



FOSTER INTRODUCES NANO REINFORCED NYLON ALLOYS FOR STRUCTURAL MEDICAL COMPONENTS

PUTNAM, CT, USA - (**December 8, 2016**) - Foster Corporation, a leader in polymer solutions for healthcare markets, introduces Nanomed MAX[®] compounds for medical device components that require high strength, yet cannot use metals or traditional reinforced plastics. These compounds, based on an alloy of meta-xylene diamine polyamide (MX nylon), are United States Pharmacopeia (USP) Class VI tested and suitable for reusable instruments or components that must withstand gamma, e-beam and ethylene oxide sterilization.

Minimally invasive procedures are increasingly used throughout the healthcare industry. New procedures require instruments, fixtures and components that do not interfere with magnetic resonance imaging (MRI), computerized axial tomography (CAT), fluoroscopy, and x-ray imaging. Metals are not suitable and plastics often require reinforcing additives, such as glass fiber, to provide sufficient strength for structural components. However, these traditional additives are too large for molding or extruding intricate device components with thin wall sections. Unreinforced, high strength plastic options, such as polyetheretherketone (PEEK), are often cost prohibitive.

Nanomed MAX compounds incorporate nanoclay particles into a high strength nylon alloy. These platelet-shaped particles, less than a nanometer thick and up to 1000 times greater in surface diameter, provide reinforcement at the molecular level. This enhances strength and

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rigidity of the polymer without hindering flow into thin sections. Nanomed MAX compounds include less than 10% by weight nanoparticles resulting in 15% more tensile strength than unmodified PEEK, for approximately half the price.

“Unlike PEEK, Nanomed MAX compounds do not require the high temperature injection molding or extrusion equipment,” said Larry Johnson, Executive Vice President for Foster Corporation. “These alloys can be processed using standard mold and barrel heaters that are commonly used for nylons and polyesters.”

For more information about Nanomed MAX high strength nylon alloy compounds, please visit www.fostercomp.com.

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About Foster Corporation

For over twenty five years Foster Corporation has been serving medical device and pharmaceutical manufacturers with industry leading technology and service in biomedical materials. These include custom medical compounds, implantable materials, drug/polymer blends and polymer distribution. Within ISO 13485:2003 and ISO 9001:2008 facilities, Foster offers comprehensive support to customers from formulation development through production.

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