EVERFOS®-626

High Performance Organo-phosphite Processing Stabilizer

Chemical Name: Bis(2,4-di-tert-butylphenyl) pentaerythritol diphosphite

Formula: \( C_{33}H_{50}O_6P_2 \)

Structure:

Molecular Weight: 604

CAS Number: 26741-53-7

Specification

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White powder</td>
</tr>
<tr>
<td>Volatiles</td>
<td>1.0% max</td>
</tr>
<tr>
<td>Color of solution (10g in 100 ml toluene)</td>
<td>clear solution</td>
</tr>
<tr>
<td>Content of 2,4-di-tert-butylphenol</td>
<td>1.0% max</td>
</tr>
<tr>
<td>Phosphorous content</td>
<td>10.0% min</td>
</tr>
<tr>
<td>Acid number (mg KOH/g)</td>
<td>1.0% max</td>
</tr>
<tr>
<td>Assay</td>
<td>99.0% min</td>
</tr>
</tbody>
</table>

Physical Properties

- Melting range (°C): 160-180
- Specific gravity (20°C): 1.03 g/cm³
- Bulk density: 0.43 kg/l
- Solubility (20°C) g/100g solution
  - Acetone: 8.5
  - Heptane: 4.5
  - Hexane: 4.8
  - Methanol: 1.9
  - Dichloro-Methane: 43.0
  - Mineral Oil: 10.0
  - Perchloroethylene: 15.0
  - THF: 35.0
  - Toluene: 35.7
  - Water: Insoluble
Applications

EVERFOS-626 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. It provides outstanding processing stability in a variety of applications and substrates including polyethylene, polypropylene and ethylene-vinylacetate copolymers.

EVERFOS-626 can synergistically combine with other primary antioxidant such as EVERNOX-10 and EVERNOX-76 for applications in polyolefins or olefin-copolymers such as HDPE, LLDPE, PP, EVA as well as PC, PA. The blends can also be used in engineering plastics such as PBT, PET, and styrenics, elastomers like PS, ABS, BR, SBS and tickifier resins, adhesives.

EVERFOS-626 protects polymers which are prone to oxidation during processing steps (compounding, pelletizing, fabrication and recycling) from molecular weight change (e.g. chain scission of PP, crosslinking of PE) and prevents discoloration.

Handling & Safety

EVERFOS-626 should be handled with care and prevent contamination of the environment. Avoid dust formation and ignition sources.

For more detailed information please refer to the material safety data sheet.

Packing

The following packages are available upon customer’s request :

(1) 20 kg foil bag per carton box.
(2) Other specific request.

Transportation

EVERFOS-626 is not a dangerous good according to the transportation regulations.

Storage

EVERFOS-626 should be stored under suitable conditions (dry & cool).

Maximum recommended storage time from the date of analysis : 12 months.