

**CYTEC**

**UCECOAT 7660**

**A NOVEL Xi FREE ALIPHATIC UV-CURABLE  
POLYURETHANE DISPERSION FOR SPRAY  
COATINGS ON WOODEN FURNITURE**



- **RECOMMENDED ESPECIALLY FOR TRANSPARENT SPRAYABLE BASECOATS WITH EXCELLENT WOOD WETTING (“ANFEURUNG”)**
- **USED IN COMBINATION WITH TOPCOATS BASED ON UCECOAT 7849, 7571, 7773 or 7655 GIVES A HIGH PERFORMANCE COATING BUILD-UP FOR FURNITURE**
- **CAN ALSO BE USED AS SOLE COMPONENT FOR BOTH BASE AND TOPCOAT IN ECONOMICAL SYSTEMS**

**ALIPHATIC POLYURETHANE DISPERSION:**

- **SOLID CONTENT : ~ 40%**
- **BROOKFIELD VISCOSITY @ 25°C (50 rpm): 45 mPa.s**
- **pH : 6.4 – 7.8**
- **PARTICLE SIZE : max. 150 nm**
- **DENSITY ~ 1.05 g/cm<sup>3</sup>**
- **TRANSLUCENT TO WHITE LIQUID**

- **OUTSTANDING WOOD WETTING (“ANFEURUNG”)**
- **EXCELLENT ADHESION ON SEVERAL WOOD SUBSTRATES**
- **RESOLUBLE AND TACKY BEFORE UV-CURING**
- **GOOD STAIN & MECHANICAL RESISTANCE**
- **HIGH FLEXIBILITY AND HARDNESS**
- **EASY APPLICABLE BY SPRAY**
- **GOOD COLLOIDAL STABILITY**
- **Xi-FREE**

## STARTING POINT FORMULATION FOR MATT SPRAY COATINGS

<b>UCECOAT 7660</b>	<b>94 parts</b>
<b>Acematt TS 100</b>	<b>1.5 parts</b>
<b>Aquamatt 208</b>	<b>3.0 parts</b>
<b>Additol BCPK</b>	<b>1.5 parts</b>

**A thickener, such as Ucecoat 8460, can be added up to 2% in the formulation to adjust the viscosity to the specific spray conditions**

	<b>Ucecoat 7660</b>	<b>Competition 1</b>	<b>Competition 2</b>
Resolubility in water (after 24h)	Excellent	No	No
Surface Tack	Tacky	Tack-free	Slightly tacky
Wood wetting (5=excellent /1=bad)	5	4	3
Adhesion (5=excellent /1=bad)	5	5	5

#### Application

Spray 70 g/m<sup>2</sup> wet basecoat (Uc.7660 or comp.1 or comp.2) on sanded (grit 150) Sapelli and beech  
+ 70 g/m<sup>2</sup> wet topcoat based always on Ucecoat 7849

#### Drying

3x Flash off (40°C, 15') + 1x Jet Dryer (50°C, 7') for each layer

UV curing (Hg 80 W/cm)

1x 10m/min (basecoat)

2x 10m/min (topcoat)

EXCELLENT WOOD WETTING  
(score 5)



BAD WOOD WETTING  
(score 1)



	Ucecoat 7660	Competition 1	Competition 2
Erichsen (N)	18	8	15
Hamberger (N) <sup>+</sup>	38	18	38
Chemical resistance (5=excellent /1=bad)			
NH3 1%	5	5	<b>4</b>
NH3 10%	<b>4</b>	5	<b>4</b>
Red Wine	5	<b>4</b>	<b>4</b>
Mustard	5	5	<b>4</b>
Eth 50%	5	5	<b>4</b>
Acetone	5	<b>3</b>	<b>4</b>
IPA	5	5	<b>4</b>
Water	5	5	<b>4</b>
Ketchup	5	5	<b>4</b>
Eosine 2%	<b>2</b>	<b>3</b>	<b>2</b>
Coffee	5	<b>4</b>	<b>4</b>
Solvent resistance (Double rubs on Sapelli)			
Water	>100	>100	>100
Acetone	>100	<b>&gt;85</b>	>100
IPA	>100	>100	>100

### Application

Spray 3x70 g/m<sup>2</sup> wet coating (based on Uc.7660 or comp.1 or comp.2) on sanded (grit 150) beech

### Drying

3x Flash off (40°C, 15') + 1x Jet Dryer (50°C, 7') for each layer

### UV-curing (Hg 80 W/cm)

1x 10m/min (first two layers)

2x 10m/min (topcoat)

- **UCECOAT 7660** is a new UV-curable aliphatic polyurethane dispersion showing excellent wood wetting, adhesion and re-solubility
- **UCECOAT 7660** is particularly recommended for transparent basecoats on wooden furniture
- **UCECOAT 7660** is also suited as main base and topcoat binder for economical coating systems
- **UCECOAT 7660** is an Xi free low viscous dispersion with good colloidal stability, that is easily formulated and sprayed in safe conditions