

TECHNICAL DATA SHEET & DECLARATION OF COMPLIANCE

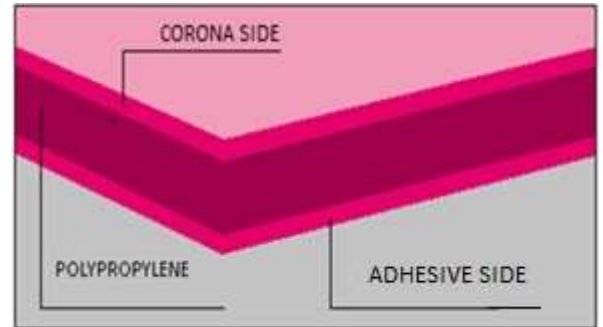
Art. 023968 Thermoal BOPP mat

Profile:

- Extrusion-coated biaxially oriented polypropylene matt film with a low temperature melting adhesive resin on one-side for thermal lamination of film to paper products by heat and pressure.

Features:

- Good optical properties
- Good machinability
- Good Fiber tear bond strength to paper
- Good resistance to elongation & tear
- Suitable for printing, UV Varnishing, hot foil stamping & gluing (initial tests prior to actual job are



recommended). Applications:

- Thermal lamination with all kinds of printed & unprinted paper and paperboards such as book covers, posters, magazines, boxes, paper bags menu cards, diaries, etc.

| TYPICAL PROPERTIES ± 3% | UNIT | TEST METHOD | VALUES. |
|---|--------------------|-------------|------------|
| Thickness | µm | ASTM D 374 | 27 |
| Unit Weight | g/m ² | internal | 21 |
| Yield | M ² /kg | ASTM D 4321 | 47.62 |
| Density | g/cc | internal | 0.84 |
| Gloss (45°) film side | % | ASTM D 2457 | 8 > 10 |
| Surface tension film side / adhesive side | Dynes/cm | ASTM D 2578 | 42 ~ 42 |
| Coefficient of friction (Kinetic) | film / film | internal | 0.3 > 0.35 |
| Recommended laminating temperature | °C | internal | 95 ~ 120 |

Storage conditions: For best film performance, keep in film in dry, clean location. Preferably wrapped in plastic or packed in a carton box. Store film at room temperatures between 18 ~ 25°C and 40% relatively normal humidity and keep away from heat sources & direct sunlight.

Disclaimer: The producer bases the information provided above on conclusive tests, these values are test results, which are indicative only and provided as guidelines.

The aforementioned data are given most conscientiously but without any obligation. Any processing details are provided merely for guidance, it is the user's responsibility to check the suitability of the product for the intended application.

Note! Changes made to the film's original identity such as: applying a surface coating or extrusion coating. This is done at the customer's own risk, it is the customer's responsibility to check the film is suitable before a surface coating or extrusion coating is to be done. Claims cannot be accepted after the film has been surface coated or extrusion coated.

Warranty: This product has a warranty of 180 days from the date on the invoice; claims after 180 days from the date on the invoice cannot be accepted. Please always keep the full label details of the film available for warranty purposes, without full label details claims cannot be handled or accepted.

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Thermoseal BOPP mat

DECLARATION OF COMPLIANCE

The manufacturer / producer of the TK27 EM MATT film type has confirmed that this film is manufactured in compliance with;

- A. Commission Regulation (EU) N° 10/2011 of the 14th January 2011 on plastic materials and articles intended to come into contact with food, (with all amendments: Commission Regulation (EU) N° 321/2011; Commission Regulation (EU) N° 1282/2011; Commission Regulation (EU) N° 1183/2012; Commission Regulation (EU) N° 202/2014; Commission Regulation (EU) N° 174/2015; Commission Regulation (EU) N° 1416/2016, 752/2017 complied. Commission Regulation (EU) N° 79/2018, Commission Regulation (EU) N°213/2018 complied, Commission Regulation (EU) N° 831/2018 complied, Commission Regulation (EU) N° 37/2019 and Commission Regulation (EU) N° 1338/2019.

Compliance with threshold values:

. Overall Migration Limits

Testing as per EU N° 10/2011

| Stimulant used | Test Condition | Result (mg/dm ²) | Reporting Limit (mg/dm ²) | Permissible Limit (mg/dm ²) |
|----------------|----------------|------------------------------|---------------------------------------|---|
| 3% Acetic acid | 10 days at 40° | Not detected | 2.0 | 10 |
| 10% | C 10 days at | Not detected | 2.0 | 10 |
| Ethanol | 40°C 10 days | Not detected | 2.0 | 10 |
| 20% | at 40°C 10 | Not detected | 2.0 | 10 |
| Ethanol | days at 40°C | Not detected | 2.0 | 10 |
| 50% Ethanol | 10 days at 40° | Not detected | 2.0 | 10 |
| Isooctane | C | | | |

. Specific Migration Limit (SML)

| Name of Substance | CAS N° | (SML) Restriction Limit (mg/kg) |
|-------------------|------------|---------------------------------|
| Homo-polymer | 9003-07-0 | No restriction |
| Copolymer | 24937-78-8 | No restriction |
| Silica | 7631-86-9 | No restriction |

B. . Dual use additives

E-number E Substance
551 Silicon Dioxide (SiO₂)

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C. Compliance to Regulation EU 1935/2004:

The Manufacturer/Producer confirms that the plastic materials or articles, products from intermediate stages of manufacture or the substances meet the relevant requirements laid down in this Regulation and in Article 3, 11(5), 15 and 17 of Regulation (EC) N° 1935/2004

D. Compliance to Regulation 2023/2006:

This film type is manufactured in compliance with EU Regulation 2023/2006, Good manufacturing practice / GMP for materials, articles intended to come into contact with foodstuffs.

E. US FDA Compliance:

This film type is manufactured in compliance with US FDA CFR 177.1520 (Olefin Polymers).

F. REACH Compliance:

The Manufacture/Producer declares that this film type is manufactured in compliance with the REACH regulation (EC) N° 1907/2006. This film type fulfills all requirements of this regulation. This mentioned Bopp grade film type does not contain any "substances of very high concern" ("SVHC") which is updated every six months. Please request the separate updated REACH & SVHC Declaration for clarification.

G. GMO, Bisphenol A:

The Manufacturer/Producer confirms GMO (Genetically Modified Organisms) are not added to or in this film type. According to the information received from the suppliers the additives and PP homo-polymers, copolymers and coated material used for the production of this film type does not contain any Genetically Modified Organisms (GMO) and Bisphenol A.

H. EN 71-3, Migration of certain elements. (Safety of toys)

Heavy Metals and Halogens:

The raw materials used in the production of this film type, PP homo-polymer, PP co-polymer and master batches based on the mentioned resin do not contain heavy metals such as Cadmium, Hexavalent Chromium, Lead, Antimony, Nickel, Tin, Arsenic, PBB, PBDE, and Mercury as tested in this film type. Neither the said Heavy Metals, Halogens nor their compounds are intentionally added during the production of this film type, nor are they used, directly in the production process itself.

I. ANIMAL FATS:

Animal fats are not intentionally used in the manufacturing process of the film.

J. ROHS:

Restriction of Hazardous Substances.

19.08.2021