EVERNOX®-B1171

Synergistic Processing and Long-Term Thermal Stabilization

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>50% EVERFOS-168; 50% EVERNOX-1098</th>
</tr>
</thead>
</table>
| Formula             | 50% \( \text{C}_{42}\text{H}_{63}\text{O}_3\text{P} \)  
                        50% \( \text{C}_{40}\text{H}_{64}\text{N}_2\text{O}_4 \) |
| Structure           | ![Structure Diagram] |

**Molecular Weight**

- EVERFOS-168: 646.9 g/mol
- EVERNOX-1098: 637 g/mol

**CAS Number**

- Preparation (31570-04-4 and 23128-74-7)

**Specification**

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Requirement</th>
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</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White, free-flowing powder</td>
</tr>
<tr>
<td>Ash content</td>
<td>0.1% max</td>
</tr>
<tr>
<td>Volatiles</td>
<td>0.5% max</td>
</tr>
<tr>
<td>Clarity of solution</td>
<td>Clear solution</td>
</tr>
<tr>
<td>(10g in 100ml toluene)</td>
<td></td>
</tr>
<tr>
<td>Transmittance</td>
<td>at 425 nm 97.0% min</td>
</tr>
<tr>
<td>(10g in 100 ml toluene)</td>
<td>at 500 nm 97.0% min</td>
</tr>
</tbody>
</table>
| Assay                   | EVERFOS-168 48.0–52.0%  
                        EVERNOX-1098 48.0–52.0% |

**Physical Properties**

- Melting range (°C): 156-187°C
- Flash point (°C): >150°C

**Applications**

EVERNOX-B1171 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 blend of EVERNOX-B1171 provides a great performance in polymer stabilization.
**Recommendation**

For polymers, the dosage level for EVERNOX-B117 varies between 0.1% to 0.25% depending on the polymer type and processing conditions. The optimum level is determined by the specific needs of application.

**Handling & Safety**

EVERNOX-B1171 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 x 2 PE bags in the carton box.
2. 25 kgs x 2 PE bags in the carton box.
3. Other specific request.

**Transportation**

EVERNOX-B1171 is not dangerous materials according to the transportation regulations.

**Storage**

EVERNOX-B1171 should be stored under suitable conditions (dry & cool). Maximum recommended storage temperature under 45°C and the storage time from the date of analysis: 24 months.