

# K-FLEX<sup>®</sup> UD-350W

## Polyurethane Diol



Science Road  
Norwalk, CT 06852  
(800) 431-7900  
Fax: (203) 866-1268  
E-Mail: coatings@kingindustries.com

K-FLEX UD-350W is an aqueous solution of an aliphatic, low molecular weight urethane diol oligomer. It is recommended as a modifier for amino crosslinked water soluble and emulsified acrylic, alkyd, urethane and polyester resins. K-FLEX UD-350W can be used as a reactive cosolvent replacement to increase solids, crosslink density, improve film/resistance properties and flow/leveling.

**APPLICATIONS:** Emulsions or water-borne thermoset coatings crosslinked with aminoplasts:  
Coil coatings  
Overprint varnishes  
Appliance coatings  
Automotive coatings  
Wood coatings  
Can coatings  
Dip coatings

**ADVANTAGES:** Allows cosolvent reduction (lower-VOC)  
Water soluble without using amine and cosolvent  
Reduced Popping  
Increased hardness  
Good chemical/stain resistance  
Improved flow/leveling (higher gloss)  
Good hydrolytic stability  
Excellent QUV resistance and exterior durability  
Anti-skinning

<b>TYPICAL PROPERTIES:</b>	Appearance	Straw colored liquid
	% Active, wt. %	88
	Diluent	Water
	Viscosity, cPs, 25° C	3,000
	Hydroxyl number (as supplied)*	325
	Hydroxyl equiv. Weight (as supplied)	170
	Color, Gardner	2
	Weight per gallon, lbs.	9.4
	*Calculated on resin hydroxyls	

**SOLUBILITY:** K-FLEX UD-350W is soluble in water and in all water miscible organic solvents. It is not soluble in aliphatic and aromatic hydrocarbons.

**TYPICAL USAGE LEVELS:** K-FLEX UD-320W should be used as a reactive resin modifier at 2-15% of total resin solids. At levels greater than 5% the aminoplast ratio should be increased. For more details see chart in K-FLEX urethane diol brochure.

**SHELF LIFE:** Minimum of 24 months from date of manufacture, when stored in the original container at ambient conditions.

**HANDLING & STORAGE:** Store in a cool, dry location. Please consult Material Safety Data Sheet for further information.

**REGULATORY:** Please refer to Section 15 of the Material Safety Data Sheet for information.