

**Vamac® AEM: Thrive in Harsh Environments**  
 Hoses, Seals, Plugs, Gaskets, Connectors and More

- Thermal and Chemical Resistance
- Mechanical Properties
- Inert in Contact with NHFR Thermoplastics
- Low Oil and Gas Permeation
- NEW Sustainable Compounding Options
- Excellent Cost/Performance

**Vamac® AEM Is Available! Let's Talk!**

# SEEKING A MATERIAL FOR THE TOUGHEST APPLICATIONS? GOOD NEWS: VAMAC IS BACK

The extreme chemical and thermal resistance of Vamac AEM has made it the material of choice for applications in extreme environments. Now, with increased supply availability, even more manufacturers can select Vamac for their projects.



## Vamac is Back: What does this mean?

Vamac AEM (ethylene acrylic elastomer) is having a moment. Naturally halogen-free and offering thermal and chemical properties comparable to much more costly elastomers, its appeal has skyrocketed among manufacturers who seek to avoid materials containing PFAS, but still require extremely high mechanical properties.

This combination of great properties, and its lower cost relative to other high-end elastomers, spurred significant demand in Vamac AEM – and even led to some supply challenges in 2022 and 2023. Celanese reacted to this challenging situation with various investments in the reliability of the Vamac AEM base resin manufacturing plant, worked to optimise manufacturing processes, and improved the collaboration with the local production partner.

The result? Vamac is back. The last two base resin production campaigns went very well, and Celanese is confident it can meet current demand for all Vamac AEM grades. At the same time, inventories of Vamac AEM products in the regions have been replenished, creating more resilience in case of demand fluctuations.

## Vamac is Back: How can my company benefit?

Vamac AEM provides excellent resistance to chemicals and fluids. Even in harsh environments, it meets the critical requirements required for applications such as hoses, seals, gaskets. When comparing Vamac AEM to other elastomeric materials like SBR, EPDM, FKM, and FVMQ, you'll notice several advantages that could be critical for your projects. Vamac AEM operates effectively in a wide temperature range from -40°C to +190°C and excels in resisting chemicals, automotive fluids, coolants, and acids. While FKM and FVMQ can match some of these properties, they come with a much higher price tag.

Vamac AEM also boasts high tensile strength, excellent compression set, and superior flex fatigue resistance, a combination you won't find together in the other alternatives. This makes it particularly suitable for demanding applications where mechanical performance is paramount.

With our current capacity of Vamac AEM, we are confident that we can support current and new customers. In addition to the automotive industry, manufacturers of wire and cable, hydrogen storage technology, and other industrial and electrical applications all can benefit from the increased availability of Vamac AEM.

## Vamac is Back: Next steps

Contact us. Vamac AEM is available in many different formulations, each with an optimised set of properties. It is likely a grade has been developed that meets the requirements of your applications.

In addition, Vamac AEM is naturally halogen-free, and so serves as a replacement to PFAS-containing materials. If you would like to have more information on this, then – again – please contact us.

Vamac is back. If you have any questions with regards to Vamac AEM, then please [reach out to Celanese](#).



### Where does Vamac AEM add value?

No matter the industry, Vamac AEM is the go-to material for parts that need to withstand years of exposure to extreme temperatures and harsh chemicals, such as:

- EV battery housing seals
- Tubes and hoses
- E-motor oil cooler hoses
- Seals and gaskets in all shapes and sizes
- Electrical connectors and insulation
- Wire and cable jacketing
- Vibration dampers
- Loudspeaker membranes

Vamac is back. Current users of the material as well as manufacturers that are interested in specifying it for their own projects can do so with confidence. Want to know even more? Contact your representative at Celanese or through [the company website](#), where your message will quickly be forwarded to the correct colleague.



## 3 Questions for Csaba Holop, Senior Global Business Director, Elastomers



**ERJ:** Vamac is Back has a nice ring to it – but what is really behind it?

**CH:** ‘Vamac is back’ is our way of signifying to manufacturers that we are completely confident in our ability to meet their orders for Vamac AEM. It’s great that the demand for the material has always been high, but we want to keep our customers happy, and that includes with deliveries to fulfill their orders.

**ERJ:** Where did the new capacity come from?

**CH:** In November 2022 Celanese acquired the plastics business of DuPont, which included the Vamac AEM business, and the leadership quickly recognised the material’s value to manufacturers. Celanese made the decision to invest in the Vamac production processes to unlock new capacity, and this investment is bearing fruit.

Vamac AEM now is back stronger than ever before. In addition to increased capacity, we also are adding expert staff to support application development with the material.

**ERJ:** Vamac has been used primarily in the automotive industry. Do you believe manufacturers in other industries also will be interested in the material?

**CH:** I do, because they already are! We do have a strong presence in the automotive industry, and the advent of electrified mobility is only increasing demand for Vamac AEM since it meets many of the demands of parts required in EV batteries and electric motors. Of course we will continue to support our automotive customers, but our new colleagues are going to help support customers’ application development in other industries, too. Wire and cable manufacturers, for example, have long recognised that the material provides the mechanical properties they need plus meets their goals for more sustainable production, to include avoiding materials that contain PFAS. Vamac AEM also can be compounded into adhesives, or used in the manufacturing of printed circuit boards, loudspeaker membranes, bellows and hoses in industrial machinery, seals in automotive and non-automotive applications....the sky is the limit for this versatile material.