K-POL®8211



K-POL 8211 is a unique, aliphatic and saturated diol recommended for 2-component polyurethane coatings, elastomers, and adhesives. It provides hard films with good flexibility. K-POL 8211 will provide lower VOC systems with improved toughness, high modulus and good exterior durability, plus excellent performance in thin film coatings.

- Lower VOC
- · Hard films with improved flexibility
- Good exterior durability
- Improved gloss

Typical Use Level (on total resin solids)		
2-K PU systems	5-15%	

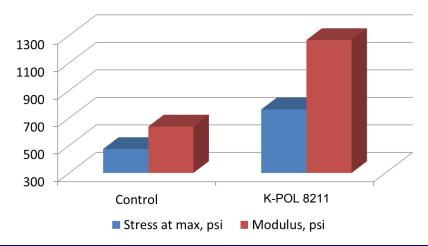
Typical Properties		
Appearance	Clear, light liquid	
% Active	100	
Viscosity, cPs, 25°C	7,200	
Hydroxyl number	400	
Weight per Gallon, 25°C	9.12 lbs.	

Performance

K-POL 8211 replacement of polycaprolactone diol in a 100% NV aromatic 2K PU floor coating

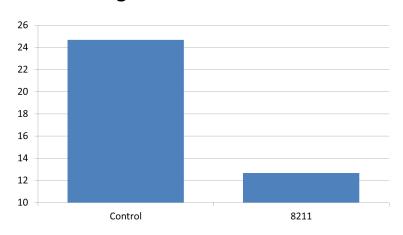
Formulation	Polycaprolactone Diol	K-POL 8211
Castor oil, urethane grade	33.24	34.52
Polycaprolactone Diol	13.01	0.00
Polycaprolactone Triol	2.17	2.25
Polyether Diol 250 MW	1.45	1.50
K-POL 8211	0.00	9.66
Des E 21	50.14	52.07
	100.00	100.00

Floor coating mechanical properties more robust with K-POL replacement of polycaprolactone diol.



Formulation	Polycaprolactone Diol	K-POL 8211
Stress at max, psi	474.22	761.55
Strain at max, %	126.13	119.56
Modulus, psi	637.4	1266.1
Shore A	73	88
Shore D	25	42
Tg, °C (initial)	8.1	22.1

Δ% Tg After 1 Week at 50°C



K-POL 8211 gave better thermal staibility than polycaprolactone diol

Applications

Industrial Maintenance

Automotive OEM/refinish

Floor Coatings (residential, commercial)

General Industrial

Urethane elastomers

Adhesives and sealants

Contact Information

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KPOL8211A4/April2015KG

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