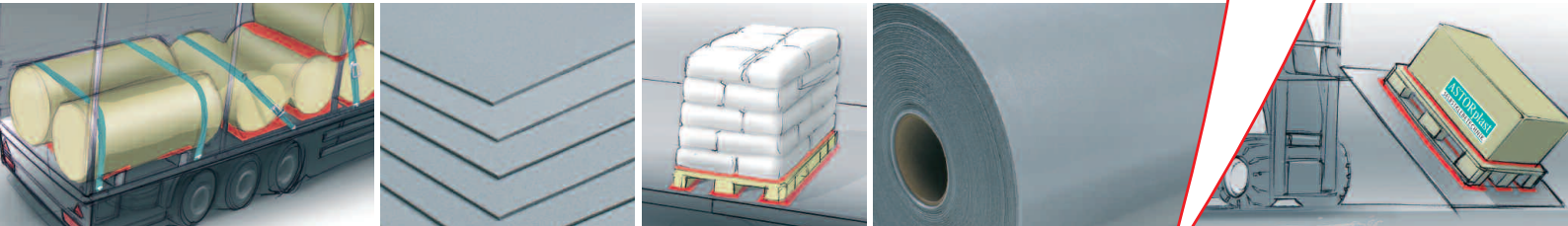




ASTORgrip

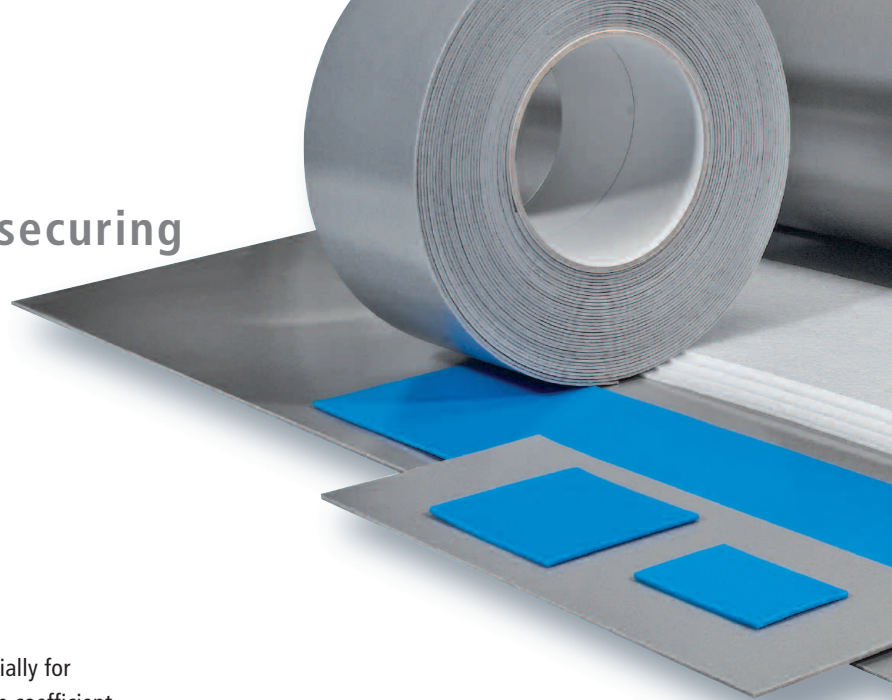
**Non-slip materials
for securing loads**



ASTORplast
SELBSTKLEBETECHNIK

ASTORgrip

Appropriate solutions for securing loads during transport



ASTORgrip is a non-slip material that has been developed specially for securing loads. ASTORgrip increases the dynamic sliding friction coefficient between the loading surface and the load significantly and enables loads to be secured safely and efficiently as a result.

Safety

The legal regulations in many European countries do not allow experiments to be made when loads are being secured.

Since 1.1.2006, § 22 of the German road traffic regulations has specified that loads must be secured in such a way *"that they cannot slip, fall over, roll backwards and forwards or fall down, even when an emergency stop is made or sudden swerving is necessary"*. In extreme cases, the authorities are entitled to take vehicles off the road if the loads they are carrying are secured inadequately.

- Certified sliding friction coefficients
- Suitable for securing plastic sacks and canisters too
- Impermeable to water to a large extent

Economic viability

The higher the friction between the load and the loading surface, the less additional effort is required to secure the load. The high coefficient of friction levels of ASTORgrip therefore make it possible to reduce the time and cost involved in securing loads considerably. When ASTORgrip is used, transport damage due to slipping loads can also be prevented in a simple and inexpensive way.

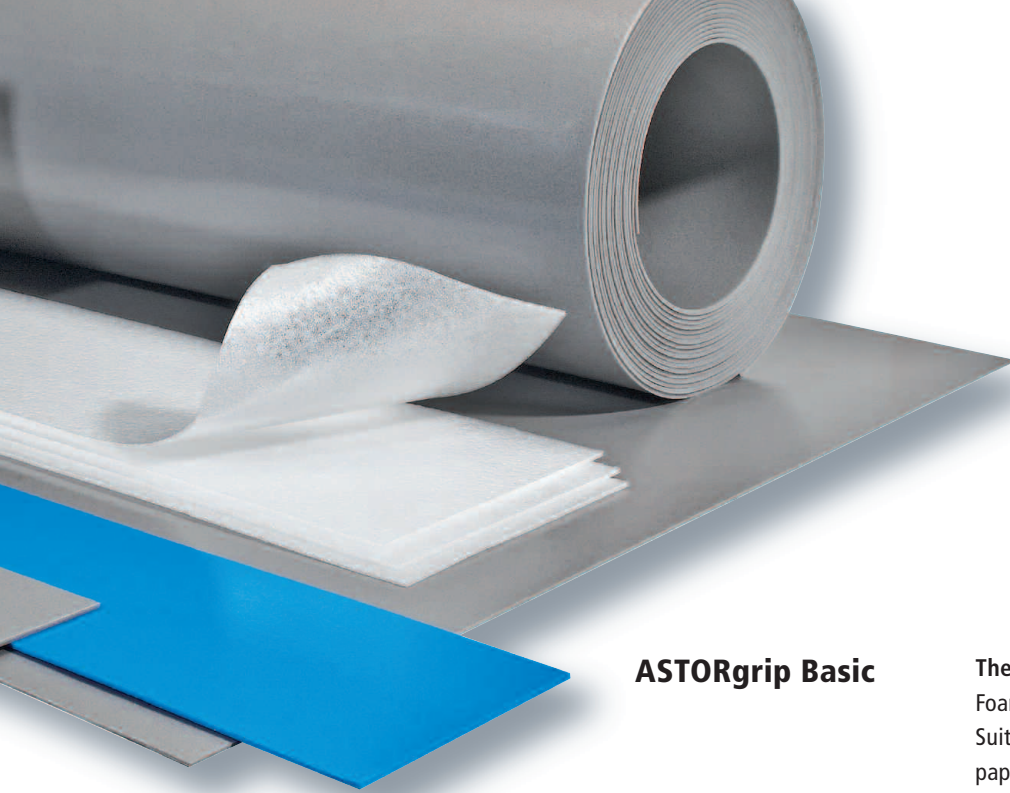
- Versatile
- Multiple use is possible (when the storage criteria specified in VDI 2700 Section 15 are observed)
- Washable
- Odourless
- Safe from a food law point of view

100% recyclable

Thanks to its unique material structure, ASTORgrip can be disposed of inexpensively after use or can be recycled to generate energy. This not only minimises waste disposal costs but also helps to protect our environment.

- PVC-free
- CFC- and HCFC-free
- Adhesive-free
- Plasticiser-free





ASTORgrip Basic

The inexpensive standard solution.

Foamed polyolefin with a non-slip finish on both sides. Suitable for such products as cartons, plastic drums, paper or plastic sacks etc.

Thickness: 3 mm

ASTORgrip Ultra

For more exacting requirements.

Foamed polyolefin with a non-slip finish on both sides. Suitable for such products as tightly wound reels of paper, wooden pallets, cartons, plastic drums, paper or plastic sacks etc.

Thickness: 2 mm, 3 mm, 4 mm

ASTORgrip Ultra plus

The solution for extremely demanding requirements.

Special foamed polyolefin with very high density and with a non-slip finish on both sides.

Suitable for such products as heavy, tightly wound reels of paper, cartons, box pallets and wooden pallets.

Thickness: 2 mm, 3 mm

Forms in which ASTORgrip can be supplied

- Reels
- Die-cuts
- Customised dimensions and colours are available on request

Sliding friction coefficient $\mu_d \geq 0,6^*$

ASTORgrip products are tested and certified for different material combinations and load weights. ASTORplast does not rely on laboratory tests in this context; instead of this, it has ASTORgrip tested by independent test institutes like »DEKRA Automobil GmbH« and »Fraunhofer Institut Materialfluss und Logistik« with genuine loads on genuine loading surfaces. Safety from a food law point of view has been certified by the »ISEGA-Forschungs- und Untersuchungs-Gesellschaft mbH«. **



Fraunhofer Institut
Materialfluss
und Logistik

* DEKRA test report 226/1605/702073/180-3990066

Fraunhofer IML test certificate of 26.01.2007 (ASTORgrip Ultra 3 mm / tightly wound reels of paper)

** ISEGA safety clearance from 14.10.2009 (ASTORgrip Ultra / investigation into safety from a food law point of view)



The statements made in this prospectus are based on what is known at the present time as well as on information provided by our suppliers and do not represent guarantees of any properties in the legal sense. It is the personal responsibility of the buyer to observe legal regulations and to check the suitability of our products for the use to which he intends to put them.



Our word is our bond



ASTORplast is a manufacturer of pressure-sensitive tapes and customer-specific stamps successful all over Europe. This corporate group has been producing customised adhesive solutions for more than 45 years for virtually every manufacturing industrial and commercial sector.

All of our work and ideas centre on the customer and his specific job. ASTORplast joins forces with its customers to apply our wide range of standard products and large portfolio of bonding agents, liners and substrate materials to put together efficient systems and product solutions.

ASTORplast takes advantage of the expertise of its own development departments in this process. Regular investments in productivity, automation and process reliability guarantee the highest level of product quality and technology at fair-market prices.

The ASTORplast Group is successful throughout Europe with ISO-certified production plants in Germany and Switzerland.



ASTORplast Klebetechnik SE
Limesweg 19
D-73553 Alfdorf
Tel +49 71 72-303-0
Fax +49 71 72-303-99
info@astorplast.de
www.astorplast.de



ASTORplast
Selbstklebeprodukte GmbH
info@astorplast.at
www.astorplast.at



ASTORplast Italia Srl
info@astorplast.it
www.astorplast.it



ASTORplast AG
Zürichstrasse 59
CH-8840 Einsiedeln
Tel +41 55 418 37 37
Fax +41 55 418 37 38
info@astorplast.ch
www.astorplast.ch



Agency in France
www.astorplast.com



Agency in Poland
www.astorplast.com

ASTORplast Group
associate companies:



Polyschaum Packtechnik
und Isoliermaterial GmbH
info@polyschaum.de
www.polyschaum.de

