

# Product Information

## Alberdingk<sup>®</sup> LUX 560 VP

### What is the resin's nature?

Solvent-free UV-curable dispersion based on an aliphatic polyurethane-acrylic copolymer.

### Technical data:

Solids content:	39 - 41%
pH-value:	7.0 - 8.5
Viscosity:	10 - 200 mPas
MFFT:	approx. 0°C

### Features:

- Good chemical resistance
- Good wood warming and film clarity
- Good sandability
- Economic allround UV - dispersion

### What is the suggested field of application?

- Furniture coatings
- Parquet coatings
- Primers, sealers
- Wood panels
- Concrete coatings
- General plastic coatings



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### Alberdingk® LUX 560 VP

#### Suitable raw materials

##### Defoamers:

Tego Foamex 822 (Evonik Tego Chemie)  
Tego Airex 902 W (Evonik Tego Chemie)  
Tego Foamex 825 (Evonik Tego Chemie)

##### Substrate wetting agents:

Byk 346 (BYK Chemie)

##### Photoinitiators:

Irgacure 184 (BASF)                      Irgacure 500 (BASF)  
Irgacure 819 DW (BASF)

##### Matting agents:

Acematt TS 100 (Evonik)                      Lanco Matt 2000 (Lubrizol)

##### Dispersants:

Surfynol CT 231 (Air Products)

##### Rheology control additives:

DSX 1514 (BASF)                      DSX 3290 (BASF)  
DSX 3800 (BASF)

# Product Information

## Alberdingk® LUX 560 VP

### Formulation Proposal

UV 560-01 wood coatings, matt, 35% solids

Pos.	Raw Materials	Amount	Supplier
<b>1</b>	<b>ALBERDINGK® LUX 560 VP</b>	<b>76.70</b>	<b>Alberdingk Boley</b>
2	Tego Foamex 822	0.80	Evonik Tego Chemie
3	Water (deion.)	16.50	Evonik Tego Chemie
4	Acematt TS 100	0.80	Evonik
5	Byk 346	0.30	Byk Chemie
6	Ultralube D-816	3.00	Keim Additec
7	DSX 1514	0.30	BASF
8	DSX 3290	0.40	BASF
9	Irgacure 500	1.20	BASF
	<b>Total</b>	<b>100.00</b>	

### Pendulum hardness according to König:

After UV-curing: approx. 120 s

### Curing Conditions:

Pre-drying: 5 - 10 min at 50°C, convection dryer

Feed: 5m/min

UV-curing: 1 x Hg-lamp, 120 W/cm

Latest update  
Feb 01, 2013

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# Product Information

## Alberdingk<sup>®</sup> LUX 560 VP

### Chemical Resistance\*

UV 560-01      wood coatings, matt, 35% solids

Test Chemicals	Test Duration	Test Results**
Ethanol (48%)	1h	4
NH <sub>4</sub> OH (10%)	1h	4
Water (deion.)	16h	5
Coffee (4%)	16h	5
Red wine	5h	5
Mustard	16h	3
	1h	5
Fatty acid	5h	5
	16h	5

\*\*5 = best / 0 = worst

### Test features

Feature	Test Conditions	Test Results
Gloss (20° / 60° / 85°)	300µm wet film on opacity chart	18 / 56 / 75

\*tested according to EN 12720

the fatty acid test simulates the resistance of the film to human hand fat or hand lotions

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# Product Information

## Alberdingk<sup>®</sup> LUX 560 VP

### Formulation Proposal

UV 560-02      wood and plastic, white, solids ca. 52%

Pos.	Raw Materials	Amount	Supplier
<b>1</b>	<b>ALBERDINGK<sup>®</sup> LUX 560</b>	<b>68.90</b>	<b>Alberdingk Boley</b>
2	Tego Foamex 825	0.60	Evonik Tego Chemie
3	Tego Airex 902 W	0.20	Evonik Tego Chemie
4	Byk 346	0.30	BYK Chemie
5	Pigment paste CT-231*	24.00	Quantity of TiO <sub>2</sub> : 18.00%
6	Lanco Matt 2000	1.00	Lubrizol
7	Ultralube D-816	2.50	Keim Additec
8	Irgacure 500	1.00	BASF
9	Irgacure 819 DW	1.20	BASF
10	DSX 3800	0.30	BASF
	<b>Total</b>	<b>100.00</b>	

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## Alberdingk<sup>®</sup> LUX 560 VP

### \*Pigment Paste Formulation CT-231

Pos.	Raw Materials	Amount	Supplier
1	Water (deion.)	12.90	
2	Surfynol CT-231	7.50	Air Products
3	Tego Foamex 825	0.40	Evonik Tego Chemie
4	Kronos 2190	75.00	Kronos Titan
5	Water (deion.)	4.20	
<b>Total</b>		<b>100.00</b>	

Disperse for 20 min. under a high shear rate

#### **Curing Conditions:**

Pre-drying: 5-10 min at 50°C, convection dryer

Feed: 5 m/min

UV-curing: 1 x Ga-doped lamp per 120 W/cm

1x Ga-doped + Hg-doped lamp, each 120 W/cm

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Water (deion.)	16h	5
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Red wine	5h	5
Mustard	16h	3
	1h	5
Fatty acid	5h	5
	16h	5

\*\*5 = best / 0 = worst

### Test features

Feature	Test Conditions	Test Results
Gloss (20° / 60° / 85°)	300µm wet film on opacity chart	11 / 44 / 65

\*tested according to EN 12720

the fatty acid test simulates the resistance of the film to human hand fat or hand lotions

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