**New Somos® stereolithography resin for investment casting helps increase yield**

* Suitable for casting of specialty alloys
* Compatible with many types of high performance metals such as nickel-based super alloys and titanium as it does not contain detectable levels of antimony
* Greater degree of dimensional stability of patterns as a result of low moisture absorption

Materials manufacturer [Covestro](http://www.covestro.com/) introduces Somos® WaterShed AF, a new stereolithography resin that simplifies 3D printing investment casting patterns. Designed to address sensitivities in the casting of certain specialty alloys, the resin results in clean burnout with low residual ash, positively impacting the overall process efficiency and yield.

**Higher overall efficiency**

Additively manufactured tooling offers foundries, service bureaus and other producers of investment casting tooling overall efficiency including cost savings and faster lead times without degrading part properties. Complex and intricate patterns are possible so engineers can optimize the cast for the part rather than for the mold-making process. And the ability to quickly print and test multiple design variations is more easily accomplished versus traditional manufacturing. That said, as a relatively new processing technology, it is often regarded as difficult and adding risk.

"SLA resins designed especially for investment casting offer foundries an investment casting solution that reduces risks and saves time – from printing to finishing," said Geoff Gardner, Innovation Director Additive Manufacturing at Covestro. With no detectable levels of antimony[[1]](#footnote-1), Somos® WaterShed AF enables investment casting for all types of high performance metals such as nickel-based super alloys and titanium. "It also reduces the chance of imperfections appearing on the cast part, requiring less rework to finish the part.”

Somos® WaterShed AF is highly dimensionally stable thanks to its low moisture uptake, so parts maintain their dimensions and mechanical properties, even under varying environmental conditions. This is particularly important in applications with tight tolerances like e.g. aerospace and aviation, transportation, energy and utilities. The resin can create accurate, complex patterns with excellent surface finish. Its low viscosity makes parts easy to print and easy to clean – typical for all resins in the Somos® WaterShed family.

*Covestro will showcase the new Somos*® *WaterShed AF resin at the Investment Casting Institute Conference, from 7-9 November in Grand Rapids, MI, USA, and at Formnext, from 16-19 November in Frankfurt, Germany (Hall 12.1, booth C11).*

\* per ICP-AES test methodology

**About Covestro:**

With 2020 sales of EUR 10.7 billion, Covestro is among the world’s leading polymer companies. Business activities are focused on the manufacture of high-tech polymer materials and the development of innovative, sustainable solutions for products used in many areas of daily life. In doing so, Covestro is fully committed to the circular economy. The main industries served are the automotive and transportation industries, construction, furniture and wood processing, as well as electrical, electronics, and household appliances industries. Other sectors include sports and leisure, cosmetics, health and the chemical industry itself. At the end of 2020, Covestro has 33 production sites worldwide and employs approximately 16,500 people (calculated as full-time equivalents).

Learn more about legacy-DSM additive manufacturing on [am.covestro.com](am.covestro.com/en_US/home.html) and Covestro on [www.covestro.com](http://www.covestro.com)

**Forward-looking statements**

This news release may contain forward-looking statements based on current assumptions and forecasts made by Covestro AG. Various known and unknown risks, uncertainties and other factors could lead to material differences between the actual future results, financial situation, development or performance of the company and the estimates given here. These factors include those discussed in Covestro’s public reports which are available at www.covestro.com. The company assumes no liability whatsoever to update these forward-looking statements or to conform them to future events or developments.

1. Measured by ICP-AES test methodology [↑](#footnote-ref-1)