SONGWON is a leading specialist in polyolefin stabilization for end uses such as films and tapes. Thanks to their excellent physical and technical properties, SONGNOX® and SONGXTEND® stabilizers are widely used to achieve high performance and protect molecular weight during polyolefin melt conversion.
Converters benefit from SONGWON’s long-standing expertise.

Wide range of stabilizers
- High processing stability thanks to effective protection of molecular weight during melt conversion
- Low initial color and low color development during melt conversion
- Low gas fading
- Considerable improvement of long-term thermal stability (LTTS)

Proven reliability
- More than 50 years’ manufacturing experience in South Korea
- Backward integration of key raw materials
- Global sales organization channels in Asia, Europe and North America

Technical expertise at hand
- Testing laboratory in South Korea
- Technically advanced, customized stabilizer formulations
- Dedicated local support centers

Strong commitment
- Continuous innovation to meet new industry standards

SONGNOX® and SONGXTEND® stabilizers cover a wide variety of requirements in polyolefin protection.

Both SONGNOX® 11B and SONGNOX® 21B offer good overall base stabilization.

SONGNOX® 6260 and SONGNOX® 1010, which improve overall protection of molecular weight and color, can be added during compounding or masterbatching.

SONGNOX® 1162 has excellent compatibility in polyolefins as well as better initial color and lower color development during processing than SONGNOX® 21B.

SONGXTEND® 1102 offers an excellent balance of all basic performance criteria as well as outstanding gas-fading resistance properties in polypropylene (PP).
SONGNOX® and SONGXTEND® stabilizers recommended for polyolefin melt conversion

<table>
<thead>
<tr>
<th></th>
<th>Processing stability</th>
<th>Initial color</th>
<th>Discoloration</th>
<th>Gas fading</th>
<th>Improvement of LTTS</th>
<th>Other</th>
<th>Performance profile</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SONGNOX® 11B</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Good balance between processing stability, color and LTTS</td>
</tr>
<tr>
<td><strong>SONGNOX® 21B</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Improved processing stability versus SONGNOX® 11B</td>
</tr>
<tr>
<td><strong>SONGNOX® 6260 and SONGNOX® 1010</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Excellent balance between processing, color and LTTS</td>
</tr>
<tr>
<td><strong>SONGNOX® 1162</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Improved initial color and color development and excellent solubility in polyolefins</td>
</tr>
<tr>
<td><strong>SONGXTEND® 1102</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Excellent balance between processing, color and gas fading Specifically for in situ addition during synthesis, low interaction with Ziegler/Natta catalyst</td>
</tr>
</tbody>
</table>

- Recommended / Fully complies with criteria
- Suitable / Can be used

**Storage conditions**

SONGNOX® and SONGXTEND® stabilizers are supplied in powder (PW) or free flow (FF) form.

The materials should be stored indoors, in closed containers, in a dry place at temperatures between 5 and 40°C.

Exposure to direct sunlight should be avoided.

**Shelf life**

SONGNOX® and SONGXTEND® products are stable for 12 months, provided they are stored under the conditions described above.
SONGWON provides customers with warranties and representations as to the chemical or technical specifications, compositions and/or the suitability for use for any particular purpose exclusively in individual written agreements.

The facts and figures contained herein have been carefully compiled to the best of SONGWON’s knowledge but are essentially intended for informational purposes only.

SONGWON Industrial Group does not accept any liability whatsoever for any information, reference or advice provided in this document or any similar SONGWON publication.

Version 3, October 2019