INNOVATION REDUCES PAIN OF KEY PLASTICIZER SUPPLY SHORTAGE

CASE STUDY: SYNPLAST™ L9TM PLASTICIZER
THE CHALLENGE
When formulating flexible PVC for high performance wire and cable applications, plasticizer selection is a critical factor. Compliance with environmental, regulatory and safety requirements can depend on the right combination of raw materials. Without these materials, performance goals might never be reached.

Case in point: A leading wire and cable polymer formulator faced significant business risk in late 2013 due to a global supply disruption of the linear 810 alcohol used to produce 810TM, a specialty trimellitate plasticizer offered by numerous plasticizer manufacturers.

Without access to 810TM plasticizer, the formulator was struggling to achieve the necessary flexible PVC performance properties at both elevated and low temperatures. Without an adequate plasticizer substitute in their formulating toolbox, the formulator was barely able to supply its existing customer base and could not pursue new business opportunities.

THE SOLUTION
Recognizing a shortage of 810 alcohol was imminent and would affect 810TM plasticizer supply, PolyOne’s cross-functional Synthetic Esters team proactively began developing a replacement plasticizer. When the formulator reached out to PolyOne with their dilemma, the team was already prepared with a solution.

PolyOne worked with the customer to understand the in-depth requirements of this application and quickly delivered samples and preliminary performance data for the new L9TM plasticizer, made with linear 9 alcohol, for initial evaluation. The customer then performed additional testing specific to the rigorous demands of their wire and cable applications, and the results were favorable. PolyOne’s manufacturing flexibility and agility enabled rapid scale-up, production and delivery of the new L9TM within a week of receiving a purchase order, enabling the customer to begin agency re-qualification trials with lightning-fast speed.

THE IMPACT
Despite a global supply shortage, the PVC formulator was able to count on PolyOne for an innovative solution that enabled them to deliver high performance products on time and under budget, while establishing a competitive advantage in the marketplace. Additionally, this customer was able to grow market share during the global shortage, because its competitors relied on the scarce 810TM plasticizer.

Collaboration with PolyOne’s experienced team helped to remove supply restrictions for the customer and enabled quick scale-up and initial small-volume production of an alternative solution at a better cost position than the original 810TM plasticizer.

PolyOne offers a broad plasticizer product portfolio that includes bio-based, non-phthalate, high-performance linear chemistries and customizable solutions for a variety of applications.

To learn more, contact PolyOne at +1 866-POLYONE (1 866-765-9663) or visit www.polyone.com