

Moldflon™

The new dimension in PTFE processing



elringklinger
Kunststofftechnik

Moldflon™ – the Innovation in Thermoplastics

Moldflon™ is a new thermo-plastic material which regarding its chemical composition widely corresponds with conventional PTFE. The **Moldflon™** innovation is the ability to process PTFE by injection moulding, a new dimension concerning cost effectiveness and large volume PTFE-production.



PTFE

Superior properties:

- High temperature resistance
- Nearly universal chemical resistance
- Light and weather resistance
- Excellent sliding properties
- Antiadhäsiv
- Inflammable
- Electrical insulating
- Physiological inert

Applications

Moldflon™ combining the superior material properties of PTFE with highly economical processing techniques of fluoro thermoplasts.

Moldflon™ can be processed utilizing the following processing technologies:

Injection moulding

- (Pump, valve) bodies
- Gearwheels
- Switches
- Seals, gaskets
- Expansion joints
- Insulators
- Sensors
- Tailormade parts

Material composites

- Laminates
- Containers, vessels
- Linings

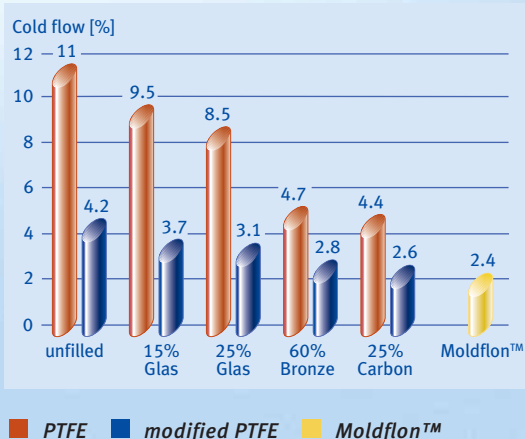
Powder coating

- Sheets
- Rolls
- Tailormade parts
- (Chemical) reactors

Extrusion

- Endless profiles
- Fibers
- Films
- Diaphragms
- Tubes/Pipes
- Cable insulations

Properties



Reduced cold flow and high temperature resistance are favourite properties of **Moldflon™**. Due to its innovative polymer composition, **Moldflon™** shows lower reduced cold flow properties even compared to compounds based on modi-

fied PTFE. This is achieved without the need of accepting the well-known disadvantages of PTFE compound fillers. Among these disadvantages are the limited chemical resistance, enhanced porosity, reduced compliance to specific

requirements of applications in the presence of food, oxygen or other critical environment. In respect to chemical resistance, antiadhesiveness, durability as well as electrical insulation **Moldflon™** is at the same level as PTFE.



Broader design options allow the realisation of more complex parts. These complex parts so far could not be produced by machining technology. In addition extrusion of endless profiles, fibres, films as well as transfer-moulding processing is possible.

Thermoplast processing technique

Highly economical due to

- Tailormade part design
- Mass production
- Short cycle time
- Recycling of scrap
- Sparing resources
- Low supervising demand
- Process to be safe and highly stable

Transfer moulding

- Linings
- Coverings

**Blow moulding/
Deep drawing**

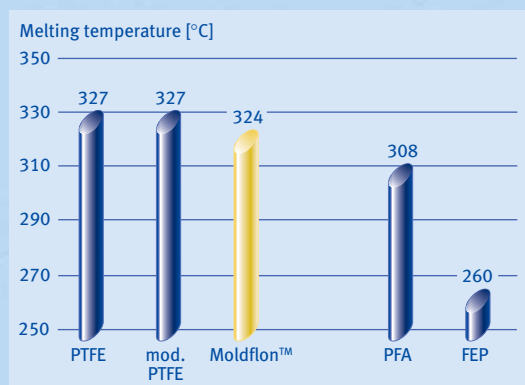
- Bellows
- Containers, vessels
- Bottles
- Bowls
- Convoluted tubes

Surface modification

- Chemical etching
- Plasma activation

Broader design options allow the realisation of more complex parts. Due to the enhanced service temperature range of **Moldflon™** the existing field of applications for fluorothermoplastic materials is expanded significantly.

Due to its specific property profile **Moldflon™** preferable should be applied for applications with high thermal, chemical, electrical or even mechanical demands.



ElringKlinger Kunststofftechnik and Konzelmann – partner for innovations



In case **Molflon™** is processed by injection moulding, we are working in a close relationship with Konzelmann GmbH – a specialist in technical applications and complicated designs made of high-grade compounds up to high-performance thermoplastic materials. Experience for many years in a wide split of sectors combined with modern machinery in operation as well as an accredited high quality level are the fundament for an efficient cooperation to the benefit of our customers.



With its seals and engineering design elements ElringKlinger Kunststofftechnik has been one of the technology leaders in its field for over 40 years. We develop tailored solutions from PTFE, PTFE compounds and other highperformance plastics. Our solutions meet the toughest demands to be found in the field – with economy and reliability guaranteed.

For more information and contact:
www.moldflon.de | info@moldflon.de

elringklinger
Kunststofftechnik

ElringKlinger Kunststofftechnik GmbH | Etzelstraße 10 | D-74321 Bietigheim-Bissingen
Phone ++49 (0) 71 42 / 583-0 | Fax ++49 (0) 71 42 / 583-200
Division Venus | Badenbergrstraße 15 | D-89520 Heidenheim
Phone ++49 (0) 73 21 / 96 41-0 | Fax ++49 (0) 73 21 / 96 41-50

www.elringklinger-kunststoff.de



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