

Swagelok Thailand M.J. Bangkok Valve & Fitting Authorized Swagelok Sales and Service Center 88/8 Moo14, Kingkaew Road, Rachatewa, Bangplee, Samutprakarn 10540

April 20, 2022

Subject: Supply Chain Disruption for PCTFE Material

Dear Valued Customers,

Regarding the Supply Chain Disruption, Swagelok is now trying to maintain the flow of make-to-stock (MTS) productions and avoid significant numbers of delayed deliveries.

Based on current business conditions, Swagelok's production of certain valve products in the high purity group (HPG) and valve services group (VSG)-diaphragm, bellows, regulators, ball, and needle impacted valves—is expected to be by interruption in our supply of PCTFE (polychlorotrifluoroethylene), a fluoropolymer material commonly referred to as Kel-F® or Neoflon®. To evaluate multiple alternatives. Swagelok are prioritizing existing material and component inventory for HPG core and growth products that have no current alternative to PCTFE.

In response to this disruption, Swagelok had recommended customers to solve this situation by steering alternatives such as PEEK, Polyimide, PTFE, or PFA for product lines offering such options.

Product potentially affected by PCTFE disruption	Potential product alternative
83K series	PEEK or PTFE (pressure limitation for PTFE)
DK series	PEEK soft seat stem
N series with NKR tip	PTFE or PEEK may be available on some models

Products affected by the disruption but without a currently identified direct alternative include LD/ELD, HFM, K, RHPS, 0, 1, 18, and 20 series with K stem tip. In addition, the make to stock (MTS) TF filter gasket (KF-4TF-K2) will have no alternative once stock is depleted. Other HPG products are potentially affected, but no actions are needed at this time. Further notice will be provided if the situation changes.

Swagelok continues to coordinate with suppliers to manage the constraints in our existing supply chain for PCTFE, while also developing alternative supply options to mitigate risk to the flow of Swagelok products to customers. However, Swagelok cannot yet estimate how quickly affected products will resume healthy delivery expectations. Lead times for new quotes and orders will be extended.

We will provide updates on our progress with these disruptions which please contact our sales engineer if there is any questions or inquiries.

M.J. Bangkok Valve & Fitting Co.,Ltd

Onsite & Technical Services