Product information

HYBRIDUR® 878

Polymer Dispersion

DESCRIPTION

Hybridur 878 polymer dispersion is an NMP-free, anionically-stabilized aliphatic urethane-acrylic hybrid polymer dispersion. Hybridur 878 exhibits rapid dry, excellent wetting, adhesion, and barrier properties when used in air-dried coatings. Further performance improvements can be obtained employing heat-cure or use of additional crosslinkers. Hybridur 878 provides typical polyurethane dispersion performance at improved economics.

Hybridur 878 can be used for both clear and pigmented coating applications on a variety of substrates. Performance of Hybridur 878 based coatings is comparable to NMP containing grades such as Hybridur 580. Hybridur 878 provides films with higher glass transition temperature (T_g) when compared to Hybridur 870.

TYPICAL PROPERTIES

Property	Value	Unit	Method
Appearance	Milky White Dispersion		
Solids	39-41	%	
Viscosity @ 25°C	50 - 150	mPa.s	
pH @ 21°C	7.5 - 9.0		
Acid Number	14.5	mgKOH/g	calculated
Specific Gravity @ 21°C	1.03	g/ml	
Particle Size	Colloidal		
Particle Charge	Anionic		
Stabilising Amine	TEA		

ADVANTAGES

- NMP free and solvent free for maximum formulation latitude
- Excellent wetting and adhesion
- Excellent chemical resistance and UV durability

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APPLICATIONS

- Primer and topcoats on variety of substrates
- Airless and conventional spray and roller applied coatings
- Heat-cured coatings with excellent blocking resistance

SHELF LIFE

At least 18 months from the date of manufacture in the original sealed container stored undercover at ambient temperature away from excessive heat and humidity.

STORAGE AND HANDLING

Refer to the Safety Data Sheet for Hybridur 878 polymer dispersion.

TYPICAL HANDLING PROPERTIES

Property	Value	Unit	Method
MFFT	62	°C	ASTM D 2354 (55 µm DFT)
Solvent	< 0.1	%	
VOC	11	g/l	TEA
Typical cure schedule	2 - 7	days	

TYPICAL PERFORMANCE PROPERTIES

Property	Value	Unit	Method
Gloss 60°	92		ASTM D 523
Persoz Hardness, 25°C	230	s	ASTM D 4366
Tensile Strength	30.4	MPa	ASTM D 638 (150 µm DFT)
Tensile Modulus	1.1	GPa	ASTM D 638 (150 µm DFT)
Tensile Elongation	8	%	ASTM D 638 (150 µm DFT)
Direct Impact Resistance	> 185	kg.cm	ASTM D 2794 (60 µm DFT, S36i steel panels)
Reverse Impact Resistance	> 185	kg.cm	ASTM D 2794 (60 µm DFT, S36i steel panels)
Double Rubs		Film Break Through	
Isopropyl alcohol	105		ASTM D 4752
2-butanone (MEK)	> 200		ASTM D 4752

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