

Introduction

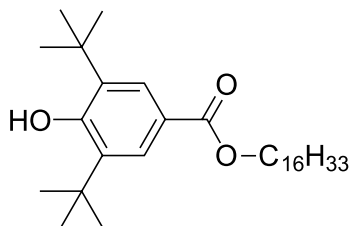
Chiguard[®] 1108 belongs to the class of hindered hydroxybenzoate light stabilizer which offers significant advantages when used in combination with antioxidants and high-molecular weight HALS light stabilizers. It is a low volatility, low color, high performance light stabilizer suitable for polyolefins, polycarbonate, PVC and polyester. Chiguard[®] 1108's non-basic nature makes it especially ideal for the systems containing brominated flame retardants or thioester type antioxidants where the adverse effects usually take place when a traditional basic HALS is used. In addition, Chiguard[®] 1108 also provides high compatibility with a variety of polymers and resin compositions.

Application

Chiguard[®] 1108 is most suitable for the protection of polyolefins, polycarbonate and the systems containing flame retardants and thioesters. The dosage of Chiguard[®] 1108 ranges between 0.1% and 0.25% are recommended for protection. It depends on the substrate and performance requirement of the final application.

Chemical Information

Structure



Chemical name

Hexadecyl 3,5-di-tert-butyl-4-hydroxybenzoate

Formula C₃₁H₅₄O₃

Molecular weight 475

CAS No. 67845-93-6

Physical Data

Odor : Faint

Melting point : 59~61 °C

Specific gravity : 1.07 @ 25°C

Solubility in water : <0.1 g/100mL

Specification

Appearance : White to off white powder

Assay : 98% min.

Volatiles : 0.5% max.

Melting point : 58 °C min.

Clarity of solution : Clear solution

Color (10% solution) : 100 max.

Solubility (g in 100mL solvent @ 25 °C)

Acetone : 56.8

Dichloromethane : >100

Methanol : 2.8

Toluene : 80

Packaging 25 kgs net/fiber drum

Performance Benefits

- Minimal color contribution
- Low volatility
- Good solubility/migration balance
- Excellent compatibility with UV absorbers, HALS, and thioesters
- FDA sanctioned to 0.5% in polyolefins