

## Solvay Introduced Technyl® One Polyamide to the Asia-Pacific Market at Chinaplas 2014

*Innovative polymer technology to address miniaturization, safety and productivity challenges in electrical equipment for energy management and building automation*

**Lyon, FRANCE – May 8, 2014** – Solvay Engineering Plastics, a global leader in advanced polyamide solutions, took the opportunity of Chinaplas 2014, Asia's leading plastics and rubber industry exhibition, to introduce Technyl® One, its latest innovation in polymer technology, to customers in the region.

Technyl® One is a new generation of polyamide resins addressing major challenges in electrical equipment for energy management and building automation, including safety, miniaturization and increased productivity. New initiatives for "smart cities" are driving a trend towards multiple smart and connected devices, such as sensors and controllers, helping businesses and homes to optimize their efficient use of electrical energy.

"We recognize that energy demand will skyrocket as populations across the globe, particularly in Asia, continue to congregate in growing megacities, and more than 40 percent of greenhouse emissions are currently caused by industrial, commercial and residential buildings," underlines Michel Rapeaux, Material Expert, Schneider Electric Shanghai R&D Center. "We are global leaders in intelligent energy management and building automation solutions that can provide up to 30 percent energy savings. Thanks to new generation materials such as Technyl® One which offer high-performance and excellent processability, we can develop products to do it now."

With its high-flowability and high-temperature matrix as well as excellent electrical properties and halogen-free fire performance, the new polymer technology of Solvay Engineering Plastics is the ideal solution for applications requiring these critical properties: high-voltage, miniature and molded-case circuit breakers, contactors and other power control equipment.

"There is a growing demand for enhanced electrical safety and fire protection solutions throughout Asia, and Chinese exports, particularly to Europe, are also subjected to increasingly stringent regulations governing flammability, flame propagation, smoke generation and toxicity," says Jonson Xing, Global Electrical Equipment Market Manager for Solvay Engineering Plastics. "In response to these needs, new Technyl® One combines superior electrical and mechanical properties under critical operating conditions with best-in-class fire protection behavior."

In addition, Technyl® One offers a wide processing window, accurate filling and good surface aspect even at 50% glass reinforcement. In addition, there are no corrosion drawbacks for tools and injection molding machines - a common problem with high-temperature nylons. This alone can significantly reduce manufacturing costs and is of particular importance in Asia's emerging markets where a molder might have to face processing several different types of polymers with one machine and may not be able to afford keeping equipment just for high-specialty fire protection applications.

Further to this, the entire range of Technyl® One products, both heat stabilized and/or flame retarded, exhibits a significantly reduced moisture uptake (by up to 40%) when compared to other polyamides. This in turn leads to excellent dimensional stability which allows this family of products to be used in high specification applications with critically close tolerances, notably in the Asian climate where resistance to hot and humid environments can be considered essential.

The first Technyl® One grade from Solvay Engineering Plastics commercially available worldwide was developed in global coordination and with the active participation of Solvay's Asian R&I teams to ensure it would meet Asian needs. It is a halogen-free flame-retardant material that provides a UL94 V0 rating at only 0.4 mm of wall thickness as well as unmatched thermal ageing properties (150°C electrical RTI – Relative Thermal Index) and a high comparative tracking index (CTI 0 for 600 volts and higher).

A further range of high-heat stabilized and glass fiber reinforced Technyl® One products has been formulated which can be used in a variety of application areas where even higher thermal resistance (above 220 °C for 1,000 hours) and high dimensional stability is required.

Beyond customizing its materials to the precise requirements of end products, including color sampling, Solvay Engineering Plastics also supports its customers with dedicated design, prototyping and testing services. Customer specific solutions can be compounded at Solvay's UL registered Asian facilities.

Solvay made the announcement at Chinaplas 2014 held from April 23-26 at Shanghai International Expo Center where the company displayed breakthrough innovations and materials which help improve the quality of daily life across five central themes: Move, Connect, Energize, Live and Care.

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#### About Solvay Engineering Plastics

Solvay Engineering Plastics, the global specialist in polyamide-based engineering plastics, has for the past 60 years developed, manufactured and marketed, under the brand Technyl®, a complete range of high performance plastics for the automotive, electrical, construction and consumer goods markets. With a growth strategy bolstered by six production sites worldwide, Engineering Plastics employs its expertise and innovation capabilities in order to more closely serve the needs of its customers, through a global network of technical and R&D centers. Learn more at [WWW.TECHNYL.COM](http://WWW.TECHNYL.COM).

#### About Solvay

As an international chemical group, Solvay ([WWW.SOLVAY.COM](http://WWW.SOLVAY.COM)) assists industries in finding and implementing ever more responsible and value-creating solutions. Solvay generates 90% of its net sales in activities where it is among the world's top three players. It serves many markets, varying from energy and the environment to automotive and aerospace or electricity and electronics, with one goal: to raise the performance of its clients and improve society's quality of life. The group is headquartered in Brussels, employs about 29,400 people in 56 countries and has generated 9.9 billion euros in net sales in 2013. Solvay SA (**SOLB**) is listed on **NYSE EURONEXT** in Brussels and Paris (Bloomberg: **SOLB:BB** – Reuters: **SOLB.BR**).

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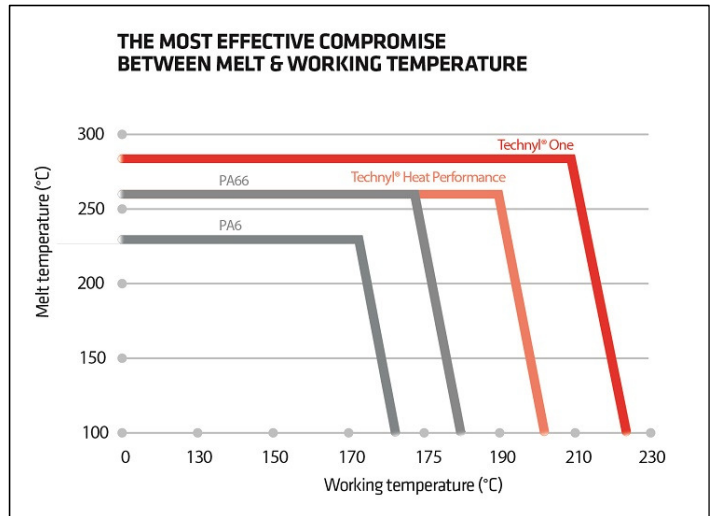
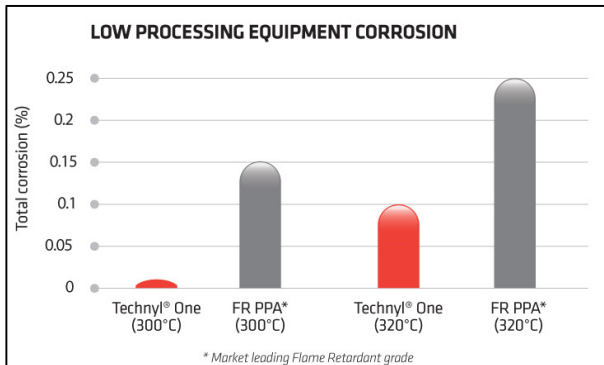
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**Technyl® One - An innovative technology for energy management devices.**



**Technyl® One - A new technology for electrical protection.**



**Technyl® One from Solvay reduces processing equipment corrosion.**

**New Technyl® One is the most effective compromise between melt and working temperature.**

Component - Plastics E44716

**SOLVAY ENGINEERING PLASTICS**  
 PLATEFORME INDUSTRIELLE DE BELLE-ÉTOILE, AV. RAMBOZ, BP 64, 69192 SAINT-FONS CEDEX - FRANCE

**J60X1 V30**  
 Polyamide (PA), Technyl® One, furnished as pellets

Color	Min Thk (mm)	Flame Class	HWI	HAI	RTI Elec	RTI Imp	RTI Str
ALL	0.4	V-0	1	0	150	120	140
	0.8	V-0	0	0	150	120	140
	1.0	V-0	0	0	150	120	140
	1.6	V-0	0	0	150	130	150
	3.0	V-0	0	0	150	130	150

Comparative Tracking Index (CTI): 0  
 Dielectric Strength (kV/mm): -  
 High-Voltage Arc Tracking Rate (HVTR): -  
 Dimensional Stability (%): -

Inclined Plane Tracking (IPT): -  
 Volume Resistivity (10<sup>10</sup> ohm-cm): -  
 High Volt, Low Current Arc Resistance (D495): -

**NOTE - Materials designated "Technyl" may be prefixed by the letters "TY".**

ANSI/UL 94 small-scale test data does not pertain to building materials, furnishing and related contents. ANSI/UL 94 small-scale test data is intended solely for determining the flammability of plastic materials used in the components and parts of end-product devices and appliances, where the acceptability of the combination is determined by UL.

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 Last Revised: 2013-09-20 © 2013 UL LLC

**Technyl® One UL Yellow Card – RTI rating of 150°C at 0.4mm wall thickness.**

(All graphics courtesy Solvay SA)