

XZ 95330.00

Experimental Acrylic Curing Agent improves epoxy coatings weathering resistance

XZ 95330.00 waterborne curing agent is a polymeric solution where the polymer consists of an acrylic backbone onto which amine functionalities are grafted. This unique combination of chemistries allows formulators to develop epoxy coatings that display:

- good aesthetics and weathering resistance
- good chemical resistance and corrosion protection and
- long pot-life

XZ 95330.00 forms glossy films, comparable in aesthetics to that of polyamide based coatings. Typical polyamide coatings however tend to yellow rapidly upon UV exposure. In contrast, XZ 95330.00 based coatings retain about 80% of their initial gloss level and display only minor yellowing after 500 hours UV exposure.

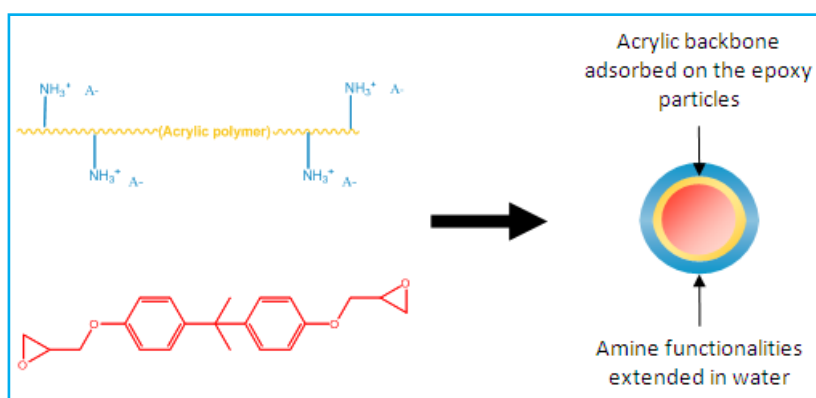
In addition, key properties of epoxy coatings are retained when formulating with XZ 95300.00. Hence, coatings based on this acrylic curing agent and liquid epoxy resins show good to excellent resistance against a range of chemicals, including solvents and bases.

Finally XZ 95330.00 emulsifies liquid epoxy resins in such a way that its amine functionalities are kept separate from the epoxy groups. This is why formulations developed using XZ 95330.00 present a long pot-life: the initial viscosity can be maintained during 6-7 hours after mixing. Tack-free films are formed as soon as the volatiles have evaporated.

XZ 95330.00 is designed primarily for use in civil engineering and marine and protective coatings. Applications include high gloss finishing coat, decorative and protective coatings for food factories, schools, hospitals and office buildings, and coatings for warm climates.



COATINGS:
Innovation solutions with Univar technical team



	XZ 95330.00 based coating	Polyamide based coating
Pot-life	8 hours	~ 3 hours
Tack-free time	3 hours	6 hours
Initial gloss (60° angle)	90	85
Gloss retention (500 hours UV exposure)	78%	70%
Yellowing index (500 hours UV exposure)	2	8
Chemical nature	Resistance(1) of XZ 95330.00 based coating	
Ethanol	60%	
Xylene	95%	
Toluene	95%	
Caustic soda, 10%	75%	
Sulfuric acid, 10%	50%	

(1) Chemical resistance: 100% indicates that the chemical did not have any effect on the coating. 0% indicates total failure.



Dow Epoxy Product Update

Did you know that [Dow](#) supplies three liquid epoxy resin grades with very low hydrolysable chloride content?

Standard liquid bisphenol A epoxy resin grades contain typical levels of hydrolysable chloride up to 500 ppm which can be too high for certain applications and particularly for electronics or electrical (casting) applications. High hydrolysable chloride content can have a negative impact on the electrical properties such as conductivity.

[Dow Epoxy](#) has recently launched three liquid bisphenol A epoxy resin grades, these new EL grades (as shown in the table below) are designed to address the low hydrolysable chloride (HyCl) content requirements whilst maintaining all other standard specification parameters.

COATINGS:
Sustainable formulations with Univar and Dow Epoxy



	DD.E.R.™ 330	D.E.R. 330-EL	D.E.R. 336	D.E.R. 336-EL	D.E.R. 331	D.E.R. 331-EL
Hydrolysable chloride content, maximum [ppm]	500	100	500	150	500	150
Epoxide equivalent weight [g/eq]	176-185		181-185		182-192	
Viscosity @ 25°C [mPa.s]	7000-10000		9400-11000		11000-14000	

These new liquid epoxy resin grades are especially designed for applications such as:

- Electrical Laminates
- Electrical Castings
- Encapsulation

[For more information contact your Univar sales contact.](#)

