

# **HOSTAPHAN™**Films for Furniture Applications



# Mitsubishi Chemical Group

With a vast network of affiliate companies, the Mitsubishi Chemical Group has both the organisation and infrastructure to realise local and global synergies. Over 70,000 employees work in 30 different countries to deliver innovative solutions for customer applications. Thanks to the intensified collaboration and coordination on a regional and global level, Mitsubishi Chemical Group companies are uniquely positioned to meet the changing demands of kev industries including automotive, aerospace, medical, packaging and 3D printing.

As a global leader and one of the largest suppliers of biaxially oriented polyester film (polyethylene terephthalate / PET), the Mitsubishi Polyester Film Group is both, a supplier of choice for a wide range of innovative high-quality customized HOSTAPHAN™ boPET films as well as for customized product solutions. In joint research activities we develop individual solutions together with our customers.

Our technological competence is regionally anchored and intensified through our global company-group. Along with our modern production lines, with co-extrusion and inline coating capabilities integrated in the process, it allows us to offer a broad range of value added performance options for our HOSTAPHAN™ products.

We make the right PET film. For the needs of today and the aspirations of tomorrow.



# **KAITEKI - Our Philosophy**

At Mitsubishi Chemical Group, sustainability is more than a concept - it's a way of life. Through our focus on improving the health and well-being of people and the planet, we create innovative sustainable solutions globally. The sustainable well-being of people and our planet Earth - we call it **KAITEKI**.

We believe our role in the chemical industry is to be partners in innovation, developing material solutions that support a circular economy and sustainability of the earth and society. This overarching **KAITEKI** Philosophy is our guiding principle as we use LESS to have MORE.

# **HOSTAPHAN™** Polyester Films for Furniture Applications

R&D and growth in high-performance materials and solutions is the core of our corporate strategy. We focus on partnering with our customers to develop and bring to market sustainable, high value and functional solutions.

One of the innovative applications of our HOSTAPHAN™ boPET film are furniture applications. HOSTAPHAN™ films for furniture lamination are biaxially oriented films made of polyethylene terephthalate (PET) which are especially developed for the lamination of a decorative surface in the furniture industry.

In today's furniture market, polyester films are finding use alongside with numerous other materials, such as lacquers, veneers, glass or real wood. Appearance plays a decisive role here. Whether high gloss or matte surfaces, HOSTAPHAN™ furniture films are used in many areas.



Depending on the production process, different HOSTAPHAN™ types are used. The fields of application range from furniture surface films to process and transfer films. We developed a variety of film types for these applications and we are an important and innovative supplier of the furniture industry. Joint development with our customers resulted in a very broad and innovative product portfolio that covers the following properties:

- Highly transparent, matte, white and black film types
- Broad thickness spectrum
- Various adhesion promoters for lacquers and adhesives
- · Sealing layers to adhere to various materials, e.g. PVC
- Web widths up to 4,20 meters

#### **HOSTAPHAN™** Lamination Film

HOSTAPHAN™ is used in the classic lamination process. The film is usually coated with a UV-curing acrylic varnish (hard coat) beforehand and then laminated onto the panel or decorative paper using a PUR hot melt adhesive, for example. The process is carried out with either individual panels or roll-to-roll. During this process, the film remains part of the furniture surface.



#### **HOSTAPHAN™** Process Film

Here, the HOSTAPHAN™ film serves as a process film and is removed at the end, so it does not remain in the end product. In this case, the film is used to structure UV-curing varnishes and to shape the appearance of the finished furniture surface. The film is placed atop the varnish before it is cured and is removed after UV treatment. Due to the different film surface properties, the final furniture surface can be, for example, high-gloss or matt. The end result therefore depends on the use of the HOSTAPHAN™ film type.



## **HOSTAPHAN™** Release Film

The surface structure of release film is transferred to the wet lacquer. In this application the film is the carrier for a coating. The film mostly has a super-matte surface which is transferred onto the lacquer as described above.



## **HOSTAPHAN™** for Melamine Adhesion

In this process, HOSTAPHAN™ carries different primers on each surface. One is for a hard coat, and the second provides good adhesion to melamine. Therefore, this film can be used as an environmentally friendly alternative to TCA treated film in furniture presses. The film remains part of the panel structure.





# **HOSTAPHAN™** Advantages:

- · High thermal and mechanical stability
- Pore free, the film forms a closed layer
- Improved scratch resistance
- Wide range of different HOSTAPHAN™ film types
- · High color brilliance and smooth glossy or matte surface
- · For melamine adhesion no adhesive is necessary
- · No critical chemicals are used in film production

# **HOSTAPHAN™** Applications for the Furniture Industry

- · Lamination of coated and uncoated panels
- Coating of decor papers
- · Imparting surface structure, e.g. for UV lacquers in liquid coating processes
- Process film in furniture presses



Mitsubishi Polyester Film GmbH is your partner of choice with a wide range of HOSTAPHAN™ special designed film types for different furniture applications.

HOSTAPHAN™ FILM TYPES FOR FURNITURE APPLICATIONS		
Product Type	Description	Thickness in µm
LAMINATION		
HOSTAPHAN™ RNL CTO2	Transparent chemically treated film for furniture applications	50, 75
HOSTAPHAN™ RNL HV5B	2-side chemically treated carrier film for furniture lamination	50, 75
HOSTAPHAN™ BHO	Black, light blocking film for lamination	25, 50, 75
HOSTAPHAN™ WO	White film for lamination	50, 75, 100, 125, 175, 190, 250, 350
HOSTAPHAN™ WNL	Translucent white film for lamination	19, 23, 50
PROCESS FILM		
HOSTAPHAN™ DOKO	Transparent film with one very smooth surface	36, 75
HOSTAPHAN™ XMTK	Matte film	50, 75
RELEASE FILM		
HOSTAPHAN™ RNL CTO2	Transparent chemically treated film for furniture application	50, 75
HOSTAPHAN™ RNL HV5	Chemically treated carrier film for decors	50, 75
MELAMINE ADHESION		
HOSTAPHAN™ RNM H5ODE	Chemically treated film for hard coat and melamine adhesion	50
FURNITURE PRESSES		
HOSTAPHAN™ RN	Intermediate layer film for furniture presses	125, 175, 190, 250

#### **Your Partner in Innovation**

Partnering with Mitsubishi Chemical Group ensures working with a supplier who has a global network of researchers on the cutting edge of PET innovation. Whether your challenge is product or service related, we commit to bringing you new ideas to discover the next ground-breaking solution for your business.



#### **Our Global R&D Team**

- Dedicated R&D Team for your development needs with collaboration globally across our R&D Teams
- Pilot line capability available for small scale production and initial new product developments

This brochure reflects our state of knowledge at the time this was prepared. The purpose is to provide an overview of the characteristics of our products and their potential uses. It neither guarantees specific properties nor the suitability of products in specific applications. The user must observe industrial property rights, such as patents or trademarks. The quality of our products is covered by the terms of the General Conditions of Sale of Mitsubishi Polyester Film GmbH.

## Contact one of our HOSTAPHAN™ Film experts

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