DOVER CHEMICAL

TECH BULLETIN

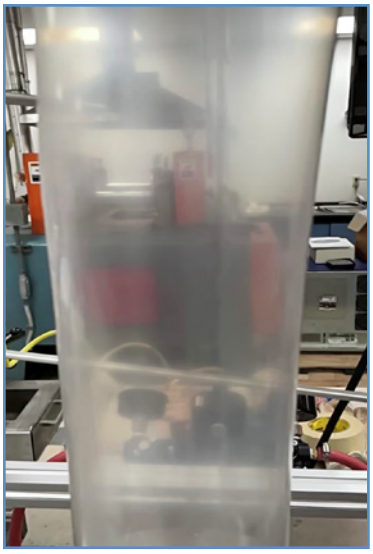
PFAS-Free Process Aid for Polyethylene

When a polymer is extruded, it can undergo shear stress, leading to surface defects, called melt fracture – sometimes called “shark skin,” etc. A polymer process aid is used to improve the surface of the polymer. Typically these process aids are fluoropolymers, which are a subset of perfluoroalkyl substances (PFAS). PFAS are under increased public and regulatory scrutiny and are being phased out.

Introducing the DoverClear™ line of polymer process aids that are **PFAS-free** and **siloxane-free** for processing of polyethylene sheet and film. DoverClear process aids clear melt fracture as well or better than fluoropolymers without sacrificing throughput due to over-lubrication. The ingredients in DoverClear are **FDA approved*** and are proven in polyolefin systems. The DoverClear line of products can clear melt fracture in a broad range of PE films, both metallocene and Ziegler-Natta catalyzed, across a wide-range of melt-indexes.



Blown Film Without Process Aid



Blown Film with DoverClear™

1-hexene mLLDPE, 1.0 MI

DoverClear process aids are available in a wide variety of forms, which can be custom tailored to individual lines, depending on need.

*FDA approval in LLDPE