

HYBRIDUR® for Interior Plastic Coatings

How do you transform your plastic coatings formulations from “good enough” to “high performance”? HYBRIDUR® one component true urethane-acrylic hybrids are innovative choice for factory applied, waterborne plastic coatings. It offers outstanding adhesion to hard plastics substrates for automotive interiors and consumer products.

APPLICATIONS
INCLUDE:
AUTOMOTIVE
COSMETIC CONTAINERS
ELECTRONICS
MOBILE PHONES
COMPUTERS

These anionically stabilized polymers are true urethane-acrylic hybrids that offer excellent wetting, adhesion. Hybridur dispersions are excellent choice for factory applied plastic coating applications. They provide VOC compliance, outstanding adhesion to hard plastic substrates and outstanding resistance to ultraviolet radiation making it a natural choice for automotive interiors, and consumer products such as electronics, cosmetic containers, mobile phones and computers.



PREMIUM PERFORMANCE

Excellent Gloss
Superior Weatherability
Adhesion to hard plastic substrates, including:
ABS, ABS-PC, and PC

IMPROVED PRODUCTIVITY

Total system cost (paint, application, and maintenance)
True Urethane-Acrylic hybrid
One component system
Ease of application

ECO-FRIENDLY PRODUCTS

VOC compliance
No Harmful materials
Registered on all major global chemical inventory registry

PROPERTIES AND SELECTION GUIDE FOR PLASTIC COATINGS APPLICATION

| | Solids (%) | Viscosity Brookfield (cP) | pH | Freeze-Thaw Stability Cycles | Mechanical Stability | Hot Box Stability | Density (lb/gal) | Plastics |
|---------------|------------|---------------------------|-----------|------------------------------|----------------------|-------------------|------------------|----------|
| Hybridur® 570 | 40 - 42 | 50 - 150 | 7.5 - 8.5 | 10 + | Good | Good | 8.6 | ++ |
| Hybridur® 580 | 40 - 42 | 50 - 150 | 7.5 - 8.5 | 10 + | Good | Good | 8.7 | + |
| Hybridur® 870 | 40 | < 150 | 7.5 - 9.0 | 5 | Good | Good | 8.7 | ++ |
| Hybridur® 878 | 40 | < 150 | 7.5 - 8.5 | 5 | Good | Good | 8.7 | + |



**STARTING POINT FORMULATION
HYBRIDUR® 570 PIGMENTED WHITE
FOR PLASTIC COATINGS**

| MATERIAL | WEIGHT % | SUPPLIER |
|--------------------------|---------------|-----------|
| Grind: | | |
| Kelsol 3961 | 6.39 | Reichold |
| Ammonium Hydroxide | 0.69 | |
| Butyl Cellosolve | 1.49 | |
| Deionized Water | 5.60 | |
| Disperse-ayd W-22 | 0.71 | |
| Titanium Dioxide R960 | 21.30 | Elementis |
| Letdown: | | |
| Hybridur® 570 Dispersion | 61.86 | Evonik |
| Texanol Ester Alcohol | 7.96 | Eastman |
| Total | 100.00 | |

**STARTING POINT FORMULATION
HYBRIDUR® 570 CLEAR COAT
FOR PLASTIC COATINGS**

| MATERIAL | WEIGHT % | SUPPLIER |
|-----------------------|---------------|------------|
| Grind: | | |
| Hybridur® 570 | 94.61 | Evonik |
| Foamaster VF | 0.40 | BASF |
| Texanol Ester Alcohol | 4.73 | Eastman |
| Byk-348 | 0.26 | BYK-Chemie |
| Total | 100.00 | |

TYPICAL COATING PERFORMANCE PROPERTIES

| FORMULATION | WHITE FORMULATION | | CLEAR FORMULATION | |
|-------------------|-----------------------|---------------|-----------------------|---------------|
| Gloss | Polycarbonate (Lexan) | ABS (Cycolac) | Polycarbonate (Lexan) | ABS (Cycolac) |
| 200 | 20 | 18 | 57 | 42 |
| 600 | 63 | 61 | 78 | 78 |
| 850 | 93 | 90 | 91 | 88 |
| Dry Tape Adhesion | 5A | 5A | 5A | 5A |
| Wet Tape Adhesion | | | | |
| 24 Hours | 5A | 5A | 5A | 5A |
| 7 Days | 5A | 5A | 5A | 5A |

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