

Feiplastic 2017:

Solvay Group supports LA markets growth with a breakthrough polyamide offer

SOLVAY GROUP AT FEIPLASTIC: BOOTH B70

São Paulo, April 3, 2017 – The Solvay Group, which in Brazil also operates under the Rhodia brand, is investing in the expansion of its high-performance engineering plastics portfolio. The company intends to strengthen its market share in the region, serving such highly technologically demanding markets as the automotive, electrical and industrial consumer goods segments.

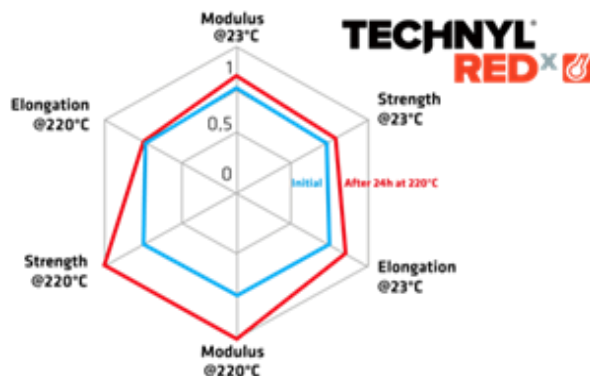
“SMART MOLECULE” HEAT PERFORMANCE TECHNOLOGY TECHNYL® REDx

Technyl® REDx material, which integrates a unique "smart molecules" self-reinforcement technology, outperforms conventional specialty polymers used in thermal management systems, especially in the automotive industry, to overcome engine downsizing constraints.

This patented innovative technology provides excellent processability. The difference, however, occurs after injection, when the parts are subjected to elevated temperatures during use, leading to rapid cross-linking that boosts the mechanical properties far beyond their initial values.

Technyl® REDx can be processed at energy-saving mold temperatures below 100°C, allowing simple and cost efficient manufacturing. Ageing tests over 3,000 hours at 220°C demonstrate very high retention property as well as a tensile property gain of more than 50 percent, without degradation of elongation at break.

Intrinsically heat-friendly, **Technyl® REDx** eliminates the need for heat shields that may be required when using conventional materials.



Tensile strength of Technyl® REDx at room temperature and after exposure to heat of 200°C



'Smart molecule' technology makes Technyl® REDx the ideal solution for highly demanding Charge Air Coolers

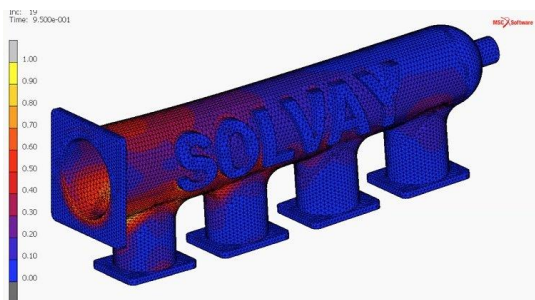
SINTERLINE® TECHNOLOGY COMBINED WITH MMI TECHNYL® DESIGN SHAPE THE FUTURE OF 3D PRINTED FUNCTIONAL AUTOMOTIVE PARTS

The Company is strengthening its **Sinterline® Technyl® polyamide 6 (PA6)** offer for additive manufacturing of functional parts with **MMI Technyl® Design**¹. Benefiting from a proven track record in injection technologies, this predictive simulation platform now offers a major step towards the design optimization of 3D printed technical parts.

For the first time, Solvay applied its predictive simulation solution **MMI Technyl® Design** to a functional 3D printed automotive part in **Sinterline®** – the plenum chamber for the breakthrough Polimotor 2 all-plastic engine project. Polimotor 2 aims to develop an engine weighing 63 to 67 kg (138-148lbs), about 40 kg (90lbs) less than today's standard production engine, thereby lowering fuel consumption and CO₂ emissions.



3D printed Polimotor 2 intake pump using Solvay's Sinterline® Technyl®



Failure indicator distribution before ultimate plenum failure in MMI Technyl® Design simulation

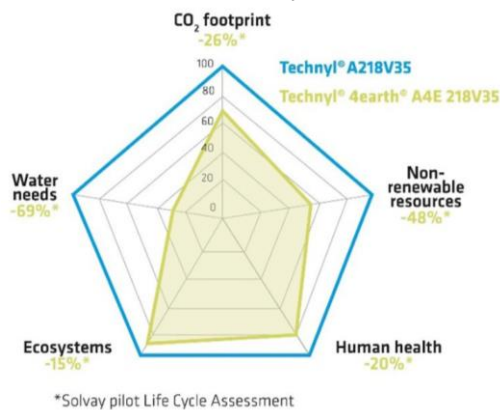
¹ MMI Technyl® Design is an advanced service powered by Digimat™ from e-Xstream, an MSC Software company.

TECHNYL® 4EARTH® TO REDUCE THE ENVIRONMENTAL FOOTPRINT OF HIGH PERFORMANCE MATERIALS

Technyl® 4earth® is a brand new solution that provides breakthrough environmental benefits as compared to traditional Polyamide 6.6 (PA6.6).

This pioneering innovation is born from Move 4earth® patented process which transforms stable sources of post-industrial or end-of-life technical textiles, such as automotive airbags, into prime quality engineering plastics. This unique technology offers novel eco-friendly products with similar performance when compared to traditional **Technyl®**.

Solvay's initial cradle-to-gate assessment shows outstanding results: carbon footprint reduced by a quarter; consumption of non-renewable resources divided by two; and water use decreased by over two-thirds compared to traditional compounds.



The cradle-to-gate environmental footprint of Technyl® 4earth® is significantly reduced vs. prime Technyl® PA6.6.

INVESTING IN LATEST EQUIPMENT TO REMAIN AT THE FOREFRONT OF INNOVATION

Committed to maintaining its leadership in offering services and innovative solutions in polyamide, Solvay has invested in equipping and strengthening the infrastructure of its Research, Innovation and Technology Laboratory located in São Bernardo do Campo (São Paulo state). This leverage Solvay's ability to generate more value for customers and to reach new businesses and markets.

Among the latest acquisitions are an extruder enabling the development of new Technyl® polyamides and scale-up analysis and some equipment performing tests and analysis in special thermal conditions.

With a more flexible local process of innovation Solvay is able to offer alternatives to meet the specific demands of customers.

Solvay also supports customers with a complete array of technical services designed to speed the time to market of new applications, from advanced material characterization to application validation. This offering includes 3D printing of PA6-based functional prototypes in Sinterline® PA6 powders, predictive simulation with MMI Technyl® Design as well as part testing at fully equipped APT® Technyl® Validation centers



Solvay's plastics technology laboratory has an industrial scale extruder to speed up the time to market for new applications

Marcos Curti, director for the Americas of the Solvay Group Performance Polyamides global business unit, says the company has been working hard with customers on projects to expand the use of engineering plastics in the various markets in which this high-performance material is used.

"All of these products and technologies we are presenting in the region - **Technyl® REDx**, **Sinterline® Technyl®** combined with **MMI Technyl® Design** and **Technyl® 4earth®**, - along with laboratory expansion, aim to support this growth in the region", he says.

According to Marcos Curti, the company integrates the joint effort of the productive chain of the sector to seek more productivity and competitiveness for the products manufactured in the country. "Internally, we have strengthened operational excellence programs and introduced innovations, both local and imported from other units of the Group's worldwide because we still believe the sector's potential," says Curti.

The development of plastic and polymer chain will be the subject of a special talk entitled, "**Sustainability and innovation - the production point of view**," that Curti will give on April 7 at the Feiplastic trade show.

Service: Solvay Group at Feiplastic 2017– booth B70
From April 3 to 7, 2017 – from 11:00 am to 8:00 pm - Expocenter Norte (SP)

About the Solvay Group

Solvay is a multi-specialty chemical company, committed to developing chemistry that addresses key societal challenges. Solvay innovates and partners with customers in diverse global end markets. Its products and solutions are used in planes, cars, smart and medical devices, batteries, in mineral and oil extraction, among many other applications promoting sustainability. Its lightweighting materials enhance cleaner mobility, its formulations optimize the use of resources and its performance chemicals improve air and water quality. Solvay is headquartered in Brussels with around 27,000 employees in 58 countries. Pro forma net sales were € 10.9 billion in 2016, with 90% from activities where Solvay ranks among the world's top 3 leaders. Solvay SA (SOLB.BE) is listed on Euronext Brussels and Paris (Bloomberg: SOLB.BB - Reuters: SOLB.BR) and in the United States its shares (SOLVY) are traded through a level-1 ADR program. In Brazil, Solvay also operates under the Rhodia brand.

Information for the press:

About the Solvay Group in Brazil

Roberto Custódio - roberto@pexpress.com.br

Marcela de Paula – marcela@pexpress.com.br

Tel. (+ 55 11) 3284 5164 or mobile (+ 55 11) 999 33 8148