

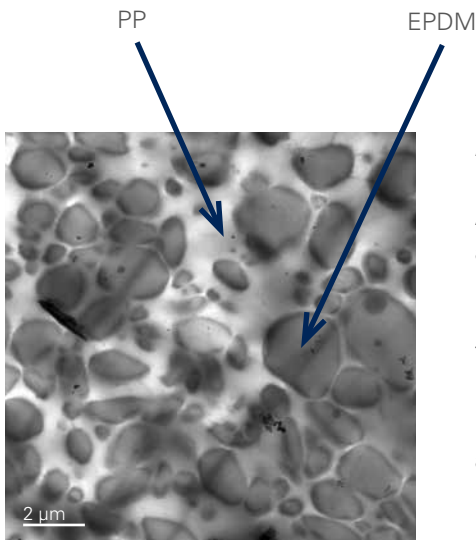
ALFATER^{XL}®

Flexibility in Plastics

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

ALFATER^{XL}®

FLEXIBILITY IN PLASTICS.



ALFATER^{XL}® – TPV (PP+EPDM)

ALFATER^{XL}® is a blend based on PP and a fine dispersed crosslinked EPDM phase and belongs to the family of thermoplastic vulcanizates (TPV). It is produced via reactive compounding, so called dynamic vulcanization.

The dynamic vulcanization of the fine dispersed EPDM particles in the PP matrix results in specific morphology which in turn guarantees exceptional properties. The highly crosslinked EPDM ensure good elastomeric properties, while the PP matrix allows thermoplastic processing, colorability and recyclability.



ALFATER^{XL}® – CHARACTERISTICS

ALFATER^{XL}® combines important properties of pure elastomers and pure thermoplastics:

- Broad hardness range (Shore A40 to D50)
- Easy thermoplastic processing (e.g. injection molding, extrusion, blow molding)
- Good recyclability and colorability
- Low density (below 1.0 g/cm³)
- Broad service temperature from -40°C to 130°C (short-time up to 150°C)
- Low tension and compression set
- Good damping properties, anti-slip and good grip
- Excellent heat ageing resistance
- Very good resistance to weathering, moisture, UV and ozone
- Very good resistance to many aqueous solutions, acids and alkaline mediums
- Good adhesion to various plastics (e.g. PP, PA)
- Foamable



ALFATER^{XL}® – INJECTION MOLDING

ALFATER^{XL}® is very suitable for various injection molding applications:

- Simple and complex parts
- Parts with long flow paths
- Thin-walled parts
- Foamed parts
- 2K parts and hard-soft combinations with various plastics (e.g. PP, PA)
- Parts for food contact
- Parts with low emission and low fogging



Different ALFATER^{XL}® injection molding series are available for numerous applications. To select most suitable ALFATER^{XL}® grade, ALBIS can support by providing data for injection molding simulation or by technical consultation through our local technicians.



Series	Hardness (Shore)	Adhesion to	Characteristics
ALFATER ^{XL} ® I 2GP	A40 – D50	Polyolefins, TPV	Normal flow, standard parts with short and medium flow paths, best mechanical properties
ALFATER ^{XL} ® I 3EF	A50 – D40	Polyolefins, TPV	Easy flow, thin-walled and complex parts, long flow paths, very good weathering resistance
ALFATER ^{XL} ® I 4GP	A40 – D40	Polyolefins, TPV	Bright inherent color, good colorability, low emission and low fogging, easy flow, thin-walled and complex parts
ALFATER ^{XL} ® I 4PA	A55, A70, A85	Polyamides	Adhesion to e.g. PA6 & PA66, easy flow, thin-walled and complex parts
ALFATER ^{XL} ® I 4FC	A40 – D40	Polyolefins, TPV	Food contact approved - fulfills FDA & EU (BfR), easy flow, thin-walled and complex parts



ALFATER^{XL}® – EXTRUSION & BLOW MOLDING

ALFATER^{XL}® grades for extrusion have high viscosity as well as good melt stability and melt strength. These properties allow versatile use of ALFATER^{XL}® in extrusion and coextrusion:

- Profiles & trims
- Tubes
- Seals
- Foamed extrudates



In addition, ALFATER^{XL}® is highly used in blow molding processes such as extrusion blow molding and injection blow molding (Ossberger process):

- Air ducts
- Bellows & boots
- Pipes
- Containers



To select most suitable ALFATER^{XL}® extrusion grade, ALBIS can support by technical consultation through our local technicians.

Series	Hardness (Shore)	Adhesion to	Characteristics
ALFATER ^{XL} ® I 2GP	A40 – D50	Polyolefins, TPV	High viscosity, good melt strength and melt stability
ALFATER ^{XL} ® E 2GP	A60 – D50	Polyolefins, TPV	High viscosity, good melt strength and melt stability



ALFATER^{XL}® – INDUSTRIES

ALFATER^{XL}® can be used in numerous applications and industries due to its characteristics, very good weathering and chemical resistance as well as its good damping properties, its comfortable haptic and grip. Important industries are: Automotive and transportation (under the hood, exterior and interior), building & construction, machinery and plant engineering, do-it-yourself sector, electronic equipments, consumer goods.

The ALFATER^{XL}® FC series fulfills relevant FDA & EU (BfR) regulations for the use in food contact applications and packaging. Typical applications and products are for example:



Automotive/transportation

- Seals & gaskets
- Bellows & boots
- Air duct
- Protective tubes
- Corner molds & end cap
- Glass encapsulation
- Spoiler & panels
- Sheaths & jackets
- Grommets
- Mats & inserts
- Soft-touch applications

Electronics/consumer goods

- Cable parts & cable grommets
- Impact & shock protection
- Bumpers, bushings, connectors & plugs
- Seals & gaskets
- Soft-touch handles
- Control elements
- Damping & vibration protection

Building/tools/engineering

- Protection & dust covers
- Impact and shock protection
- Bumpers & plugs
- Seals & gaskets
- Soft-touch handles
- Casters & wheels
- Sheaths & jackets
- Damping & vibration protection
- Profiles & trims

Packaging/food contact

- Seals & gaskets
- Caps & closures
- Soft-touch applications
- Haptic elements
- Spouts & pourers
- Bumpers & plugs



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)].

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