

CHISORB EPL

Ultraviolet Light Absorber for Epoxy Resins

General Chisorb EPL is a liquid UV absorber specifically designed for the protection of epoxy resins against the damage from UV light radiation. Characterized by its good solvent solubility, better resin compatibility and less volatility. Chisorb EPL provides a degree of stabilization that is significantly better than those of other commercialized UV absorbers based on benzotriazole or benzophenone.

Composition Active Ingredients:
1. UV absorber based on dialkylaminobenzoic ester
2. Hinder Amine Light Stabilizer

Physical Data

Appearance	:	yellow liquid
Odor	:	Faint
Boiling Point	:	> 300 °C
Freezing point	:	< 10 °C
Viscosity	:	1000~3000 cps@25 °C
Extinction coefficient (ϵ)	:	ca. 13,200
Specific gravity	:	1.10~1.13 g/cm ³ @ 25 °C

Solubility (g in 100 ml solvent)

Ethyl acetate	:	> 50
Ethanol	:	> 50
Methyl ethyl ketone	:	> 50
PEG ($M_n=400$)	:	> 50
Water	:	Nil

Specification

Appearance	:	Light yellow liquid
Color (Gardner)	:	6.0 max.
Clarity in toluene	:	Clear solution (5g/100ml)

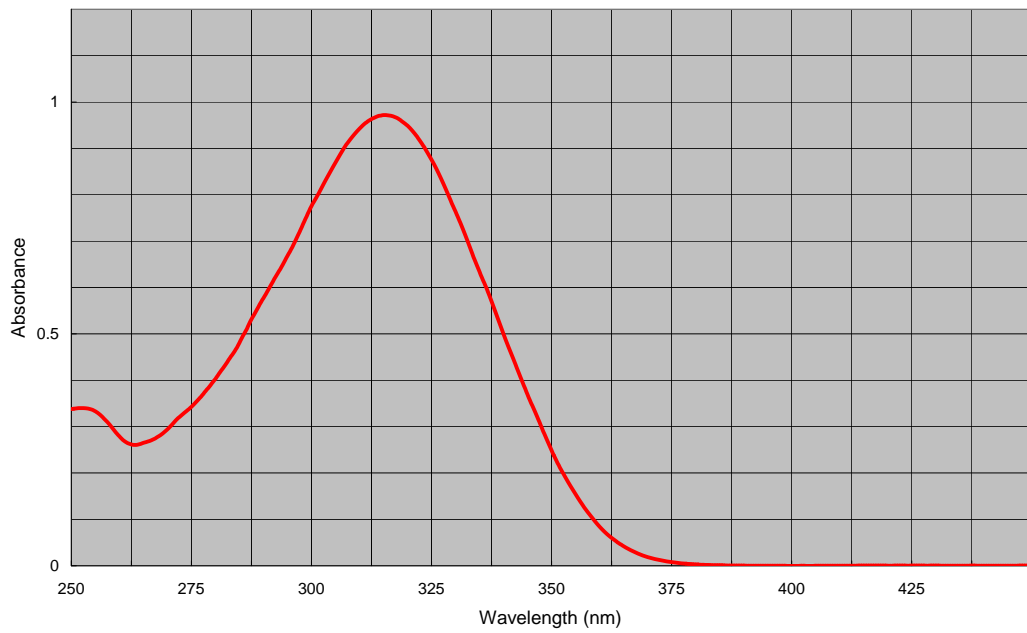
Application Chisorb EPL is most suitable for the protection of polymers due to its excellent solubility in resin and its non-yellowing property during baking stage. Therefore, Chisorb EPL is exclusively designed for

1. Epoxy resin.
2. Epoxy acrylate
3. Thermoset acrylic enamels.

Dosage: About 0.2 % - 2.0 % of Chisorb EPL is recommended for the protection of epoxy resin.

UV Spectrum

Chisorb EPL



Illustration

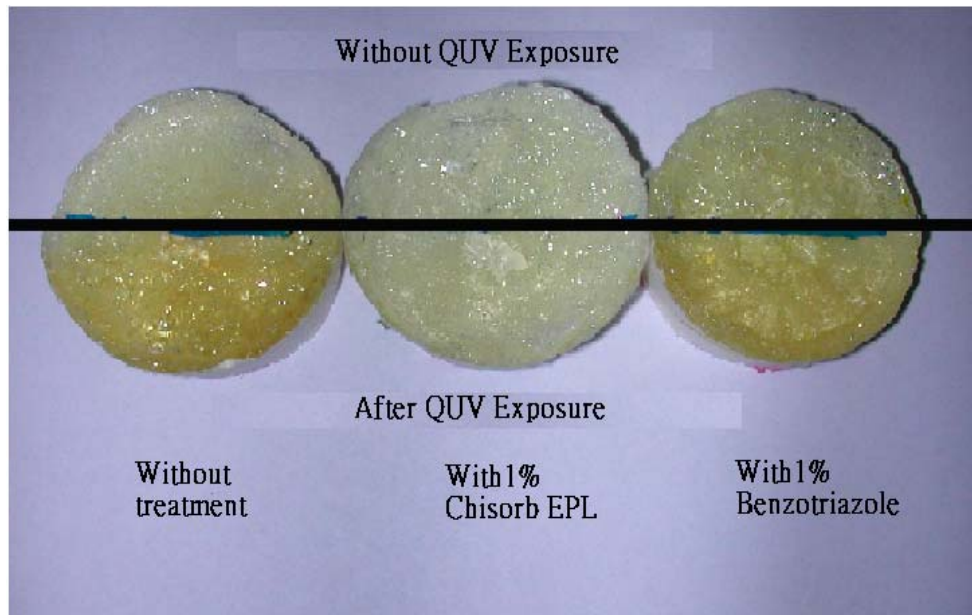


Fig. The yellowing effect of QUV exposure on epoxy with different pretreatment

After each 200 hrs Exposure

Formulation: Epoxy (anhydride hardener)+ 1%UV Absorber (or without) ,
Exposure: QUV 313, Temp: 50° C

* Out door test for 2 months has similar performance

Test result	Blank	TP-10	EPL	Benzotriazole UVA
Heat resist	F	O	F	X
UV resist	X	F	O	X

O: Good, F: Fair, X: Yellowing



Storage	Must be stored in closed containers and in dark dry conditions.
Packaging	30 kg net t/plastic drum
HS Code	2921 4200
Health and Safety Information	<p>Toxicity: ORL-RAT LD₅₀ : > 1,000 mg/kg</p> <p>Inflammability: Flash point: : > 100 °C Decomposition temp. : > 150 °C</p> <p>For detailed information please consult the corresponding material safety data sheets.</p>
Important Notice	<p>Chisorb EPL tends to crystallize at low temperature. The crystallization is natural occurrence. To use the product, heat up to 60 – 70 °C. The quality and characteristics of product are not affected after being heated up.</p> <p>To prevent crystallization, it is recommended to store Chisorb EPL at room temperature (25 °C).</p>
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