

# **Epseal**®

Taste-free sealing solutions for the food & beverage industry





OUR CUSTOMERS

MANUFACTURE FOOD &

BEVERAGES WITH A PURE

AND NATURAL TASTE;

EPSEAL TPE COMPOUNDS
KEEP THEM THAT WAY

Epseal thermoplastic elastomers (TPEs) are custom made liner sealing compounds for the food and beverage industry. They are PVC free and conform to FDA and EU regulations.

A range of compounds has been developed with series dedicated to different types of closures including crown corks, aluminium closures, both roll-on and roll-on pilfer proof, plastic closures, both out-shell and in-shell liner moulding.

Epseal TPE compounds give excellent organoleptic results ensuring neutral taste properties, a key requirement for sensitive filling goods like mineral water.

Excellent sealing characteristics are combined with the optimal elasticity and softness necessary for each individual closure and packaging system, be that PET, glass, returnable or one way. Epseal TPEs offer consistent short, medium and long term opening torques which provides consumer friendly functionality and also make it easier for children and senior citizens to open the bottles.

Solutions are available for carbonated soft drinks, beer, wine, fruit juice and milk based beverages. Including versions that perform ideally after cold-fill, hot-fill, pasteurisation or sterilisation processing. For beverage promotion opportunities, we also offer laser compatible compounds throughout the range.

In this guide we give an overview of some of the most widely used grades, however, this does not list all ranges and possibilities.

To discuss your specific requirements, please contact the Epseal team at epseal@hexpolTPE.com or visit www.epseal.de

### **CUSTOMISED SOLUTIONS**

Customer specific solutions, manufactured from quality raw materials and compounded under exact and consistent conditions, this is what makes us a trusted and reliable partner for the beverage industry. Our caps and closures team work hand-in-hand with customers to tailor compounds to your specific application. Our knowledge and experience in this area means we are familiar with evolving legislation and application criteria, particularly in regard to sealing, organoleptics and migration values.

#### PRODUCT HIGHLIGHTS:

- Excellent organoleptic results for neutral taste
- Elasticity and softness ensure excellent sealing
- Low migration values
- Consistent opening torques
- Strict raw material selection policy, only using highest quality materials which comply with FDA and EU regulations for direct food contact

- Approvals with major international beverage companies
- Efficient processing on all standard lining machines
- PVC Free
- Recyclable
- Suitable with the whole range of beverage processing methods from cold fill to sterilisation

# Epseal® 100

### TPE SEALING COMPOUNDS FOR CROWN CORKS

The Epseal 100 series is designed for crown corks and can be used for carbonated beverages including lemonades, beer, mineral water, juices and milk based drinks.

Different versions accommodate all the beverage processing systems including sterilisation. Additional versions address steel down-gauging as well as twist off crown applications.

Our laser marking versions support beverage promotion strategies. Oil free grades are also available.





### Epseal® 300

### TPE SEALING COMPOUNDS FOR ALUMINIUM CLOSURES

The Epseal 300 series was developed for aluminium screw closures. Different versions are optimised for a wide range of beverages for example mineral water, wine, lemonades and milk based drinks.

The 300 series includes versions for cold fill through to sterilisation and additionally for returnable or one way packaging systems. Included in this series are very low migration versions for sensitive application areas such as mineral water. A variety of lubricant packages address different applications leading to consistent and reliable consumer friendly closures whilst accommodating the special needs of children and senior citizens.



## Epseal® 400

#### TPE COMPOUNDS FOR SYNTHETIC WINE CORKS & T-STOPPERS

The Epseal 400 series was developed for synthetic wine corks and T-stoppers for spirits.

Various grades are available for both extrusion and injection moulding process. The addition of foam masterbatch enables the user to reach individual customer specifications.

The optimal slip systems we have developed allow for consumer friendly removal from the bottle mouth.



### Epseal® 700

### TPE SEALING COMPOUNDS FOR OUT SHELL SYSTEMS

The Epseal 700 series are for PP or PE closures using the out shell compression moulding system and also tape extrusion process.

There are versions for both carbonated soft drinks and the premium segment of mineral waters where very low migration is required.

Additionally, laser marking versions are available for beverage promotional campaigns.



# Epseal® 800

#### FOR PLASTIC CLOSURES USING THE IN SHELL LINER MOULDING

The Epseal 800 series was developed for PE and PP closures specially designed for the in shell moulding liner technology.

The series includes versions for cold fill, pasteurisation and hot fill beverage treatment systems.

This series also includes versions with different rheological values to address the special processing requirements of different lining machine types. An assortment of lubricant packages addresses the spectrum of closure and liner profile designs but all lead to a neutral taste and odour sealant whilst remaining consumer friendly and reliable.



### PRODUCT SAFETY

When working with sensitive applications, the whole supply chain needs to be considered. From sourcing the correct raw materials and suppliers, managing production, traceability and consistency, to the knowledge about the application requirements.

With state-of-the-art compounding and product development facilities, HEXPOL TPE place a strong emphasis on operational excellence. We invest in high-quality compounding technology and supporting subsystems. Working with quality management standards such as ISO 9001, ISO 14001, ISO 50001 and ISO 13485.

When developing polymer compounds, a deep understanding of regulatory, legal requirements and industry standards is also essential.

Our computerised weighing and metering systems, combined with a customised machine configuration ensure we manufacture the same high quality time and time again.

Stringent and frequent testing during manufacturing is part of our standard operating procedure. We also have independent laboratories monitor our products for food grade conformity.





HEXPOL TPE is a global compounding group specialising in Thermoplastic Elastomers (TPE) for key industries such as consumer, medical, packaging, automotive and construction.

We have a core belief in being the easiest company to do business with. That's why we invest in our operations, teams and technologies to offer our customers the most reliable, relevant and cost-effective TPE compounds, backed by highly responsive support, technical know-how and application expertise. Our teams work together, across boundaries, applying the knowledge, experience and talents we have all around the world to meet the needs of our customers.

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LEGACY NAMES: From 2017, the ELASTO and Müller Kunststoffe businesses will be renamed to HEXPOL TPE.

We provide written and illustrated advice in good faith. This should only be regarded as being advisory and does not absolve the customers from doing their own full-scale tests to determine the suitability of the material for the intended applications. We retain the right to make changes without prior notice. HEXPOL TPE makes no warranties or guarantees, express or implied, respecting suitability of HEXPOL TPE's products for your process or end-use application. Epseal® is a registered trademark, property of the HEXPOL TPE group of companies.

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