

Date: Feb 28, 2019

Dear Valued Customer,

The AZ 800 MIF developer series includes AZ 826 MIF, AZ 830 MIF and AZ 833 developers. The AZ 800 MIF developers contain TMAH, DI water and a mixture of surfactants. The POR supplier of one of these surfactants decided to stop producing. The current raw material in stock can sustain the manufacturing for AZ 800 MIF developers until Dec 2019.

Merck has found the alternative supplier for this surfactant and has evaluated its performance compared to the current supplier. The performance of the AZ 826MIF developer using the surfactant from the new supplier is identical with the current one in our tests. The linearity, exposure latitude and focus latitude graphs as well as the respective SEM images show that the origin of the surfactant (current or new supplier) do not affect the CD size and shape of the patterns when processed under the same conditions. PCN full package can be found in the attached presentation.

Sample of AZ 800 MIF developers using the surfactant from the new supplier is being prepared in Merck Wiesbaden site and it is expected to send to customers by end of March, 2019. Customer evaluation is expected to be finished by Sep, 2019.

If you have any questions on this Product Change Notification, please contact your Account Manager. We are pleased to continue to provide you the high level of quality. And thank you for selecting Merck Performance Materials for your electronic chemical needs.

Sincerely,

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