety information.

## TECHNICAL DATA (typical values)

| Properties  | NAT 25         | NAT 28         | NAT 32         | NAT 35         | Unit           | Measuring method                           |
|---|----------------|----------------|----------------|----------------|----------------|--|
| Nominal thickness   | 25             | 28             | 32             | 35             | μm             | -  |
| Unit weight   | 22.7           | 25.5           | 29.1           | 31.8           | g/m²           | ISO 4591                                   |
| Yield   | 44.1           | 39.2           | 34.3           | 31.4           | m²/kg          | -  |
| Tensile strength:<br>machine direction<br>transverse direction        | 150<br>280     | 150<br>280     | 150<br>280     | 150<br>280     | N/mm²<br>N/mm² | DIN EN ISO 527-1/-3<br>DIN EN ISO 527-1/-3 |
| Tensile modulus of elasticity: machine direction transverse direction | 2,200<br>4,200 | 2,200<br>4,200 | 2,200<br>4,200 | 2,200<br>4,200 | N/mm²<br>N/mm² | DIN EN ISO 527-1/-3<br>DIN EN ISO 527-1/-3 |
| Elongation at break:<br>machine direction<br>transverse direction     | 150<br>60      | 150<br>60      | 150<br>60      | 150<br>60      | %<br>%         | DIN EN ISO 527-1/-3<br>DIN EN ISO 527-1/-3 |
| Wettability   | ≥ 40           | ≥ 40           | ≥ 40           | ≥ 40           | mN/m           | ISO 8296                                   |

Tests have shown that under the prescribed storage conditions the characteristics of Treofan NAT will maintain consistent performance and will be best before use throughout a 6-months period after delivery. Treofan NAT is largely unaffected by climatic influences, but should not be stored at temperatures above 30°C (86°F). The rolls should be kept in their original wrapping until used. After the rolls have been unwrapped, they should be stored safely in horizontal position.

### **Food Safety**

Treofan NAT has been developed specially for packaging foods and meets the specific requirements on health and safety. It meets the FDA and EC regulations, which includes the specific "German Food and Commodity Act" and the current recommendations of the BfR. Compliance with other specific national regulations is available on request.

## AVAILABILITY (unprinted film)

Reel length (m):

| ength Up to 6-times standard<br>16,800<br>15,000 |
|--|
| 13,200<br>15,000                                 |
|  |

Maximum reel outside diameter (mm):

| Core diameter | Standard length | Up to 6-times standard |
|---------------|-----------------|------------------------|
| 152 mm        | 360             | about 800              |

Max. reel width: 2,000 mm (widths > 2,000 mm on request)

The figures and the data provided in this data sheet are consistent with the current state of our knowledge, and are intended to provide general information on our products and their applications. They do not constitute a guarantee of any specific product attributes or the suitability of products for specific applications. Any existing commercial rights or patents must be observed.

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