

Stabilizer Packages for Epoxy Coating Systems

- Pre-blended, liquid, all-in-one stabilizer packages for convenient processing and use
- Booster options to improve performance in use
- Low initial color and excellent long-term protection

SONGWON specializes in stabilizer solutions that counter the harmful effects of light and heat on epoxy coating systems.

A diversified product portfolio of stabilizers and stabilizer blends enables the coatings formulator to enhance the durability of epoxy systems. This in turn extends the life of coated goods, allowing them to meet increasingly stringent industry standards. High-performance products are key to sustainable product development in a circular economy.

It's all about **the chemistry™**

 **SONGWON**

SONGNOX® CS Antioxidants and SONGSORB® CS Light Stabilizers

A combination of organic UV absorbers (UVAs), hindered amine light stabilizers (HALS) and phenolic antioxidants (AOs) provides exceptional levels of protection against discoloration, loss of gloss and cracking in epoxy coating systems. Ready-to-use liquid blends streamline production accuracy and supply-chain efficiency. Individual stabilizers boost the performance of blend products and can be used to tailor stabilizer packages, thereby optimizing protection.

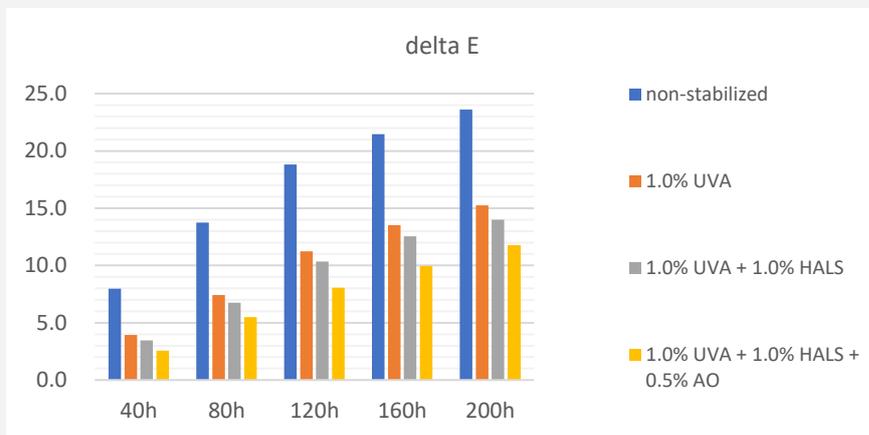
A combination of stabilizers provides the best performance in accelerated aging tests:

Coating system:

- 1:1 mixture of bisphenol A/F - diglycidyl ether with monoglycidyl- and benzyl alcohol diluents and cycloaliphatic diamine hardener

Preparation of test specimens:

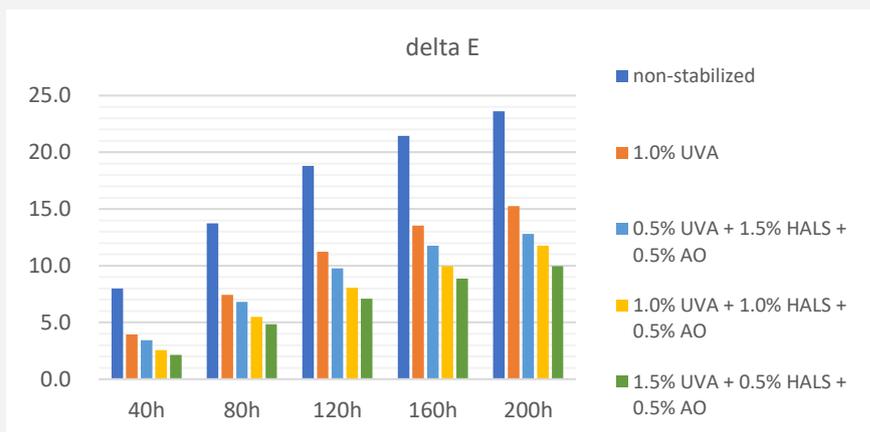
- 2-mm-thick moldings in aluminum dish
- 12 hours curing at 40°C
- 7 days conditioning at 23°C / 50% relative humidity



Optimizing stabilizer ratios further improves aging performance:

Accelerated aging procedure:

- Bandol Wheel® H400
- Black panel temperature: 60°C
- Irradiation: 95 W/m² (300-400 nm) medium-pressure mercury lamp
- Water immersion: 17% of time



SONGWON stabilizers for epoxy systems:

Liquid stabilizer blends:

- Easy and convenient processing
- Optimized logistics and reduction of materials used

Individual stabilizers:

- Tailoring of stabilizer ratio
- Boosting of protection
- Highest flexibility to enable different epoxy systems achieve market-required performance criteria

| Product | Function | General epoxy systems | White or bright pigmented epoxy systems |
|--|--|-----------------------|---|
| Synergistic liquid stabilizer blends for convenient handling and processing | | | |
| SONGSORB® CS B5075 | Synergistic UVA-HALS-AO blend | ■ | ■ |
| SONGSORB® CS B5248 | Synergistic UVA-HALS blend | ■ | ■ |
| SONGSORB® CS B5424 | Synergistic UVA-HALS-AO blend | ■ | ■ |
| SONGSORB® CS B5459 | Synergistic UVA-HALS blend | ■ | ■ |
| Individual stabilizers that can be used to tailor additive ratios and boost protection | | | |
| SONGSORB® CS 171 | UVA (UV absorber) | ■ | ■ |
| SONGSORB® CS 400 | UVA (UV absorber) | ■ | ■ |
| SONGSORB® CS UV1 | UVA (UV absorber) | ■ | ■ |
| SONGSORB® CS 292 | HALS (hindered amine light stabilizer) | ■ | ■ |
| SONGNOX® CS 1135 | AO (antioxidant) | ■ | ■ |
| SONGNOX® CS 2450 | AO (antioxidant) | ■ | ■ |

■ Recommended ■ Suitable

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.

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