

BOREALIS TECHNOLOGY

Borealis is a leading supplier of high-quality polyolefin plastics - polyethylene and polypropylene producing over 3.5 million tons of these plastics per year. Borealis' technology shapes plastic products to develop and manufacture products such as food packaging, transport packaging, automotive components, appliances, distribution pipes for water, gas and sewage, power and communication cables, industrial packaging and medical devices. Borealis' leading edge Borstar process technology is opening the route for next-generation innovative and creative developments in plastics.

- **Borstar**

Borstar process is a technology which offers polyethylene (PE) and polypropylene (PP) materials that are stronger and more easily processed than conventional materials. For this specific process high reliability operation is required and experience is needed to manufacture and supply the adequate material. Borealis' BORSTAR™ process uses slurry loop and gas-phase reactors for producing high-grade PE. Borstar PE has a bi-modal molecular weight distribution that gives it a wide range of high quality end-user properties.

- **BorPEX™**

It is Cross-linked polyethylene scores well on higher temperature and very good chemical resistance. BorPEX™ materials from Borealis perform excellently under difficult operation conditions.

- **Borcell™**

Borcell is an extensive range of chemically and physically blown PE compounds offering improved transmission properties and processability. The use of the internet and mobile phones has accelerated the need for accurate and fast transmission of large volumes of data, speech and pictures. This has led to a requirement for enhanced electrical properties of the solid or cellular dielectric insulation materials used in communication cables. Borealis' new Borcell PE cellular compounds are optimised to generate uniform and evenly distributed cells, which enhances transmission properties. In addition, improved flow properties, melt elasticity and purity ensure the cable producer superior processing allowing high line speeds in combination with minimised capacitance variations.

- **Bormed™**

Borealis comprehensive product range covers PE and PP products for injection, rotational moulding and blow moulding processing technologies for a wide range of application areas like; bottles, thin wall packaging, caps and closures, transport packaging, houseware and healthcare. Bormed is trade name of polypropylene for healthcare moulding applications.

- **Borecene™, Borecene Compact™**

High performance rotomoulding polyethylenes based on single site catalyst technology is marketed under the Borecene trade name. Borealis also offer a new and unique black compounded powder under the Borecene Compact™ trade name. Borecene is the superior material for fuel tanks.

- **Superclean™**

Borealis' Superclean™ peroxide based XLPE compounds are produced using state-of-the-art production lines where all possible precautions are taken to ensure perfectly clean material all the way from polymerisation through to packaging of the product in specially designed containers. Today Borealis is working with third generation detectors located at critical points in the production process and in the quality inspection department to better assure the consistency.

- **SuperTR™**

The tradename SuperTR™ is the latest in the family of products for medium- and high-voltage cables established under the trade names Superclean, Supersmooth, and Supercure. SuperTR can be readily used with common strippable/easy strippable insulation screens.

- **Visico and Ambicat™**

Borealis has developed the Visico and Ambicat™ system of moisture crosslinked polyethylene to support producers of low voltage cables in getting superior quality crosslinked PE cables at the lowest total cost of production. The unique system allows cable producers to optimise production on ordinary extruders designed for PVC or thermoplastic PE through longer production campaigns, less scrap as well as higher output and a safer production environment. Visico (Vinyl Silane Copolymer) offers a range of XLPE materials where the crosslinking is initiated by moisture. Visico materials are available for virtually any type of low voltage cable construction, natural material for individual colouring, black for UV resistance, medium density compound for improved heat deformation resistance or as a terpolymer material adding flexibility to the cable design.