

## ABB Selects Solvay's Technyl® One for New Contactor Application

*Simultaneously Addresses Increasing Safety Demands and Superior Processing Efficiency  
for Challenging Miniaturization Requirements of Electrical Equipment*

**LYON, France October 15, 2015** – ABB, a world leader in power and automation technologies, has chosen Solvay Engineering Plastics' Technyl® One for a new contactor application. Technyl® One is an innovative generation of polyamide (PA) resins addressing major challenges in electrical equipment for energy management and building automation, such as safety, miniaturization and increased productivity.

With its high-flowability and high-temperature matrix, as well as excellent electrical properties and halogen-free fire performance, Technyl® One has successfully demonstrated its suitability for demanding applications within the electrical protection segment. Targeted applications include Miniature Circuit Breakers (MCBs), Moulded Case Circuit Breaker (MCCB) and contactor parts requiring high amperage and thermal resistance performance.

*"The ease of processing of this Technyl® One J 60X1 V30, combined with its high functionality, has been a determining factor for ABB during the development phase of our new contactor application. We observed during the electrical overload test, that the material exhibited a high retention of surface properties,"* states Jacques Dumoux, ABB Plastic Material Manager (Low Tension). *"For short durations, during this critical test, the connections of the new contactors are exposed to significant overloads - up to ten times the normal amperage which generates very high temperatures, to which the surrounding plastic parts must resist."*

J.Dumoux added, *"Due to its unique characteristics, Technyl® One withstood creep and softening behavior throughout this stringent analysis. Previously, only materials such as crosslinked polyamide, polyphthalamide or thermosets passed these tests."*

Continuous product miniaturization together with an increasing functionality is a constant challenge for the E&E industry. *"Further, in the last decade the EU directives RoHS and REACH (SVHC) have had a significant impact on flame retardant technologies. These directives impacted a global market shift towards halogen-free plastics for the E&E industry,"* says Dr. James Mitchell, Global EE Market Director at Solvay Engineering Plastics.

*"However, specifically for glass fibre filled polyamide and PBT, the adoption of the most efficient halogen-free flame retardant technology has also been associated with drawbacks in terms of physical properties and processing issues like tool corrosion. The superior rheological behaviour of Technyl® One helps reduce the level of corrosive degradation during processing, which is beneficial to the tooling equipment as well as process and product consistency overall, thereby addressing both safety demands and meeting OEMs economic and processing needs,"* Dr. Mitchell added.

Technyl® One J 60X1 V30 grade from Solvay Engineering Plastics 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).

In addition to a fully compliant yellow card, Technyl® One J 60X1 V30 also fulfills the new European standard EN 45545-2 that will come into force by 2016. This material offers the highest level of low-smoke performance being classified HL3 under R22 and R23. The current offering includes as stand natural, grey and black grades. Substantial know-how has been built around laser marking and formulated grades are available for customer specific UV / YAG<sup>1</sup> laser system requirements.

Solvay Engineering Plastics is exhibiting at FAKUMA 2015. To learn more about how Technyl® One helps address demanding challenges for the design and manufacture of electrical equipment, visit Booth 4213 in Hall B4.

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<sup>1</sup> YAG is an acronym for Yttrium Aluminum Garnet

#### ABB Group

ABB ([abb.com](http://abb.com)) is a leader in power and automation technologies that enable utility, industry, and transport and infrastructure customers to improve their performance while lowering environmental impact. The ABB Group of companies operates in roughly 100 countries and employs about 140,000 people.

#### About Solvay Engineering Plastics

Solvay Engineering Plastics is the global specialist in polyamide-based engineering plastics, with more than 60 years of experience in the development, manufacture and marketing of a complete range of high-performance materials under the Technyl® brand for demanding applications in automotive, electrical and electronics, construction, consumer goods and other markets. With a growth strategy bolstered by six production sites worldwide, Solvay Engineering Plastics employs its expertise and innovation capabilities in order to serve the needs of its customers more closely through a global network of technical and R&D centres. Learn more on Technyl® brand at [WWW.TECHNYL.COM](http://WWW.TECHNYL.COM).

#### About Solvay

As an international chemical group, **SOLVAY** 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 aeronautics 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 26,000 people in 52 countries and generated 10.2 billion euros in net sales in 2014. Solvay SA (**SOLB**) is listed on **EURONEXT** in Brussels and Paris (Bloomberg **SOLB:BB** – Reuters: **SOLB.BR**).

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Courtesy ABB

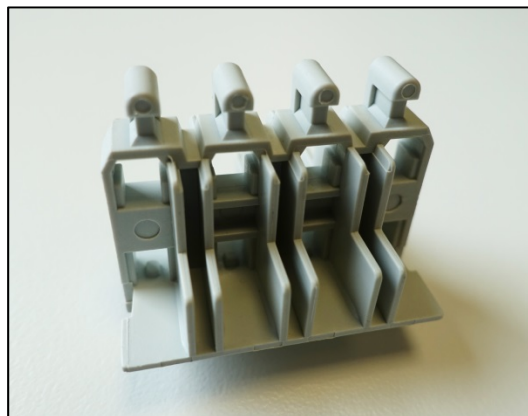
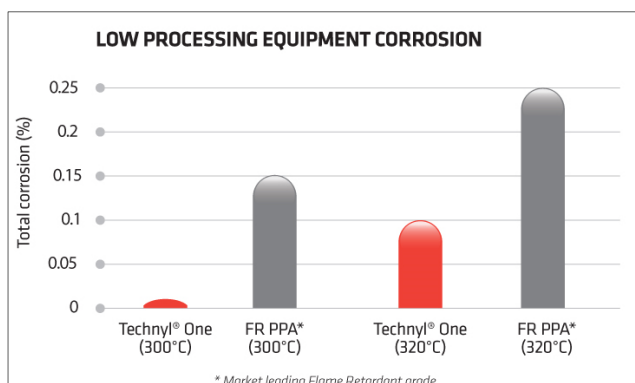


ABB Contactor made with Technyl® One  
Courtesy ABB



**Technyl® One reduces processing equipment corrosion**  
Courtesy Solvay Engineering Plastics

**TECHNYL®**  
**ONE**