

Repol

REPOL DEVELOPS NEW MATERIALS WITH THE MAXIMUM SAFETY LEVEL (HL3) FOR RAILWAY VEHICLE INTERIORS



Repol

Innovating
since 1975

SAFETY IN THE RAILWAY SECTOR

The standardization of the railway sector following EN45545-2:2013 Regulation finally harmonized the fire prevention regulations for railway vehicle interiors in Europe.

The use of thermoplastics in the railway sector is assessed from the study of flammability, toxicity and optical density of smokes, thus establishing a hazard level (HL) which may range from 1 to 3.

WHAT DOES AN HL3 SAFETY LEVEL INVOLVE?

HL3 is the maximum safety level for a thermoplastic material according to the hazard risk set by the 2013 EN45545 regulations.

This level involves the need for the following characteristics in materials:

Self-extinguishing properties in accordance with the strictest levels of LOI value (Oxygen Index) and flame resistance.

Low toxicity and opacity of fumes, which are critical factors in the case of an evacuation from a confined space where a fire has started.

REPOL + R+D+i = TOP SAFETY

Repol, in collaboration with several companies in the sector, has developed self-extinguishing grades with the maximum safety level (HL3) for R22 and R23.

Repol started developing materials for the railway sector in 2014. Thanks to continuous commitment to innovation and great experience in the transport sector, as well as in highly fire-resistant materials, Repol has developed three new grades which now join the already existing portfolio of high performance thermoplastics, aiming at offering customers the most technologically advanced solutions.

REPOL GRADES WITH HL3 (R22 & R23) SAFETY LEVEL

DINALON B2S30 V0 UV-0232

PA6, self-extinguishing, UV stabilized

DINALON A1X20 G30V0 H-4381

PA66, self-extinguishing. 30% glass fibre, heat stabilized

DINALON C1X30 G30V0 H-4381

PA/PA66 self-extinguishing. 30% glass fibre, heat stabilized

MAIN FEATURES OF HL3 REPOL GRADES

Repol's grades with a HL3 security level are characterized by:

They are flame retardant compounds with no halogens nor red phosphorous, thus meeting the strictest environmental and health criteria.

They are easily processable and have good mechanical and electrical properties.

They feature great resilience and high impact resistance, and they also provide a significant weight reduction in comparison to materials made of metals or composites.

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ENGINEERING PLASTICS

Dinalon PA is the commercial brand for our thermoplastic compounds based on PA6 and PA66.

La portfolio covers a wide range of grades, ranging from standard (first quality) to customized solutions which feature reinforcements, colour adjustments, impact modifications, flame retardants, lubricated grades and many other possibilities which allow us to rapidly meet our customers' requirements in a variety of sectors, such as automotive, electrical, machinery, agriculture, construction, leisure, furniture and others.

More information on PA DINALON at
www.repol.com