

December 11, 2020

Dear Valued Business Partner,

As you know, Ashland takes pride in the quality of our Gafchromic[™] film products and service to our customers. We have previously communicated our challenges producing Gafchromic[™] XRQA2 films which meet our quality release specifications. Our R&D and Manufacturing teams are still actively working on XRQA2 which has not met our specifications yet. Film lots outside of manufacturing specifications are not released and are not sold to the market. As a result, the Gafchromic[™] XRQA2 sheet films remain **on** backorder.

A new decision has been made to maintain the suspension of future production of XRQA2 film, while engaging our Process Engineering team to assess and pursue new technology pathways. Our goal is to restore shipment of our GafchromicTM XRQA2 product as quickly as possible. Although optimistic and hopeful it could be sooner, realistically it could be at least six months before we can ship XRQA2 sheet films.

Having said that, most of our customers have tested successfully Gafchromic™XRSP2 for geometrical testing, beam size identification, beam alignment, and verification of Collimation. Despite visual defects which are small particles on the surface of the film, the sensitivity/uniformity of the product remains the same. The product has been FDA listed and carries the CE mark. It is less expensive and available and if not for dosimetry, it can be used in lieu of XR-QA2.

Ashland recognizes the significant impact backorders **have** for you and your customer base and is working aggressively to restore availability of XRQA2 films. We will keep you updated as we get closer to releasing XRQA2.

If you have any questions, please reach out to us. We thank you for your support as we work through this production challenge.

Yours sincerely,

Jean-Jacques Gulka

Advanced Materials Director

