EVERNOX®-1098
EVERNOX®-1098GF

Phenolic Primary Antioxidant for Manufacturing, Processing and Long-Term Thermal Stabilization

**Chemical Name**  \( \text{N,N'} \)-hexane-1,6-diylbis(3-(3,5-di-tert-butyl-4-hydroxyphenylpropionamide))

**Formula** \( \text{C}_{40}\text{H}_{64}\text{N}_2\text{O}_4 \)

**Structure**

![Chemical Structure](image)

**Molecular Weight** 637 g/mol

**CAS Number** 23128-74-7

**Specification**

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White, free-flowing powder or granule</td>
</tr>
<tr>
<td>Volatiles</td>
<td>0.5% max</td>
</tr>
<tr>
<td>Transmittance (10g in 100 ml toluene) at 425 nm</td>
<td>97.0% min</td>
</tr>
<tr>
<td>Transmittance (at 500 nm)</td>
<td>98.0% min</td>
</tr>
<tr>
<td>Assay</td>
<td>98.0% min</td>
</tr>
</tbody>
</table>

**Physical Properties**

- **Melting range (°C)** 156-162
- **Flash point (°C)** 282
- **Specific gravity (20°C)** 1.04 g/cm³
- **Vapor pressure (20°C)** 1.3 x 10⁻¹² Pa
- **Solubility (20°C)** g/100g solution
  - Acetone 2
  - Benzene 0.01
  - Chloroform 6.6
  - Ethyl acetate 1.2
  - Hexane 0.01
  - Methanol 6.0
  - Water 0.01
  - 80% Caprolactam + 20% Water 3

**Weight loss (TGA, in air at 20°C/min)**

- Temp.(°C) at 1% weight loss 280
- Temp.(°C) at 10% weight loss 340
Applications

EVERNOX-1098 and / or EVERNOX-1098GF, is a sterically hindered phenolic antioxidant of highly effective, non-discoloring stabilization for organic materials. It protects these materials against thermo-oxidative degradation. EVERNOX-1098 is especially recommended for use in polyamide molded parts, fibers, and films. It can also be used with various polymers such as polyacetals, polyesters, polyurethanes, adhesives, elastomers as well as other organic substrates.

EVERNOX-1098 has good compatibility, high resistance to extraction and low volatility. It provides excellent processing and long-term thermal stability as well as superior initial resin color. It can be used in combination with other additives such as costabilizers (e.g. phosphites, thioesters), light stabilizer (e.g. UV absorbers, hindered amines), and other functional stabilizers. The synergistic blends of EVERNOX-1098 with EVERFOS-168 (also called EVERNOX-B1171) provide a great performance in polymer stabilization.

Handling & Safety

EVERNOX-1098 and EVERNOX-1098GF 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 kgs paper bag.
(2) 25 kgs × 2 PE bag in the carton box.
(3) 50 kgs fiber drum.
(4) Other specific request.

Transportation

EVERNOX-1098 and EVERNOX-1098GF are not dangerous materials according to the transportation regulations.

Storage

EVERNOX-1098 and EVERNOX-1098GF be stored under suitable conditions (dry & cool).

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