

Polymer characterization and process control

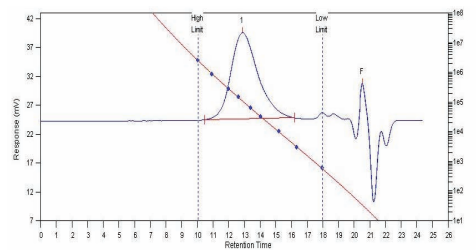
Industry
Automotive

Region
Global

Industry challenge

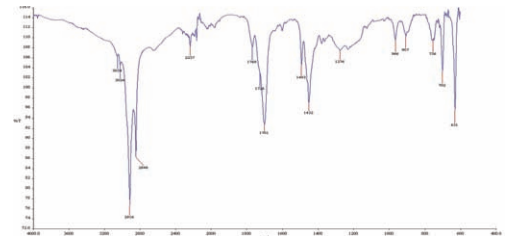
Polyscope styrene copolymer products are found in various applications. One of these applications is the use in car dashboards. The material gives it the required looks, but also the needed properties to guarantee safety under all conditions. Many OEM's have released XIRAN® styrene maleic anhydride co-polymer as their key material for the critical structural car parts.

Intertek supported Polyscope by testing new materials against national and international OEM specific standards, pilot plant injection moulding, and material identification to optimize processes and products.



Quality control on polydispersity (Mw/Mn) of styrene maleic anhydride co-polymer using GPC-RI. (example PD 2.52 (Mw 158241 A / Ms 62842 A))

Cause of contamination in piping in compounding-process, Identification via the use of FTIR (Attenuated Total Reflection), mainly organic and consisting of ABS and wax, rather than styrene maleic anhydride co-polymer.



The Solution

Intertek services delivered to Polyscope includes 24hr-service quality control for a wide range of materials analysis:

- o Monomers, oligomers and rest solvents, using GC-FID
- o Viscosity, acidity, opacity, yellowness, and water content
- o Specific tests support during development of new product-types
- o Physical characterization of styrene maleic anhydride co-polymer and compounds, using a variety of laboratory testing techniques including Charpy, IZOD, Tensile, HDT, Vicat, MFI, VEN, Density, DSC and more

For more information on these services visit:

www.intertek.com/automotive/polymers-and-plastics-testing/materials-selection

For more information on Polyscope products visit:

<http://www.polyscope.eu/applications/automotive>

