

## FOSTER INTRODUCES LOPRO PLUS<sup>TM</sup> NANO REINFORCED COMPOUNDS FOR CATHETERS

PUTNAM, CT USA – (**June 5, 2014**) - Foster Corporation, a leader in custom polymers for medical devices, introduces LoPro Plus<sup>TM</sup> radiopaque compounds reinforced with nanoparticles for improved pushability of thin wall catheters. These compounds allow for extrusion of single layer tubes with radiopacity and strength properties equivalent to conventional two layer tubes, in which each layer provides the distinct properties. LoPro Plus reduces material and inventory costs when compared to standard two layer constructions.

Radiopaque compounds typically include 30% to 40% barium or bismuth filler to provide fluoroscopic visibility of catheters within blood vessels; however, these fillers are not designed to improve strength properties. Improved pushability and torque for catheters that must reach deep in the body or precise locations often requires coextrusion of additional layers using polymers with high strength properties. This can increase manufacturing costs due to the purchase and inventory management of multiple materials. LoPro Plus compounds combine radiopacity and strength enhancement in a single material designed to replace the two materials used for traditional extrusions.

LoPro Plus compounds use particles that are less than a nanometer thick and up to 1,500 times the thickness in length. These extremely small reinforcements are dispersed throughout the polymer at the molecular level to improve physical properties. When added to radiopaque filled compounds in small quantities, the nano particles improve rigidity without increasing brittleness. Recent studies performed by Foster indicate the addition of 3% nanoparticles to a 72 durometer polyether block amide (PEBA) with 35% bismuth filler, improves flexural modulus by 60% and increases elongation by 10%.

"Catheters require enhanced performance properties to reach deeper inside the body. At the same time, device manufacturers are aggressively pursuing cost reductions associated with these devices," said Bill Blasius, Manager of R&D and Polymer Science for Foster Corporation. "LoPro Plus compounds are designed to replace multi-layer tubes with a single layer, which will reduce material and inventory costs."



LoPro Plus compounds are the latest addition to Foster's portfolio of radiopaque polymers that leverage nano technology for enhanced performance. For more information about LoPro Plus nanoparticle enhanced radiopaque compounds, please visit <a href="www.fostercomp.com">www.fostercomp.com</a>.

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## **About Foster Corporation**

For 25 years, Foster Corporation has been at the forefront of medical and materials solutions based on extremely precise polymer\_technology. Foster Corporation is a leading supplier of custom biomedical polymers for the medical device industry, including custom compounds for minimally invasive devices, polymers blends for implants, and drug/polymer blends for combination products. For more information visit <a href="https://www.fostercomp.com">www.fostercomp.com</a>.