



# Design, Develop & Deliver

with Distrupol and Sumika Polymer Compounds

Sumika, part of the Sumitomo Group, has been manufacturing thermoplastics for over 30 years and offers a wide range of thermoplastic polyolefin based compounds and elastomers. Specialists in high temperature and high wear plastics for the automotive industry, as well as providers of plastic compounds for hard wearing and longlife industrial applications, Sumika continues to develop new technologies to meet the changing demands of the future.

www.distrupol.com

info@distrupol.com



**Sumika Polymer Compounds** is widely recognised as a leader in the technology of mineral filled and chemically coupled glass fibre reinforced polypropylene compounds.

## **Advanced Glass Fibre and Coupling Technology**For optimum Glass Fibre/PP adhesion

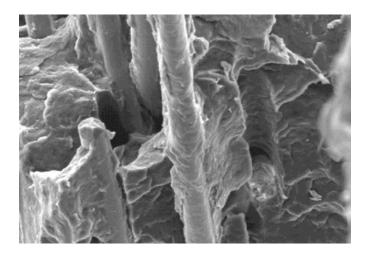
Sumika has developed an advanced coupling technology, with the use of unique screw design and process technology for optimum glass fibre length distribution. This combination, enables Sumika to improve the properties of glass fibre filled PP.

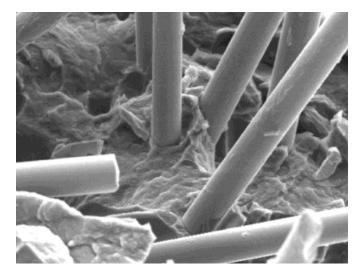
#### **Product Range**

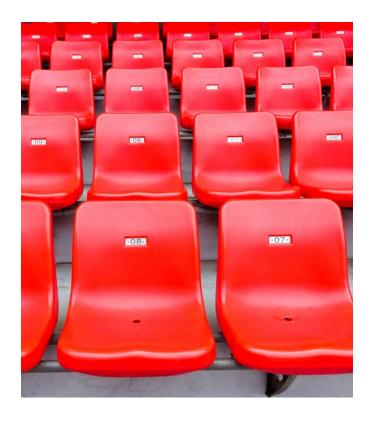
- Special Sumitomo PP resin
- Advanced Glass Fibre
- Improved Coupling Technology

#### **Advantages**

- Improved Tensile Strength (TS)
- Improved Tensile Modulus (TM)
- Improved HDT (HDT-A)
- Improved impact properties







#### Thermofil® FR

#### Flame retardant PP compounds

Thermofil® FR is made with distinct characteristics, to prevent fire by extinguishing the flame. Thermofil® FR meets the continued demand for flame retardant properties required in the electronics and building industries.

#### **Product Range**

- PPH & PPC
- GF range 10-30%
- Unreinforced

#### **Advantages**

- Flame retardant
- UL listings
- Easy processing
- Chemical resistance
- Electrical resistance
- EN45545-2 HL3 approved (European Railway Industry)

#### Thermofil® (GPP)

#### Advanced PP Compounds - Glass coupled PP

Thermofil® is a high performance glass filled polypropylene. The material range is made using advanced glass fibre and coupling technology which achieve optimum adhesion between glass fibres and polymer.

#### **Product Range**

- 10-50% GF range
- Low & high flow

#### Advantages

- Chemical resistance
- Electrical insulation
- Highly impermeable
- Low density
- Stiffness
- Creep resistance
- Easy processing
- Replace long fibre PP

#### Thermofil® HGPP

#### Advanced PP Compounds - Hybrid glass filled PP (GF+MF)

Thermofil® hybrid glass filled PP has the advantage of mineral fillers in addition to glass fibres in advanced compounds. The combination gives the benefit of good dimensional stability with excellent surface finish.

#### **Product Range**

- GF 10-30%
- MF 10-30%

#### **Advantages**

- Low warpage
- Excellent surface finish
- Easy processing
- Good colorability
- Fast cycle times

### Thermofil® SPP

#### Tailor made PP Compounds

With Thermofil® PP compounds, Sumika has the ability to tailor the right compound for your application. Tailored compounds gives an edge in cost and optimisation for a wide range of applications.

#### **Product Range**

- GF
- Talc
- Unreinforced
- Flame retardant
- UV
- Heat stabilized
- Low warpage
- Colors

#### Advantages

- Custom made
- Cost savings



#### **Propyver**

#### **Recycled PP Compounds**

Propyver helps to meet our customer's sustainability goals for the future. Propyver is a high quality recycled PP compound, which gives the edge in providing the right post-consumer material for a wide range of applications.

#### **Product Range**

- Color Black (post-consumer)
  Susta
- Color Natural (post-industrial)
- UV
- Extrusion & Injection moulding qualities

#### Advantages

- Sustainability
- High quality



### Performance against Long Glass Fibre Reinforced Polypropylene (LGFPP)

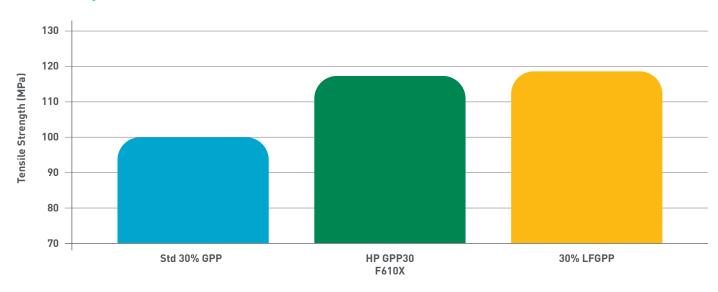
Thermofil® High Performance materials show excellent performance against LGFPP, out-performing LGFPP in most areas with the exception of tensile strength.

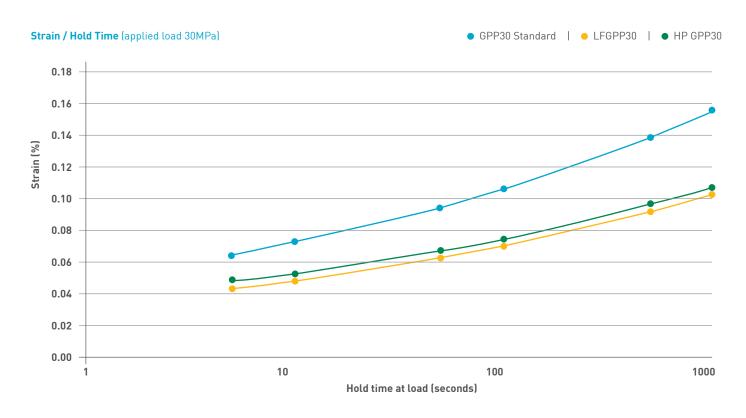
#### Key benefits:

- Improved tensile (or equivalent) performance
- Comparable flexural performance
- Improved impact performance in 'real life' applications
- Comparable HDT performance
- Easier moulding (no fibre breakage)
- Better weld line performance
- More design freedom
- Lower material cost



#### **Tensile Strength**





### **An Integrated Process**



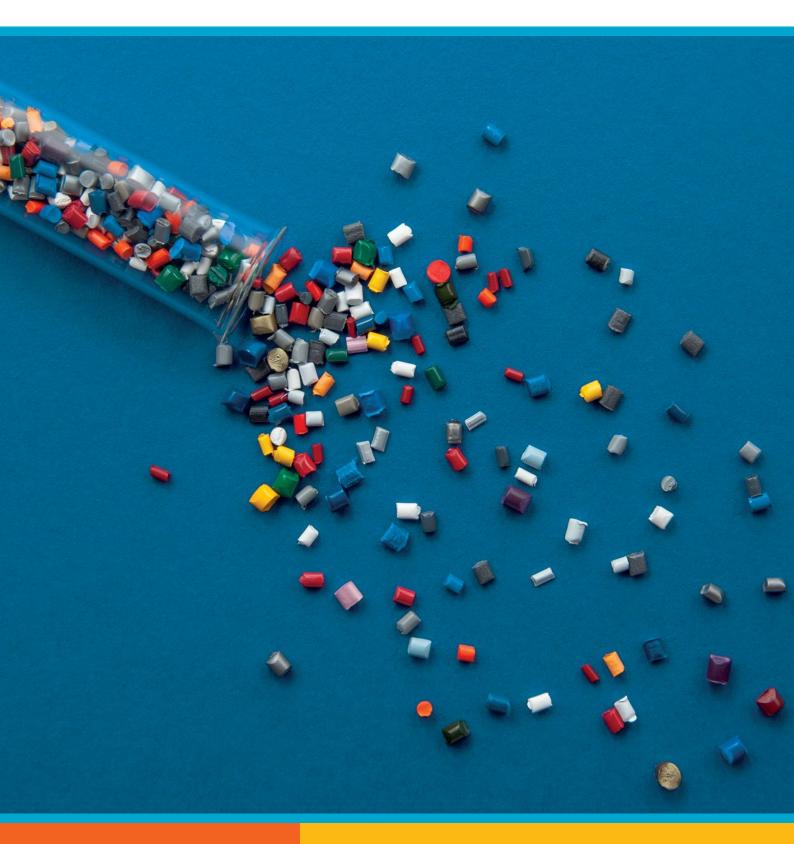




Find out more at distrupol.com/design-develop-deliver







Further Information info@distrupol.com www.distrupol.com

Our highly experienced sales and technical team will support you with mould design, polymer selection, testing and process optimisation.