

OUTDOOR DURABILITY + COLOR STABILITY

TPU SHEET EXTRUDER WIND FARM BLADE

AVIENT SOLUTION

Smartbatch™ Combination Colorants & Additives

WHY AVIENT?

- Leveraged experience in sheet applications and TPU chemistry to develop masterbatch solutions that meet the stringent outdoor durability and color stability requirements
- Validated the resistance to harsh environment factors (temperature, UV radiation, moisture) with internal testing
- Performed Design of Experiments (DoE) on multiple solutions to validate the performance in target environmental stress exposure

LEARN MORE

KEY REQUIREMENTS

- Stable under long-term UV-A and UV-B exposure without chalking, fading, or yellowing
- Withstanding high temperatures during extrusion and blade operation without discoloration, especially for white and light-grey colors
- Improve physical and chemical properties, including hydrolysis-resistance, erosion resistance, mechanical strength, chemical stability, adhesive reliability, and ability to weather extreme climate cycles