SURFACE PROTECTION TAPES

SPV 6065E5 HP | SPV 6065E7 HP | SPV 6069E7 HP | SPV 6065E9 HP

General description

The SPV 6065E HP series are Surface Protection Tapes suitable for the protection of metal surfaces with high gloss, matt and brushed finishes during mechanical operations such as deep drawing and profiling. These tapes consist out of a specially designed high-performance PO film that has an outstanding tear resistance. They are coated with a pressure-sensitive, acrylic-based easy-to-peel adhesive available in medium (E5), high (E7), and very high (E9) adhesion levels to support various processing operations and surface roughness.

Features

- Easy-peel removability
- Very low unwind
- Very good deformation behavior
- High tear resistance in all directions (High Performance PO film)
- Good humidity and oil resistance
- Transparent film for substrate identification and inspection
- Recyclable film

Application

SPV 6065E HP series are high-performance Surface Protection Tapes designed for the protection of metal substrates during mechanical processing. The specially designed high performance (HP) PO film guarantees good tear resistance in both machine and cross direction, which leads to very minor film burrs during processing The products have three different adhesion levels ensuring a secure bonding and reliable performance on the appropriate surfaces. Compared to standard PE film they show a high humidity resistance and an improved oil resistance.
SPV 6065E5 HP comes with a medium adhesion level and can be used on high gloss metals, SPV 6065E7 HP is preferably to be used on matt metals, and SPV 6065E9 HP on brushed metals, such as stainless steel and aluminum
The easy-to-peel adhesive combines a low unwind with a low peel force, which decreases with increased removal speed.

Properties

	Typical value*	**Test method**
Film type	Tear resistant PO film	n/a
Adhesive type	Acrylic-based	n/a
Total thickness	60µm	EN 1942
Adhesion to BA steel	SPV 6065E5 HP: 200 cN/20mm SPV 6065E7 HP: 300 cN/20mm SPV 6069E7 HP: 300 cN/20mm SPV 6065E9 HP: 400 cN/20mm	EN 1939
Tensile strength MD**	40 N/20mm	EN 14410
Elongation MD**	600%	
Color	SPV 6065E5 HP: blue transparent SPV 6065E7 HP: blue transparent SPV 6069E7 HP: green transparent SPV 6065E9 HP: blue transparent	n/a

*CAUTION: The above are typical values and should not be used in writing specifications. Details from the test methods are described on the customer product specification.
**MD = Machine Direction

Warranty

The product is guaranteed to be free from defect in material and workmanship at the time of delivery and will be suitable for use for a period of 12 months thereafter, subject to the conditions set out herein.

Availability

Widths: 1000 mm, 1250 mm, 1500 mm and 2560 mm
Lengths: 500 m and 1000 m
Please contact us for specific dimensions.

Storage conditions

The product should be protected against direct sunlight and extremes in temperature and humidity. Recommended storage and transport conditions are between 15 °C and 30 °C and between 40% and 75% relative humidity. The product should be stored in its original packaging in a well-ventilated room to avoid deterioration, deformation and contamination. Once removed from its packaging, it should be protected against dust and other impurities. Do not over stack the product, as this may cause deformation.

Lamination guidelines

- If the substrate is stainless steel that has been treated with a grinding or polishing machine, it is advisable to wait at least 1 day before laminating the surface protection tape. This is necessary to ensure the correct build-up of the self-healing passive layer. Immediate lamination after grinding or polishing can lead to difficult removability of the surface protection tape.
- The tape should be applied to clean and dry surface by automatic mechanical means.
- To avoid entrapped air-bubbles, excessive tension and shear, the customer should determine appropriate lamination conditions.
- The best lamination conditions are obtained at a temperature between 15 °C and 40 °C.

Application guidelines

- It is recommended to perform further processing after a lamination period of 1 week.
- In general, the tape is immediately usable for further processing after lamination.
- This tape is not recommended to be used in heavy forming processes.
- SPV 6065E HP series cannot be used on lacquers containing softeners (such as PVC lacquers).
- The tape is not designed for outside exposure.
- Surface protection tapes are not meant for permanent protection, they should be removed at the end of the supply chain.

General conditions of use and precautions

The properties of the product might be adversely affected by various elements such as composition, condition and surface of and impurities in or on the substrate, temperature and humidity during storage, the surrounding environment at and after application and time of exterior use. When the product is used in combination with another material or process, the user shall assure the compatibility of the product in such combination and whether this combination results in the expected performance. The same principle applies in the event of product use in extreme conditions or circumstances, whether at or after the moment of application, including extended exposure to sunlight or extreme temperatures and pressure.

Packaging, transport and storage

During transport and storage the product should always be protected against direct sunlight and extremes in temperature and humidity and contained in its original packaging. Once removed from its packaging, it should be promptly applied and remain shielded from direct sunlight and extreme temperature as well as protected against dust and other impurities.

Liability

Except for its willful misconduct, Nitto Belgium's liability shall be limited to a replacement, a reimbursement or an additional delivery of the product, and shall not exceed the purchase price of the products. In no event shall Nitto be liable in respect of any indirect or consequential damages, including loss of profits. The above limitations of liability shall equally apply if Nitto Belgium has assisted in any manner with the selection, treatment or application of the product. Nitto's liability is limited to the terms and conditions provided in the Product Specification and Nitto's General Terms and Conditions of Sale.

Product information

This datasheet provides a general description of the product properties and application scope.
Full technical details in connection with this product are presented in the customer product specification, which is available upon request.
The information reflected in this datasheet is subject to change and the product described herein may be modified or discontinued without notice.

Nitto Belgium NV has obtained the following certificates

- ISO 9001
- ISO 14001
- IATF 16949