

1. Product Description

UVPROTECT is a liquid UV-protective additive developed to protect epoxy resins against the chemical degradation caused by ultraviolet (UV) radiation. It is a synergistic blend of a UV absorber (UVA) and a hindered amine light stabilizer (HALS). The UVA absorbs harmful UV radiation before it penetrates the resin, while the HALS scavenges the free radicals that form and halts the degradation chain. This dual action provides markedly higher protection than benzotriazole- or benzophenone-based UV absorbers alone. **UVPROTECT** dissolves readily in the resin, has low volatility and preserves the initial color and clarity of the cured film.

2. Uses

UVPROTECT is compatible with all epoxy resin systems and can be used in epoxy resins, epoxy acrylates and thermoset acrylic systems. It is added to the formulation to preserve color and surface integrity in UV-exposed epoxy floor coatings, primers, castings and similar applications. **UVPROTECT** is designed for professional formulation and industrial use.

UVPROTECT slows the UV-induced yellowing, loss of gloss and surface degradation of epoxy and extends its service life, but it does not make epoxy fully UV-stable. For a genuinely non-yellowing surface, an aliphatic polyurethane-based topcoat must be used.

3. Use and Dosage

UVPROTECT is used at 1-2% of the resin weight. In epoxy-amine systems it must be added to the hardener (amine) component, not to the epoxy resin; in acrylate and UV/radical-cured systems it must be added to the resin component instead. In all cases it must be mixed until a homogeneous blend is obtained. Adequate protection requires the correct dosage together with a sufficient film thickness; the protective effect is reduced in thin films.

The final dosage must be determined by preliminary trials according to the resin system used and the exposure conditions.

4. Safety

Applicators and supervisors must read the Safety Data Sheet (SDS) carefully and follow the instructions provided. Emptied packages must be disposed of in compliance with relevant regulations and laws. The application must be carried out by skilled workers under the supervision of experts and the applicators must use all personal protective equipment required for the worksite and the task such as goggles, mask and gloves.

5. Storage

UVPROTECT must be stored in its closed packaging, in a cool, dry place out of direct sunlight. The recommended storage temperature is approximately 25 °C. Under these conditions, the material will retain its properties in unopened containers for 12 months from the production date.

UV Protective Additive for Epoxy Resins

Highlights

- Protects epoxy resins against UV-induced yellowing, loss of gloss and surface degradation
- A synergistic blend of a UV absorber (UVA) and a hindered amine light stabilizer (HALS)
- Provides markedly higher protection than benzotriazole- or benzophenone-based UV absorbers alone
- Compatible with all epoxy resin systems
- Liquid; dissolves readily in the resin and has low volatility
- Preserves the initial color and clarity of the cured film
- Slows the UV degradation of epoxy; for full UV stability an aliphatic polyurethane topcoat is recommended



At low temperatures the product may crystallize; this is a natural occurrence, and after being heated to 60-70 °C and homogenized the product can be used without any loss of its properties. After prolonged storage, the product must be stirred thoroughly before use.

6. Disclaimer

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7. Technical Data

Property	Method	Result
Appearance		Homogeneous
Color		Transparent
Density	EN ISO 2811-2	1.09 ± 0.05 g/cm ³
Viscosity	EN ISO 3219	1500 ± 150 cP
Flash Point		

Stenkim[®] reserves the right to make changes to the values in this table at any time.

