Irgafos® 126

A High Performance Organo-phosphite Processing Stabilizer

Characterization

Irgafos 126 is a high performance organo-phosphite processing stabilizer, which protects polymers from thermo-oxidative degradation during processing by decomposing hydroperoxides to form non-radical, non-reactive products.

Chemical name

Bis-(2,4-di-tert.-butyl phenol)pentaerythritol diphosphite

CAS number

26741-53-7

Chemical formula

![Chemical structure of Irgafos 126]

Molecular weight

604 g/mol

Applications

Irgafos 126 provides outstanding processing stability in a variety of applications and substrates, including polyethylene, polypropylene and ethylene-vinylacetate copolymers. Irgafos 126 can also be used in other polymers such as engineering plastics, styrene homo- and copolymers, polyurethanes, elastomers, adhesives and other organic substrates. Irgafos 126 is particularly effective when used in combination with primary antioxidants of the Irganox range.

Features/benefits

Irgafos 126 is a high performance solid organo-phosphite which protects polymers from degradation during the processing steps (compounding, pelletizing, fabrication, recycling).

- Protects polymers from molecular weight changes (e.g. chain scission or crosslinking)
- Prevents polymer discoloration due to degradation
- High performance at low concentration levels
- Synergistic performance when used in combination with primary antioxidants from the Irganox range.
- Can be used in combination with light stabilizers from the Tinuvin and Chimasorb range.
Product forms
Irgafos 126 white powder

Guidelines for use
In the recommended applications, the concentration levels for Irgafos 126 range typically between 0.05% and 0.15% depending on substrate and processing conditions. The optimum level is application specific. Performance data of Irgafos 126 in various organic polymers and applications are available upon request.

Physical Properties
- Melting point: ≥ 160 °C
- Acid number: ≤ 0.5 mg KOH/g
- Bulk density:
  - Powder: 500 – 600 g/l

Solubility (25 °C) g/100 g solution
- Acetone: 8.5
- Heptane: 4.5
- Hexane: 4.8
- Methanol: 1.9
- THF: 35
- Toluene: 35.7
- Water: insoluble

Health & Safety
Irgafos 126 exhibits a very low order of oral toxicity and does not present any abnormal problems in its handling or general use.

Detailed information on handling and any precautions to be observed in the use of the product(s) described in this leaflet can be found in our relevant health and safety information sheet.

Note
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September 2010