

OUTSTANDING FEATURES. OUTSTANDING QUALITY.

# GRUPO REPOL MAKES A BREAKTHROUGH WITH ITS NEW MATERIALS FOR TUBE AND PROFILE EXTRUSION.

Since it was established in 1975, GRUPO REPOL has been leading the way in innovation when it comes to the production of materials for the profile and thermoplastic tube extrusion, and is now a benchmark in the sector. Extensive experience in the formulation of engineering plastics and leading edge technology in production and characterization have allowed Grupo Repol to develop several materials featuring complex and highly innovative characteristics for a wide range of international customers, which has led to a considerable increase in sales over the last year. Technicians carry out exhaustive controls on each product, therefore allowing Grupo Repol to be well ahead of the market requirements.

#### **New materials for tube extrusion by Grupo Repol.**

The wide variety of materials used in this sector allows us to offer specific, tailor-made solutions for each application in the technical profile and tube extrusion.

Both the selection and the production conditions of the materials used have an influence on thermal resistance, aging, UV resistance, elasticity and geometric design, among many other properties.

Throughout its history, Grupo Repol has produced polyamides and polypropylenes for the extrusion of both rigid and flexible tube. However, in order to meet the different market requirements, the company has been developing new formulae for the extrusion of both rigid and

corrugated tube over the past years, and has done so by using materials which also allow the production of both rigid and flexible tubes with different diameters, in accordance with the regulations in force.

Accordingly, the current Grupo Repol portfolio features PA or PP for flame retardant tube extrusion, heat-stabilized, impact modified, glass fiber reinforced and in different colours and fluidity degrees.

Simultaneously, the new developments in PC/ABS for tube extrusion carried out have yielded a wide range of Dinablend grades with different mechanical and flame retardant properties, especially as far as both the inner and surface appearance of the tube are concerned (roughness and gloss).

## Railway sector

Grupo Repol works in the development of new plastic materials with better resistance to fire, and –in so doing– meeting the new European regulations which limit the use of certain products in the railway sector.

Although plastic materials and their compounds are highly appreciated in the railway sector due to their excellent mechanical performance-to-weight ratio, the fact remains that these materials lack proper fire resistance in such aspects as flammability, combustion, flame spread or toxic gases.

Research carried out for this purpose has allowed Grupo Repol to obtain formulations of flame retardant, halogen-free PA Dinalon formulations, EN 45545-2:2013 approved, with proper viscosity and fire resistance properties, to be used in the process of rigid tube extrusion for the railway sector.

Continuous research carried out in the sector along 2015 has borne fruit with the development of a new grade of PA Dinalon, UL 94 VO and HL3 approved, and with high stabilization to UV radiation.

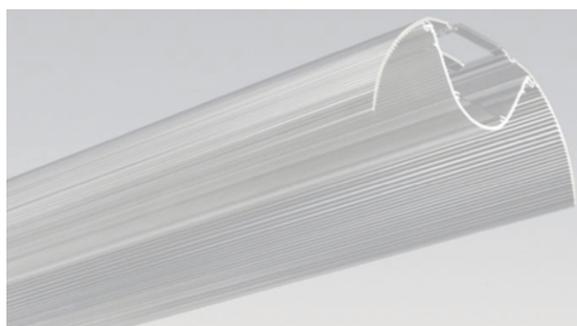
With this new grade, Grupo Repol meets the specific needs of the railway sector, offering reliable solutions in the face of growing demand for fire resistant materials, with excellent finishes and a clear improvement of mechanical properties.

Furthermore, the company makes a clear commitment to its customers' global strategy, thus facilitating the attainment of a common goal: the developing of trend-meeting materials, capable of overcoming challenges in the railway sector.

## Innovating in profile extrusion.

Over the past year, Grupo Repol has worked on the development of new materials for the light profile extrusion. The Dinaxan range covers a great deal of opal and smoked PCs, with several transmittance levels, under yellowness index and ultraviolet

stabilization. Repol's latest development in this sector has been the production of fire retardant, transparent PC (UL94 VO), stabilized to UV radiation, both for profile and film extrusion. Simultaneously, a new grade of opal, VO fire retardant PC has been presented.



Apart from the latest developments in materials for the lightning industry, Grupo Repol focuses on innovation in profile production for the building sector with the introduction of its new material in the Dinaplen range, especially designed to substantially reduce weight in extruded profiles. This new formula reduces weight by up to 10% in comparison with standard load PP, simultaneously improving thermal insulation, thus contributing to increasing energy efficiency in the building process. The new grade of PP Dinaplen increases thermal insulation by 20%, whilst maintaining the most common mechanical properties in this type of pieces. ■

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**Grupo Repol**

Engineering plastics