

# **UPM**

# Company

 UPM has production plants in 16 countries and a global sales network

#### **Turnover**

■ 10 billion € (2013)

# **Employees**

**21,000** 

#### **Branches**

- Chemical pulp and paper production
- Development of new valueadded uses of forest biomass, such as biofuels, biochemicals, biocomposites and fibril cellulose

# **Key materials**

 Cellulose blends for injection moulding and extrusion

### Key bio-based products

- UPM Formi new cellulose fiber reinforced plastic composite
- UPM ProFi wood plastic composite
- Paper
- Label materials
- Riofuels
- Biobased chemicals and additives
- Energy renewable energy production
- Pulp
- Timber
- Plywood



# The Biofore Company

# Company

UPM is the Biofore Company whose production is primarily based on renewable raw materials that are biodegradable and recyclable. Over the past years, UPM has invested in the research and development of new value-added uses of forest biomass, such as biofuels, biochemicals, biocomposites and fibril cellulose.

In addition to paper, UPM is also one of the major chemical pulp producers. UPM's chemical pulp product range covers northern softwood and hardwood pulp as well as eucalyptus hardwood pulp. These fibres are strong and they can be reused or recycled several times. Chemical pulp is a natural Biofore product.

In 2011, UPM launched a new biocomposite, UPM Formi. The composite contains renewable cellulose fibres which reduce usage of oil based plastics. UPM's composite products are examples of UPM's innovative thinking and total lifecycle approach.

#### Material

UPM Formi is designed for injection moulding and extrusion applications. Principal ingredients are specially selected cellulose fibres and virgin polypropylene. Cellulose fibres substantially increase stiffness and strength of polypropylene and allow wide variations in wall thicknesses. This brings new possibilities to injection moulding. Thanks to the vibration dampening properties of wood fibres, the material is well suited especially for demanding sound reproduction.

UPM Formi exhibits unique, tactile qualities with a natural, silky-smooth surface finish that provides a friedly and approachable feel to the material, as well as enhancing the overall emotional experience of the end user of the product.

UPM Formi granulates offer smooth and reliable processability. Due to high quality of pulp raw material, UPM Formi granulates enable clean and odourless composite products. A specially selected mixture of virgin plastic completes the mouldability of granulates for a wide range of end products with precise details. In addition, UPM Formi offers unlimited dyeing possibilities.

The share of renewable material can reach up to 60% thus the product is recyclable or it can be burned for energy at the end of its lifecycle. Moreover, UPM Formi's carbon footprint is significantly lower than traditional plastics'. Renewable fibre raw material is sourced via UPM's supply chain from sustainably managed forests.





#### **Products**

UPM offers several grades for injection moulding and extrusion. UPM Formi GP for general use, UPM Formi SP for special surface, UPM Formi EFP for thin-walled applications and UPM Formi EXP for extrusion.

UPM Formi is suitable for manufacturing both consumer goods and industrial injection moulding and extrusion products. The new composite has extensive opportunities as the product range can vary from acoustics, electronic and automotive industries to furniture, tableware and other goods for everyday living.



Puustelli Miinus kitchen cabinet frame



Tregren herb garden



Genelec M-Series loudspeakers

# Contact

**UPM Biocomposites**Niemenkatu 16

P.O. Box 203 FI-15141 Lahti Finland

Phone: +358 (0) 204 15 113

Contact person

Harri Kosonen

harri.kosonen@upm.com