

Hybridur[®] Polymer Dispersions

Cost Efficient Waterborne Polyurethane Performance
with Fast Return to Service



Hybridur[®]

Hybridur[®] Acrylic Polyurethane

Hybridur[®] Polymer Dispersions are a line of anionically stabilized urethane-acrylic hybrid polymers from Evonik Corporation. These innovative materials have been found to exhibit excellent wetting, adhesion, barrier and film properties when used in air dry, baked or crosslinked high-performance coatings on a wide variety of metal, wood, plastic and previously painted substrates. Hybridur[®] dispersions offer the formulator a cost effective alternative to standard polyurethane dispersions (PUDs) without sacrificing performance, and enhanced performance properties over blends of PUDs and acrylic emulsions in coatings for primer, topcoat, and clear coat applications.

OUTSTANDING PERFORMANCE

- Polyurethane performance
- Good chemical and corrosion resistance
- UV durable
- Scratch and mar resistance
- Excellent adhesion to plastics, concrete, wood, and metal

IMPROVED PRODUCTIVITY

- Fast return-to-service time
- Worry-free application
- Ease of handling

ECO-FRIENDLY, USER-FRIENDLY

- Waterborne
- Isocyanate free polyurethane
- Low-VOC



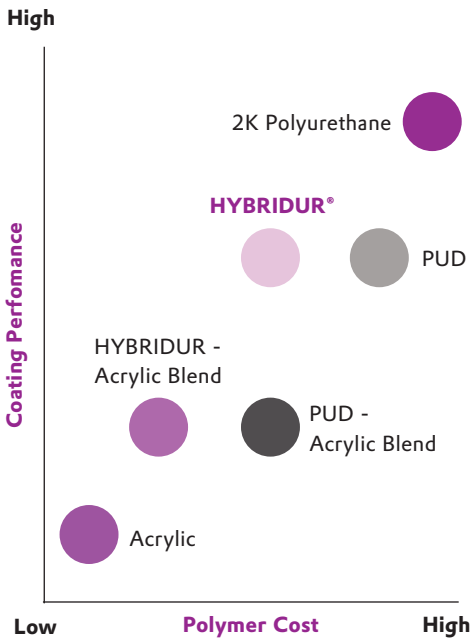
Developed with purpose

Hybridur[®] dispersions are easy to formulate and offer rapid dry times. They provide the same ease of use and VOC compliance of typical waterborne dispersions with the added benefits of outstanding barrier properties, durability and UV resistance in both air dry and baked systems. These hybrid polymers are prepared by a proprietary process technology that leads to an intimacy of interaction between the polyurethane and acrylic structures that cannot be achieved by blending. They are targeted for use in high-performance, VOC-compliant coatings and ink applications.

Selection Chart

HYBRIDUR [®] 878	HYBRIDUR [®] 870
Wood / hard plastic/ metal or concrete	Flexible substrates
<div> <div>NMP-FREE</div> <div> <div>HARD</div> <div>SOFT</div> </div> <div>CONTAINS NMP</div> </div>	
HYBRIDUR [®] 580	HYBRIDUR [®] 570
Wood or hard plastic	Metal or concrete

Technology Positioning



Performance Properties

	Solids (%)	Viscosity Brookfield (cP)	pH	Freeze-Thaw Stability Cycles	Mechanical Stability	Hot Box Stability	Density (lb/gal)		Paradise Size	Particle Size	VOC lb/gal (g/L)	Comments	Principal Applications
Hybridur® 570	40 - 42	50 - 150	7.5 - 8.5	10 +	Good	Good	8.6		Colloidal	Anionic	1.35 (150)	Anionically stabilized urethane-acrylic hybrid polymers. Exhibit excellent wetting adhesion, barrier and film properties when used in air dry, baked or crosslinked high performance coatings.	Metal or concrete applications
Hybridur® 580	40 - 42	50 - 150	7.5 - 8.5	10 +	Good	Good	8.7		Colloidal	Anionic	1.35 (150)		Wood or hard plastic applications. Compliant with 21CFR 175.105.
Hybridur® 870	40	< 150	7.5 - 9.0	5	Good	Good	8.7		Colloidal	Anionic	0.25 (30)	NMP FREE. Anionically stabilized urethane-acryliy hybrid polymers. Exhibit excellent wetting, adhesion, barrier and film properties when used in air dry, baked or crosslinked high performance coatings.	Metal, concrete or more flexible applications. Compliant with 21CFR 175.105
Hybridur® 878	40	< 150	7.5 - 8.5	5	Good	Good	8.7		Colloidal	Anionic	0.20 (24)		Metal, concrete or more flexible applications. Compliant with 21CFR 175.105

Application Selection Guide

	Metal Coatings	Plastics	Interior Wood	Exterior Wood	Commercial Roofing	Concrete Coatings
Hybridur® 570	+	++	+	++	++	++
Hybridur® 580	+	+	++	++	+	+
Hybridur® 870	++	++	++	+	++	++
Hybridur® 878	+	+	+	++	+	+

Regional Availability

	Americas	Europe	Asia
Hybridur® 570	+		+
Hybridur® 580	+		+
Hybridur® 870	+	+	+
Hybridur® 878	+	+	+



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