

# Additives for Adhesives and Sealants



## RHEOLOGY MODIFIERS

Addition of **DISPARLON**<sup>®</sup> provides thixotropy with good shear thinning for ease of application and excellent film build/ bead formation. In liquid systems, suspension of fillers can be achieved with minimal effect on application viscosity.

## DIOLS

Unique diols that can enhance mechanical properties and improve bond strength. **K-FLEX**<sup>®</sup> diols are solventless liquid polyester diols that range in viscosity from 400-12,000 cPs and can add a balance of flexibility while retaining hardness. They are especially suited for adhesives that require good clarity and low color development.

## CATALYSTS

**K-KAT**<sup>®</sup> catalysts are alternatives to tin and mercury catalysts for isocyanate, blocked isocyanate and moisture cure silane systems.

**K-PURE**<sup>®</sup> catalysts are 100% solids, latent thermal initiators for epoxy systems. These catalysts initiate reactions for epoxy/epoxy, epoxy/acid anhydride, epoxy/polyol and epoxy/benzoxazine systems. Applications include semiconductor manufacturing, electronic packaging, laminating and industrial/automotive adhesives.

## ADHESION PROMOTERS

**K-FLEX**<sup>®</sup> acetoacetates react to contribute polar groups in the polymer morphology and provide better adhesion to various substrates. Primary applications are 2K systems where one component is an amine, or where an amine is generated in the reaction.

**NACURE**<sup>®</sup> **XC-293** is a solventborne adhesion promoter additive for aluminum substrates.



# Selection Guide

## POLYAMIDE THIXOTROPES

○ Effective    ◐ Very Effective    ● Most Effective

	Attributes	Form	Solvent Based	Water Based	Solventless	(1K) Epoxy	(2K)	Acrylate	Silicone Silane
DISPARLON® 6100	Lowest activation temperature	Powder	○		○		◐	●	●
DISPARLON® 6250	Reduced activation temperature	Powder	○		○		●	○	●
DISPARLON® 6500	General use	Powder	○		○		●	◐	●
DISPARLON® AQH-800	Anti-settle / anti-sag	Rheology mod.		○		●	●	●	

## POLYESTER DIOLS

	Attributes	Form	Solvent Based	Water Based	Solventless	(1K) Urethane	(2K)	Aminoplast
K-FLEX® 188	Balance of properties, low color	Liquid	●	○	●		●	●
K-FLEX® XM-366	Lower viscosity, more flexibility	Liquid	◐	○	●		●	●
K-FLEX® XM-332	Lower viscosity, softest	Liquid	◐	○	●		●	●

## CATALYSTS

	Attributes	Form	Solvent Based	Water Based	Solventless	(1K) Urethane	(2K)	(1K) Epoxy	(2K)	Aminoplast	Silicone Silane
K-KAT® 670	Zinc complex	Liquid			○	◐					●
K-KAT® XK-678	Acid phosphate	Liquid	○		○					◐	●
K-KAT® XK-661	Zinc complex	Liquid	○	●	●	◐	●				
K-KAT® XK-604	Hg alternative	Liquid	○		○		●				
K-PURE® CXC-1612	80°C cure	Solid	◐		●			●		○	
K-PURE® CXC-1614	100°C cure	Solid	◐		●			●		○	
K-PURE® CXC-1615	120°C cure	Solution*	◐	●				●		◐	
K-PURE® CXC-1765	Epoxy + acid anhydride	Liquid	●		●				●		

## ADHESION PROMOTERS

	Chemistry	Form	Substrate	Solvent Based	Water Based	Solventless	(1K) Epoxy	(2K)	Aminoplast
K-FLEX® XM-B301	Acetoacetate	Liquid	Metal or plastic	○		●	○	●	◐
NACURE® XC-293	Carboxylate	Solution*	Metal or plastic	◐	◐				●

\*Solution contains solvent