



Polydegrade is one of the industries most cost effective degradable additives on the market. It provides excellent thermal stability and more controlled degradability of the polymer without issues such as yellowing, odors, or pre-degradation. The additives used in manufacturing Polydegrade are non-heavy metal or oxide based; this results in more eco-friendly by-products released into the environment. The use of Polydegrade in polyethylene film applications such as T-shirt bags or grocery bags, both manufactured with TiO<sub>2</sub> and CaCO<sub>3</sub>, can significantly affect degradation results. Polydegrade has addressed these issues resulting in very controlled rates of degradation, process ability and thermal stability, when exposed to outside environments of short-wave UV light (300nm – 400nm), heat, and oxygen.

### Applications: Blown Film

Melt Flow: 1.2 LDPE (grams/10 min.), at 190°C

Blend Density: 0.961 g/cm<sup>3</sup> (60 lb. /ft<sup>3</sup>)

Types of Resins: HDPE and LDPE

Amount Required: 1% (depending on degradation requirements)

### Features and Benefits:

- More control over degradation
- Thermal and UV stable
- Better storage and degradation control
- RoHS compliant
- Low concentration requirements

Polydegrade has addressed these issues resulting in very controlled rates of degradation, process ability and thermal stability, when exposed to outside environments of short-wave UV light (300nm – 400nm), heat and oxygen. Polydegrade can be processed at temperatures typical of polyethylene using standard extrusion equipment. The recommended use levels for film extrusion are 1% depending on the degradation requirements and environmental conditions. We recommend that this product be kept closed and kept in its original container, away from sunlight, heat and highly humid environments. Polydegrade, once blended, should be processed and not stored for future use. Opened packages should be vacuum sealed or closed tightly to limit oxygen permeation and oxidation of degradable additives.

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