

# TIF, the leading fumigant emission and dose reduction tool

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## **ABSTRACT**

TIF mulch films are coextruded films of Polyethylene containing a thin core layer of EVAL™ or ethylene vinyl alcohol copolymer (EVOH). TIF films are most commonly produced in 7-layer structures where Polyethylene (PE) layers provide mechanical strength and moisture barrier, tie layers provide and adhesive layer between the PE and the EVOH, and EVOH provides the fumigant vapor barrier.

Following hundreds of plot applications, several monitored flux studies, and commercial deployments in hundreds of acre, TIF has been adopted as the leading fumigant emissions mitigation tool in the United States. Efficacy studies and soil profile research conducted in the recent past have shown that TIF films can contribute to the sustainability of fumigation not only by reducing fumigant emissions but also by making rate reduction possible. From a product life-cycle point of view, TIF films can also be recycled. This paper will provide an overview of how TIF technology contributes to sustainable fumigation and highlight several successful case studies from around the world.