

Nano Science, Technology and Industry Scoreboard

Tethon 3D Launches Carbon Nanotube C-Lite ESD Resin for Stereolithography



2021-09-22

Tethon 3D, leveraging Mechnano MechT technology, will soon commercially launch C-Lite, a high-temperature-resistant carbon nanotube ESD material, printable on SLA, DLP and LCD Additive Manufacturing (AM) printers. Using Mechnano's E35A Masterbatch for static dissipative (ESD) properties from Dymax, in combination with its own formulas, Tethon 3D created an ESD resin, named C-lite that can withstand temperatures of up to 225 degrees Celsius.

"Our materials team integrated the MechT enabled E35A to create a high-temp ESD resin," said <u>Tethon 3D</u> CEO Trent Allen. "The experts at <u>Mechnano</u> were very helpful and have a deep understanding of nanomaterial science and chemistry. We plan to formulate new composites by incorporating additional versions of MechT into our resins to improve mechanical, electrical and thermal properties."

Tethon and Mechnano worked together to quickly integrate E35A with Tethon's base resins, taking about six weeks from the initial conversations to the enhanced resin release. "This is a great example of how our discrete carbon nanotube technology is a game-changer for the additive manufacturing industry," said Mechnano CEO Steve Lowder. "E35A Masterbatch provides ESD benefits to existing materials, such as the custom high-temp resin formulated by Tethon 3D."

The C-Lite resin is expected to be in high demand as it addresses challenges in a number of manufacturing and production applications in multiple industries including electronic manufacturing, automotive, defense, and more. The ESD-enhanced Tethon resin is undergoing additional testing and is expected to soon be available to all SLA, DLP and LCD users.

Mechnano is the first company to fabricate parts with carbon nanotubes using vat

photopolymerization systems to achieve static-dissipative properties or improve impact, tearresistance and tensile performance. Its technology is backed by over a decade of research and development and protected by over 100+ issued and pending patents.

Tethon 3D is an industry leader in discovering valuable uses for 3D printing, with an emphasis on ceramic materials that provide solutions for diverse industrial, consumer and design industries. In addition to its off-the-shelf products, the company partners with clients to formulate custom 3D printable materials.

Read the original article on 3D Printing Media.