

SHELL PROCESS OILS



LEVERAGING GTL TECHNOLOGY TO CREATE LOW-FOGGING TPE COMPOUNDS

How Shell's gas-to-liquids (GTL) technology enabled thermoplastic elastomer (TPE) producer Elastron Kimya to unlock a competitive advantage

 elastron



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Serif Erdogan, Research and Development (R&D) Manager at Elastron Kimya, is acutely aware that continuous innovation is essential to stay at the cutting edge of the TPE industry. The company devotes significant resources to R&D and has established a strong track record for innovation.

So, when Shell launched its Shell Risella X top-tier process oils based on GTL technology, Erdogan was immediately keen to evaluate whether they could unlock competitive advantages for his business.

He was particularly interested in Shell Risella X having a very high flash and aniline points while also having relatively low viscosity. The R&D manager was unaware of any other process oils that could offer the same combination of properties and surmised that this combination of characteristics could provide his compounds with very low fogging values.

"Fogging occurs when volatile components are released from interior components under circumstances such as high temperatures and are

deposited on the vehicle's interior glass," he explains. "Minimising fogging is a really important issue for our customers in automotive equipment manufacturing."

After evaluating the new oils in Elastron compounds, he was proved right. Tests have proved that compounds that are based on Shell Risella X give up to 30% less fogging than compounds based on conventional process oils according to VW PV 3015 test specification.

Elastron now has several Shell Risella X based products on the market and eventually intends to use the new process oil in all its injection moulding products.

The TPE compounds based on Shell Risella X have unlocked advantages for Elastron's customers too. The low viscosity of Shell Risella X provides advanced flow characteristics to the compounds that are especially valuable for injection moulding applications. Indeed, this has helped some Elastron customers to reduce their cycle time by 10% and, therefore, to increase their productivity.

"We are always looking for innovative new materials and are keen to bring new, differentiated products to the market," says Erdogan. "Because our new Shell Risella X based TPE compounds have highly valued low-fogging characteristics and can help customers to reduce cycle times, they have helped us to gain market share and enhance margins."

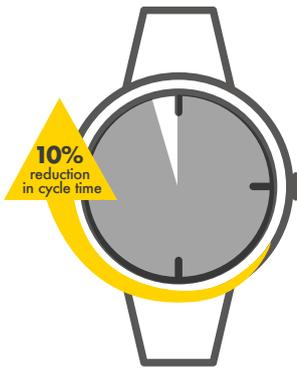


FIGURE 1: Some Elastron customers that have switched to TPE compounds based on Shell Risella X have been able to reduce cycle times by 10% compared with compounds based on conventional oils.



DELIVERING VALUE

Benefits for Elastron*

- Higher process efficiency
- Enhanced market share
- Improved margins
- Greater customer loyalty

Benefits for Elastron's customers*

- Low-fogging, high-quality compounds
- Reduced cycle times
- Reduced labour costs

*Compared with TPEs using conventional, paraffinic technical white oils



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SERIF ERDOGAN, R&D MANAGER, ELASTRON KIMYA

SHELL RISELLA X: NEXT-GENERATION PROCESS OILS

Shell Risella X oils are manufactured at Shell's world-class Pearl GTL plant in Qatar, which is the culmination of about 40 years of research and development. It is also the world's largest source of GTL products.

Extra purity

Shell Risella X oils provide key qualities for many applications, thanks to their high paraffinic hydrocarbon content and exceptional purity. For instance, they

- are colourless
- are almost odourless
- contain virtually no sulphur, nitrogen or aromatics
- have an extremely narrow hydrocarbon distribution range.

Excellent performance

Shell Risella X synthetic process oils can enhance the performance of the applications in which they are used by offering an outstanding combination of characteristics, including

- low volatility
- low pour point
- high flash point
- high viscosity index
- outstanding UV and thermal colour stability.



ABOUT ELASTRON KIMYA

Elastron Kimya is an industry leader in the TPE industry. The company was established in 1980 initially to produce SBS-based thermoplastic rubber compounds. After making significant technical developments, it added SEBS- and EPDM/PP-based TPEs to its product range.

The innovation-focused company employs 500 people, more than 80 of whom are in its R&D laboratories around the world.

In recent years, Elastron, which has its headquarters in Gebze, Turkey, has expanded its global reach and now serves more than 40 countries with high-quality products that meet customers' needs.

ABOUT SHELL PROCESS OILS

Shell is one of the leading process oil manufacturers and has more than 25 years' experience in the process oils business. We recognise the crucial role that process oils play in your products and operations.

We also understand that the quality of these vital oils is paramount and that using a process oil that has a highly consistent quality can have a major bearing on the success of your business.

Whatever your needs and applications, Shell can provide a full range of process oils. Customers in a wide range of industries have unlocked value by using Shell process oils. We also offer expert consultation and technical advice to support your business needs.



FIND OUT MORE: TALK TO SHELL PROCESS OILS

If you are interested in unlocking valuable performance advantages, talk to us about the benefits that Shell Risella X could have for your business.



www.shell.com/processoils



www.elastron.com