



# **HOSTAPHAN™ boPET Films**

## **Fast & Innovative Process Films for Casting**



Mitsubishi Polyester Film GmbH

# 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 key 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™ Films for Casting Applications

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

One of the innovative applications of our HOSTAPHAN™ boPET film is casting. Cast films are used in various applications such as screen protection films, wrap films for cars, trains, planes, paint protection (PPF) as well as medical applications and textiles. They are designed for decorative purposes or to give protection from sand and stones, UV exposure, scratches, vandalism and others.

Mitsubishi Chemical Group is your partner of choice with a wide range of different HOSTAPHAN™ special designed film types for casting applications.



# HOSTAPHAN™ Carrier Films

Cast films can be made from various materials like PVC, PVB, Polyurethane and Acrylates (PMMA). In a first step the material is typically dispensed in a liquid or molten state onto a process carrier. The surface of the carrier film is critical as it is transferred to the surface of the cast film. This determines the gloss of that surface which is typically the decor side of the product. Other aspects influencing casting performance depend on formulation of the cast material (i.e. release and presence of migrating substances) and process parameters.

## HOSTAPHAN™ advantages:

- Good flatness
- High dimensional stability
- From highly brilliant to matte surfaces
- Easy handling
- Excellent processability
- High mechanical resistance
- Waste reduction due to increased yield
- Low gauges compared to paper



# HOSTAPHAN™ Release Liner

In a second step the cast film receives a pressure sensitive adhesive, which needs to be protected by a release liner. Our silicone system is chemically bonded to the polyester surface, minimises back side transfer and provides excellent release properties.

## HOSTAPHAN™ advantages:

- Excellent cured silicone
- Mechanical stability
- Temperature stability
- Chemical resistance
- Easy release properties



# HOSTAPHAN™ Cap Sheets

Optionally, after removing the initial carrier film the surface of the cast film can be top coated by a hard coat. The hard coat may be applied on the cast film and covered by a so called cap sheet. The hard coat in a precured state can be cured under heat or UV radiation. Release liner and cap sheet stay with the cast film and can be removed after curing or by the end customer. Mitsubishi Polyester Film GmbH offers special HOSTAPHAN™ release film types which can be used as cap sheets. The smooth or glossy surfaces as well as the matte surface play an important role in the process.

## HOSTAPHAN™ advantages:

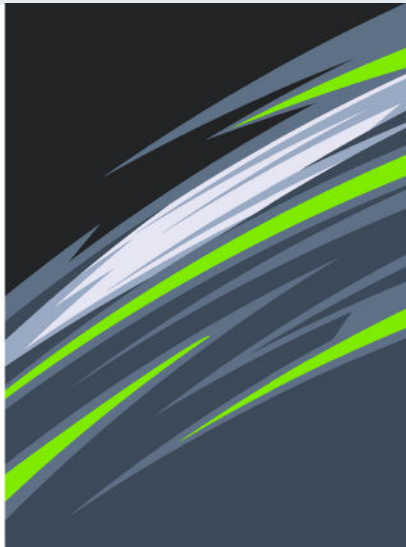
- High gloss or matte surfaces
- Outstanding UV-transmission
- Thickness consistency
- Cleanliness
- Homogeneous topography



# HOSTAPHAN™ Applications for Casting

- Screen protection films
- Wrap films for cars, trains and planes
- Medical applications like patches
- Textiles for example sport jersey shirts
- Paint protection film (PPF)
- Safety glass

## FABRIC DESIGN



## HOSTAPHAN™ FILM TYPES FOR CASTING APPLICATIONS

Product Type	Description	Thickness in µm
<b>HOSTAPHAN™ FOR CARRIER FILMS</b>		
HOSTAPHAN™ GN 4600	Glass clear film	50, 75
HOSTAPHAN™ RNK	Transparent and glossy film	19, 23, 36, 50, 75
HOSTAPHAN™ RD	Transparent and glossy film with smooth surface	23, 36
HOSTAPHAN™ DOKO	Transparent and glossy film with smooth surface	36, 75
HOSTAPHAN™ MT	Matte film	50, 75
HOSTAPHAN™ STK	Super matte film	36, 50, 75
HOSTAPHAN™ XMTK	Extremely matte film	50, 75
HOSTAPHAN™ 43SM	Clear film (produced in USA)	50
HOSTAPHAN™ MT44	Smooth film with rough back side (produced in USA)	50, 75
<b>HOSTAPHAN™ FOR RELEASE LINER</b>		
HOSTAPHAN™ RN 2PRK	Siliconised liner with easy release properties	19, 23, 30, 36
HOSTAPHAN™ RN 2SLK	Siliconised liner with easy release properties	23, 30, 36, 75
HOSTAPHAN™ MT 2PRK	Matte one side siliconised release liner	50, 75
<b>HOSTAPHAN™ FOR CAP SHEETS</b>		
HOSTAPHAN™ DOKO	Transparent and glossy film with smooth surface	36, 75
HOSTAPHAN™ XMTK	Extremely matte film	50, 75

## 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

Please note that when our HOSTAPHAN™ boPET films are combined with other materials or articles, the performance of the final product depends on all components and the geometry. Rigorous qualification and safety testing of the final product is always necessary, as unexpected interactions could occur.

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™ Casting Film experts

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