HOSTAPHAN™ boPET Film

Innovative Power in Battery Technology

MITSUBISHI CHEMICAL GROUP

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 (MCG), we focus on reducing environmental impacts and supporting societal needs through initiatives such as emissions reduction, recycling technologies, and product innovation, while ensuring the Group's long-term growth.

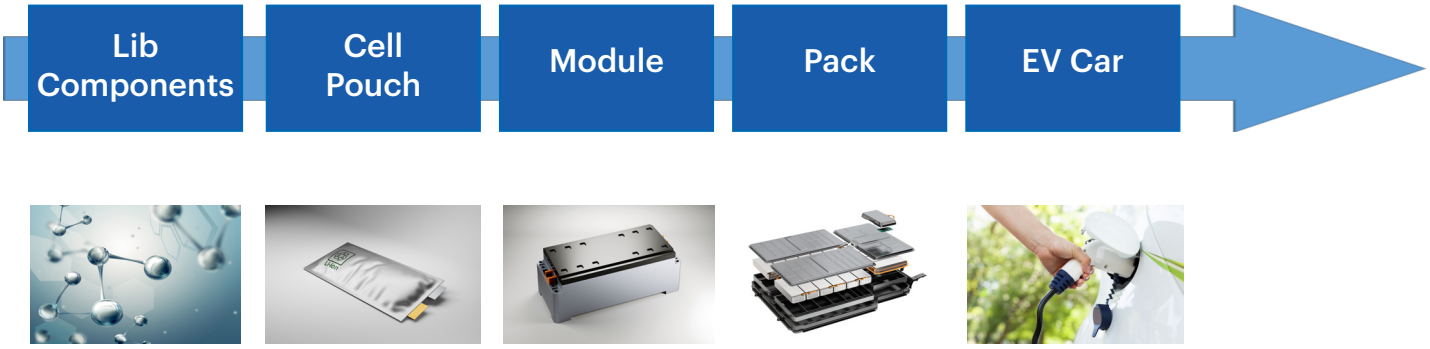
KAITEKI combines ecological, economic and social sustainability with the pursuit of health and a better quality of life. To achieve the KAITEKI goals, we use modern technologies and develop innovative products.

HOSTAPHAN™ boPET Films for EV Applications

With a long history of partnership and development, automotive has been an integral industry for Mitsubishi Polyester Film. R&D and growth in high-performance materials and solutions for autonomous and electrified vehicles is at the core of our corporate strategy. Our focus is on partnering with our customers to develop and bringing to market lightweight, innovative, high value, and functional solutions.

At various points in the production process of an EV-battery HOSTAPHAN™ high quality polyester films from Mitsubishi Polyester Film play a role.

HOSTAPHAN™ Polyester films in EV-Batteries



HOSTAPHAN™ Applications:

- Battery pouches
- Insulator, tape
- Process liner

HOSTAPHAN™ Properies:

- Good chemical resistance
- Outstanding mechanical stability
- Excellent release properties
- Good electrical insulation
- High thermal resistance

HOSTAPHAN™ Product Variety:

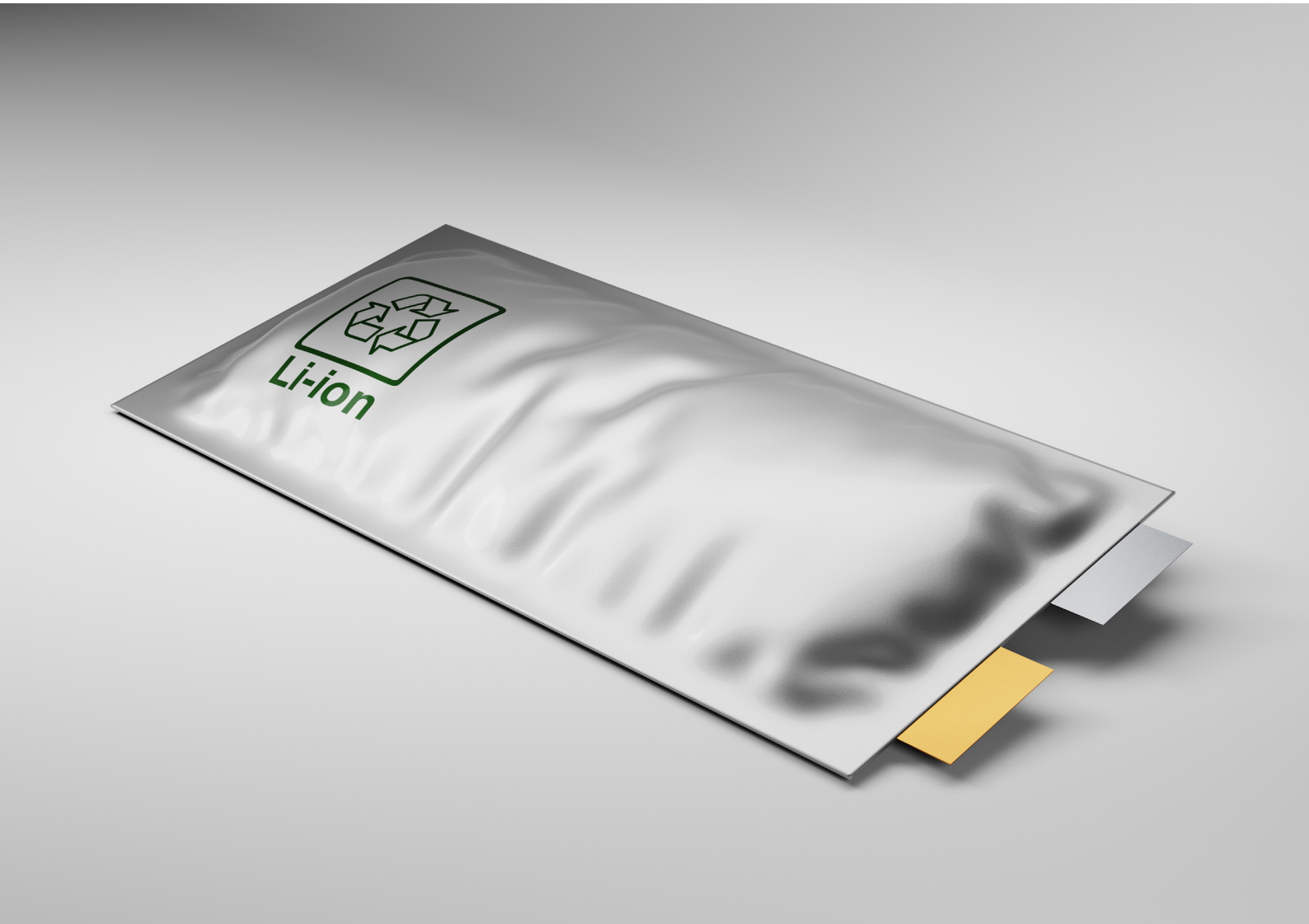
- Transparent, white, matte films
- Flame retardant films
- Sealable films
- Siliconised and non siliconised films
- Thicknesses from 6 to 500 µm
- PCR (post consumer recyclate) films

HOSTAPHAN™ boPET Films for Battery Pouches

EV battery pouches are crucial components in the world of electromobility, having a significant impact on battery performance, safety and sustainability. These flexible pouches are designed to ensure the functionality and longevity of each individual battery cell. One of the key components of an EV battery pouch is our innovative biaxially oriented polyester film HOSTAPHAN™.

HOSTAPHAN™ advantages:

- Excellent thermal endurance (RTI)
- Outstanding mechanical properties
- Very good chemical resistance
- Excellent electrical insulation properties
- High break down voltage
- Lightweight
- Formability and adaptability
- Thickness uniformity



HOSTAPHAN™ boPET Films for Insulator and Tapes

Due to its outstanding insulating properties, boPET film is used in various parts of an EV battery, for example as insulator and tapes. HOSTAPHAN™ is very well suited for these applications.

HOSTAPHAN™ advantages:

- Excellent thermal endurance (RTI)
- Good chemical resistance
- Outstanding electrical insulation
- High mechanical resistance
- Thickness uniformity
- Very stiff due to biaxial orientation
- High break down voltage

VTM-0 Flame retardant film:

- Films with ultralow flame ability
- Suitable as flame retardant cover film or for tapes
- Foldable and printable

HOSTAPHAN™ boPET Films for Process Liner

Mitsubishi Polyester Film GmbH offers special HOSTAPHAN™ release film types which are suitable for the production of electrodes and separators/membranes. HOSTAPHAN™ is used as a carrier film for different components and will be removed after the process. The smooth surface and high temperature resistance plays an important role in an approved and commercial process.

HOSTAPHAN™ advantages:

- Very smooth and defect free surface due to excellent topography
- High chemical resistance of the film
- Thickness uniformity
- Siliconised film types available (Low to virtually no silicone transfer)
- Non silicon versions available
- Stable release properties and good handling behavior
- Film is also available with post consumer polymer content

HOSTAPHAN™ FILM TYPES FOR EV APPLICATIONS

Product Type	Description	Thickness in µm
BATTERY POUCH		
HOSTAPHAN™ REV	Transparent film for EV applications	12, 50
INSULATOR, TAPE		
HOSTAPHAN™ RN	Transparent film	50 - 500
HOSTAPHAN™ WN	Translucent white film	125 - 350
HOSTAPHAN™ WNL	Translucent white film for lamination	19, 23, 50
HOSTAPHAN™ RNF	Transparent flame retardant film	175
HOSTAPHAN™ WIN EHB	White film with high RTI	185
HOSTAPHAN™ WO D054B/CSRB	White film with high CTI	50 - 350
PROCESS LINER		
HOSTAPHAN™ RNK 2PRK	Siliconised clear film	23 - 36
HOSTAPHAN™ DOKO	Transparent film with one very smooth surface	36, 50, 75
HOSTAPHAN™ RN	Transparent film	50 - 500
HOSTAPHAN™ RNL	Highly transparent film	12 - 75
HOSTAPHAN™ MT LUISO	2-side differential release	50

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 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™ EV Film experts

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