

PRESS RELEASE

DOMO's TECHNYL® PURE: A Game-Changer in Hydrogen Fuel Cell Cooling Circuit Performance

- DOMO demonstrates TECHNYL® polyamides effectively limit ion migration, helping to reduce the conductivity of fuel coolant
- TECHNYL® PURE outperforms reference materials in H2 fuel cell cooling circuit performance, resulting in a sixfold increase in the ion filter lifetime

Ghent, 13.02.2024 - DOMO Chemicals, a global leader in the production of high-quality engineered materials and sustainable solutions, has made a landmark breakthrough with its TECHNYL® polyamides, drastically reducing coolant conductivity in hydrogen fuel cell stacks. This innovation, supported by comprehensive testing, establishes TECHNYL® as the premier choice for enhancing fuel cell stack performance and durability.

Historically, polyamides (PA) were not considered optimal for cooling circuits in hydrogen fuel cell technology due to concerns about ion leaching and increased coolant conductivity. However, DOMO's latest research overturns these assumptions, demonstrating that TECHNYL® polyamides effectively limit ion migration, thereby maintaining lower coolant conductivity and extending system longevity.

"Our research reveals the 'polyamide paradox,'" says Maarten Veevaete, Director Application Center at DOMO.

"Contrary to previous beliefs, TECHNYL® grades have a positive impact on the fuel cell cooling circuit. Their chemical interaction with the coolant reduces its conductivity, significantly enhancing system longevity and leading to a five to sixfold increase in the lifetime of ion filters. This effectively reduces maintenance requirements and associated costs," adds Maarten Veevaete.

TECHNYL® PURE, a top-tier formulation designed to minimize ion leaching, consistently maintains lower coolant conductivity from the outset. This innovative material surpasses traditional solutions*, offering a more efficient and durable option for hydrogen fuel cell cooling loops. **

The TECHNYL® range for the fuel cell cooling circuit caters to specific customer requirements, offering a variety of grades including PA6 and PA66-based alternatives alongside the flagship TECHNYL® PURE. Discover the optimal solution for enhancing your hydrogen fuel cell cooling loop's performance and longevity by contacting the TECHNYL® team. [<https://www.domochemicals.com/>]

* Data based on internal research conducted by DOMO, available upon request.

** Calculation based on a commercial vehicle lifetime of 500,000 km, with a filter change every 90,000 km at a battery operating temperature of around 80°C.

About DOMO Chemicals

DOMO Chemicals offers polyamide-based engineered materials solutions and services for the automotive, consumer goods, industrial goods, electricals and electronics industries. Based on the company's upstream and downstream integration, DOMO also serves the agricultural, chemical, pharmaceutical, fiber and textile sectors. Its complete portfolio of polymer-based products and services includes chemical intermediates, base polymers, engineering plastics and performance fibers. Some of its best-known brands include TECHNYL® engineered materials, STABAMID® PA66 virgin grades, DOMAMID® PA6 virgin resins, NYLEO® Polyamide 66 fibers and TECHNYL® 4EARTH® sustainable polyamides.

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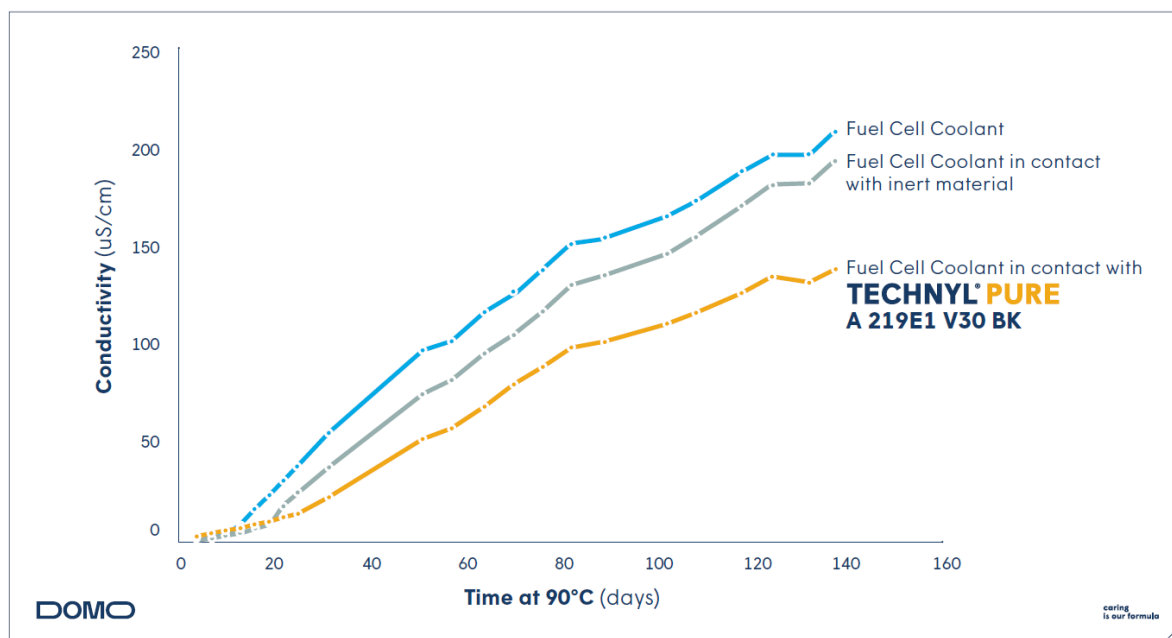


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