



## Solvay launches Technyl® One: a new solution challenging the limits of miniaturization for electrical protection

*Superior electrical performance compared to traditional high-performance plastics*

*Low corrosion ensuring processing tools longevity*

*High flowability for increased productivity and design freedom*

Lyon, France, October 16, 2013 --- Solvay Engineering Plastics, a global leader in polyamide solutions, has developed Technyl® One, a new patented polymer technology designed especially to help electrical protection products manufacturers address miniaturization challenges. Announced at K'2013 in Düsseldorf, Germany, this innovative technology effectively yields high electrical performance while drastically reducing tool corrosion and simplifying processing.

Manufacturers today continue to develop smaller and more complex parts to support product miniaturization and multi-functionality, which results in more demanding material requirements. To meet these challenges, plastics must provide high flowability for reduced product wall thickness as well as enhanced electrical in-use performance (e.g. arc resistance).

*“High-end electrical protection devices, such as high-voltage circuit breakers and contactors, demand superior electrical and mechanical properties under critical operations,”* adds Sylvie Teyssier, Materials Manager at Schneider Electric, the global leader in electrical equipment market. *“Innovative polyamides like Technyl® One meet these very stringent requirements while offering easy processing and significant resistance to corrosion.”*

Pilot applications include high-range mini circuit breakers, moulded case circuit breakers as well as contactors. Beyond customising the material to the precise requirements of the end product, including colour sampling, Solvay Engineering Plastics also supports its customers with dedicated design support and testing.

*“In contrast to high temperature matrices, Technyl® One allows a wide processing window, accurate filling and good surface aspect even at 50% glass reinforcement,”* explains James Mitchell, Global Electrical Equipment Market Director at Solvay Engineering Plastics. *“In addition, there are no corrosion drawbacks for tools and injection moulding machines, helping manufacturers to minimize their production costs.”*

The first grade of Technyl® One introduced by Solvay Engineering Plastics is a halogen-free flame-retardant solution that demonstrates best-in-class fire protection behaviour, such as low smoke generation and zero flame propagation. With a UL94 V0 rating at a wall thickness of only 0.4 mm and unmatched thermal ageing properties (150°C electrical RTI - Relative Thermal Index), Technyl® One bridges the gap to high temperature polymers. The application profile is complemented by outstanding electrical properties, including a high comparative tracking index (CTI 0 for 600 volts and higher).

The new material is commercially available worldwide. For stringent quality control, all Technyl® One solutions are supplied by Solvay from in-house compounding facilities.

For 60 years, high-performance Technyl® materials have led to value-added innovations in such varied industries as automotive and transport, construction and energy, consumer goods and industrial equipment. Today, the Technyl® range is stronger than ever owing to the differentiating offer of products and services for Metal Replacement, Fire Protection, Thermal Management and Fluid Barrier applications founded on Solvay Engineering Plastics' expertise.

For further information about Technyl® solutions please visit [www.technyl.com](http://www.technyl.com)

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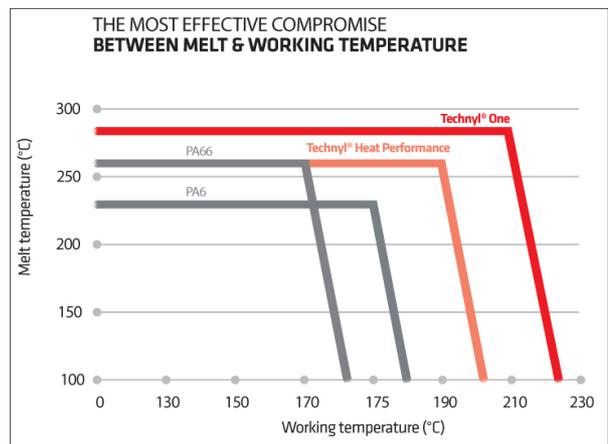
As an international chemical group, [SOLVAY](#) assists industry in finding and implementing ever more responsible and value-creating solutions. The Group is firmly committed to sustainable development and focused on innovation and operational excellence. Solvay serves diversified markets, generating 90% of its turnover in activities where it is one of the top three worldwide. The group is headquartered in Brussels, employs about 29,000 people in 55 countries and generated 12.4 billion euros in net sales in 2012. Solvay SA ([SOLB.BE](#)) is listed on [NYSE EURONEXT](#) in Brussels and Paris (Bloomberg: [SOLB.BB](#) - Reuters: [SOLBt.BR](#)).

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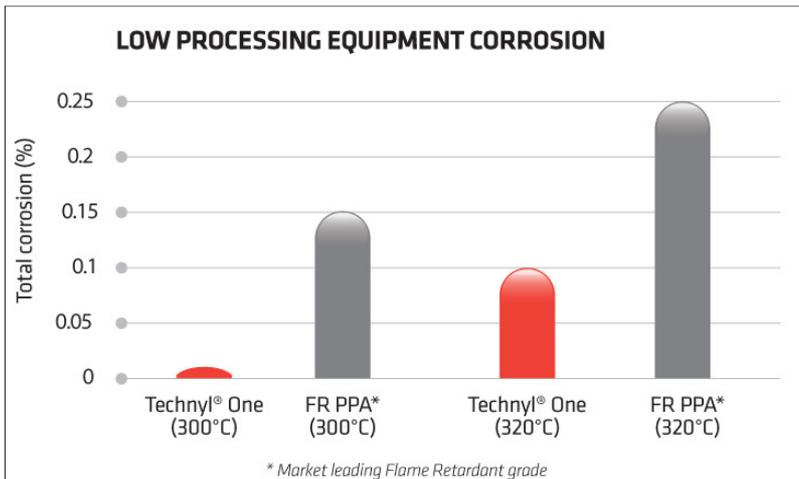
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**Photo Caption:**  
*Technyl<sup>®</sup> One - an innovative technology for electrical protection.*



**Caption:**  
*New Technyl<sup>®</sup> One is the most effective compromise between melt and working temperature.*



**Caption:**  
 Technyl® One from Solvay reduces processing equipment corrosion

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>12</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

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**Caption 4:**  
 Technyl® One UL Yellow Card - RTI rating of 150 °C at 0.4mm wall thickness