

Ultraviolet (UV) Stabilizer Masterbatch

Introduction

Exposure to sunlight can have adverse effects on the useful life of plastic products. Ultraviolet (UV) radiation can break down the chemical bonds in a polymer. Photo-degradation causes cracking, chalking, color changes and the loss of physical properties. Therefore UV stabilizing packages are vital to ensuring a polymer.

Generally, UV stabilizers are categorized by two classifications: UV absorbers and hindered amine light stabilizers (HALS).

High performance UV stabilizer masterbatches offer the optimal UV stability to meet current and upcoming requirements.

Product Benefits

- Excellent UV resistance to meet end use requirements
- Optimal balance between UV stability and long-term thermal stability
- Tailored products as per end use requirements
- Good processability

Applications and Recommended UV Stabilizer System

- Polyolefin films (for thin wall thickness like film, HALS is more efficient UV stabilizer than UV absorbers)
- Polyolefin injection molded (synergistic HALS mixture)
- PP fiber pigmented (Combination masterbatch between HALS and UV absorber)
- PP pipes (HALS)
- Polyolefin for Construction (high Mw HALS)
- Styrenic polymers (Combination masterbatch between HALS and UV absorber)

It is very important that the UV stabilizer (or combination of UV stabilization) should be selected to suit the exact application. It is therefore important to identify where an end use product will be used and the required durability. Other factors that affect the choice of UV stabilization package include product dimensions, type and color of pigments present and application information such as food contact.