# Eversorb® UR210

## Light stabilizer for UV curable coatings applications

#### Introduction

Eversorb® UR210 is a blending high performance liquid UV light stabilizer for UV curable coatings. It can prevent to degrade from sunlight UV radiation. The most to important thing is no impact on the cure speed for most formulations.

Eversorb® UR210 is a versatile light stabilizer, which can be used in wide varieties of clear and pigmented UV curable coating system. It recommended for metal, wood and plastic materials.

<b>Physical Properties</b>	<u>Appearance</u>	
	Amber to yellowish liquid	
	Solubility at 25°C (g/100g monomer)	
	Isobornyl acrylate (IBOA)	>50
	2-phenoxyethyl acrylate (PEA)	>50
	hexane diol diacrylate (HDDA)	>50
	tripropyleneglycol diacrylate (TrPGDA)	>50
	trimethyolpropane triacrylate (TMPTA)	>50
	trimethyolpropane ethoxytriacrylate (TMPEOTA)	>50
	Dynamic Viscosity at 20°C	
	3000-3500 mPa.s	
Advantages		
	Easily handing	
	NO impact on the curing speed	
	Improve gloss retention	

Excellent color retention

Improve coating durability

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# **Experiments**

1.Test of Minimal Curing Energy:Formulation : Epoxy Acrylate38% w/w TPGDA24% w/w HDDA

38% w/w alpha-Hydroxy Ketone (photo initiator) 5% Curing condition: 1x150w/cm (High pressure Hg lamp)

Dry film thickness (DFT):10 mm

Curing Method: WWR on coated Leneta charts

Dosage: 1~3% Eversorb® UR210

1-1 Min. energy to reach curing need (J/cm<sup>2</sup>)



0 0.02 0.04 0.06 0.08 0.1 0.12 0.14 0.16 Min. energy to reach curing need (J/cm2)

2. Test of Accelerated Weathering:

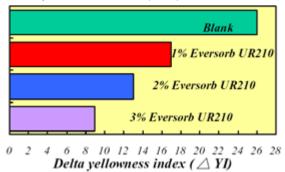
Model: Q-U-V Accelerated Weathering Tester

Test Time: 100 hours

Test Model: ASTM G154-2 (QUV with UVB-313 light bulb ) Material: Metal

Dosage: 1~3% Eversorb UR210

2-1 Delta yellowness index (△YI)



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### **Handling & Safety**

Personal equipment for protection is recommended. Excess exposure to the product should be avoided. Wash thoroughly after handling.

### **Storage Conditions**

Eversorb® UR210 should be kept in a dry, dark place without any light exposure.

The data presented in this leaflet are in accordance with the present state of our knowledge, but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations do not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the products for a particular purpose. Seller makes no representation or warranty to express or implied including of merchantability or fitness for particular purpose.

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