

ALFATER^{XL}®

Flexibility in Plastics

An abstract background graphic consisting of overlapping, semi-transparent geometric shapes in shades of red, orange, and grey, creating a sense of depth and movement.

ALFATER^{XL}®

FLEXIBILITY IN PLASTICS.

ALFATER^{XL}® – Portfolio



Injection Molding

ALFATER^{XL}® is perfect for many different injection molding applications: simple or complex components, also with long flow paths, thin-walled parts, two component parts with adhesion to various polymers (e.g. PP, PA) or use in multi-cavity molds.



Extrusion

ALFATER^{XL}® is characterized by its homogeneity, high melt strength and excellent mechanical properties. Its easy processing in extrusion or coextrusion processes makes ALFATER^{XL}® perfect for various applications.



Blow Molding

ALFATER^{XL}® is perfect for all kind of blow molding processes. Thanks to its good flexibility at low temperature as well as its heat- and chemical resistance ALFATER^{XL}® is particularly used in the automotive engine compartment.



Specialties

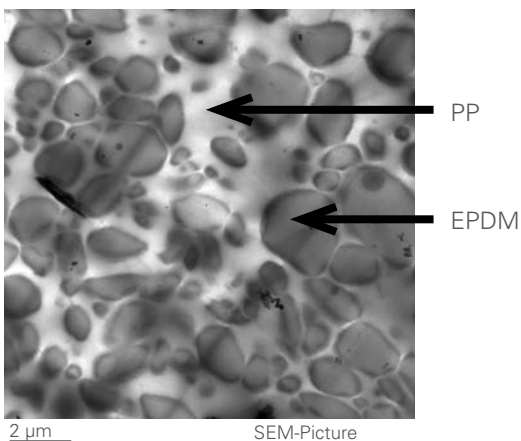
ALBIS PLASTIC is specialized in the development and production of custom products and develops specific types to meet the particular requirements of its customers. In addition to the series described above, ALFATER^{XL}® special compounds can be offered for almost any application. Such specialties include PA adhesion-modified grades, food contact grades or special colored grades.



ALFATER^{XL}® – TPV (PP+EPDM)

ALFATER^{XL}® is a blend consisting of a PP-matrix and a dispersed EPDM phase, belonging to the family of thermoplastic elastomers. Special dynamic vulcanization of the elastomer particles distributed very finely in the thermoplastic polymer matrix produces its exceptional characteristics.

Due to the special morphology of the material, the highly cross-linked EPDM particles ensure good resilience properties, while the PP-matrix makes thermoplastic processing possible.



ALFATER^{XL}® – Properties and Advantages

ALFATER^{XL}® has excellent mechanical properties and good durability compared to conventional elastomers.

- Hardness ranges from Shore A 40 to Shore D 50
- Available in black, natural and colored
- Simple processing by injection molding, extrusion or blow molding
- Low density less than 1.0 g/ccm
- High flexibility and extremely good mechanical properties over a wide temperature range from -40 °C to 130 °C. Higher temperatures also possible depending on load
- Low tension set and compression set
- Excellent long-term resistance to aging
- Excellent weathering, UV and ozone resistance as well as many aqueous solutions, acids and alkaline mediums
- Good adhesion on various polymers (e.g. PP, PA)

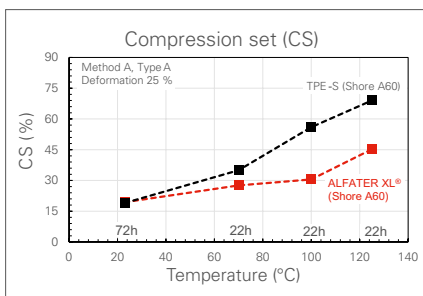




ALFATER^{XL}® – In Comparison

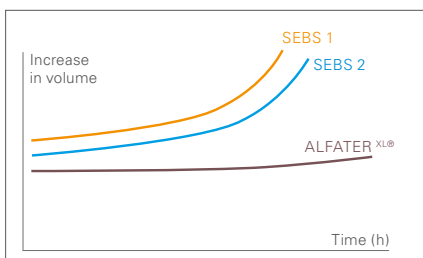
ALFATER^{XL}® Compression Set

ALFATER^{XL}® has excellent compression set values at high temperatures, even over long periods of time.



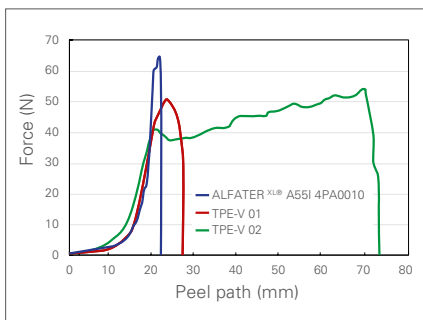
ALFATER^{XL}® Oil Swelling

ALFATER^{XL}® is also distinguished in comparison to SEBS by its low tendency to swell in the presence of oil even at high temperatures and over longer periods of time as well as its good resistance to a wide range of mediums.



Adhesion of ALFATER^{XL}® to polyamides

The PA adhesion-modified series ALFATER^{XL}® 4PA0010 is characterized by very good bonding to PA6 and PA66. This series is suitable for multi-component injection molding processes as well as for cold insert molding processes.





ALFATER^{XL}® – Application Areas

Automotive industry

- Air ducts
- Storage mats
- Stop buffers
- Gaskets & seals

Electrical Industry

- Gaskets
- Tubing
- Grommets

General Industrial Applications

- Handles & soft touch applications
- Wheels / rollers
- Support feet

Construction Industry

- Profiles
- Window seals
- Covers

Tools

- Handles
- Damping elements
- Impact and shock protection

Food Contact

- Hoses
- Handles & soft touch applications
- Gaskets

Automotive

ALFATER^{XL}® is suitable in a wide variety of applications in the automotive industry. Thanks to its excellent resistance to temperature, oils, greases, acids and bases, it can be used for many components in the engine compartment, such as air ducts, gaskets, buffers, protective tubing and grommets. In the passenger compartment it satisfies many requirements such as fogging or alternating climate tests and ALFATER^{XL}® is easy to color. Its excellent resistance to UV, weathering, temperature and ozone also make ALFATER^{XL}® optimal for exterior applications such as mirror and headlight gaskets as well as circumferential window seals.

Electrical and electronic applications

Low temperature flexibility and resistance to temperature in combination with excellent mechanical properties, its pleasant feel as well as good resistance to highly varying mediums distinguish ALFATER^{XL}® from other materials. These properties make ALFATER^{XL}® perfect for applications such as pull relief mechanisms, grommets, sleeves, housing gaskets and hoses.

Construction / Machines / Tools

ALFATER^{XL}® is characterized by its excellent cushioning and damping properties as well as its high outdoor resistance. Therefore ALFATER^{XL}® is used for parts subject to high stress, e.g. covers, dust guards, buffers, vibration dampers, two component sealing lips or tools with good grip.

Food Contact

The ALFATER^{XL}® FC series has been developed especially for food contact applications and fulfills the applicable EU and FDA standards. It can be used for both injection molding and extrusion. Applications include seals, hoses, function elements, handles and soft touch features.



CERTIFICATION

Our quality management system is certified in compliance with IATF 16949:2016. The certificate is checked and renewed regularly by the German Society for Certification of Management Systems [Deutschen Gesellschaft zur Zertifizierung von Management-systemen mbH (DQS)].

HEAD OFFICE

ALBIS PLASTIC GmbH
Mühlenhagen 35 · 20539 Hamburg
Tel.: +49 40 7 81 05-0 · Fax: +49 40 7 81 05-361
info@albis.com · www.albis.com

