



## **Ecrothan**

acrylic modified polyurethane emulsions  
for coatings on wood, metal and plastics

Bright future.  
Water-based emulsions.



# Acrylic modified polyurethane emulsions

	<b>Ecrothan 440</b>	<b>Ecrothan 557</b>
<b>Type of emulsion</b>	Acrylic modified polyurethane emulsion NMP - and Isocyanate free	
<b>Technical data</b>		
Solid content:	39,0 ± 1,0%	41,0 ± 1,0%
pH-Value :	7,0 - 8,5	7,0 - 8,5
Average particle size :	app. 0,12 µm	app. 0,12 µm
MFFT:	15 °C	0 °C
Viscosity:	20 - 400 mPas	20 - 400 mPas
<b>Specification</b>	The data for solid content, viscosity and pH-Value are determined by our quality control department. The product is specified with this data.	
<b>Characteristics</b>	<ul style="list-style-type: none"> <li>- block resistant</li> <li>- non yellowing</li> <li>- good sandability</li> <li>- good chemical resistance</li> <li>- good „Anfeuerung“</li> <li>- excellent compatibility with pigment pastes</li> </ul>	<ul style="list-style-type: none"> <li>- block resistant</li> <li>- non yellowing</li> <li>- good sandability</li> <li>- exterior use</li> <li>- very elastic</li> <li>- self - crosslinking</li> <li>- very good adhesion on metal and plastics</li> </ul>
<b>Application</b>	<ul style="list-style-type: none"> <li>- parquet lacquers</li> <li>- floor coatings</li> </ul>	<ul style="list-style-type: none"> <li>- clear coat</li> <li>- glaze</li> <li>- enamel lacquers</li> </ul>

## Note

The information given in this brochure is reliable to the best of our knowledge. It is supposed to serve as a guideline for further processing our product. Due to the many influences in processing, however, no guarantee can be construed.

## For coatings on wood, metal and plastics

Acrylic modified polyurethane emulsions are designed to be applied on several substrates like wood, plastics and metal.

Due to the right selection of raw materials and the special morphologie of the polymer, we achieve high performance binders, with an excellent property profile. Our development is very customer oriented, this gives room for targeted and tailor-made products for special applications and substrates.

# Starting formulations

## Ecrothan 440

### Parquet lacquer, semigloss

<b>1 Ecrothan 440</b>	<b>Ecronova Polymer GmbH</b>	<b>84,00</b>
pos. 1 let down		
2 Butylglycol		4,50
3 Water		2,00
4 Byk 028	Byk Chemie GmbH	0,40
5 Aquafloor 400	Byk Cera b.v.	3,00
pos. 2 - 5 add successively under stirring		
6 Acticide MBN	Thor GmbH	0,20
7 Byk 028	Byk Chemie GmbH	0,40
8 Byk 333	Byk Chemie GmbH	0,10
9 Byk 346	Byk Chemie GmbH	0,30
pos. 6 - 9 add successively under stirring		
10 Water		2,00
11 Acrysol RM 825	Dow Advanced Materials	0,40
pos. 10 + 11 mix before addition		
12 Water		2,70
pos. 12 to adjust the viscosity		

**Total 100,00**

Viscosity DIN 4mm	after 1d/rt	45 s
pH-Value		7,8
Gloss 60°		28 E
Pendulum hardness (König)	after 28d / rt	105 s
Taber-Abraser (CS 17/1000 g/1000 U)		app. 60 mg

## Ecrothan 557

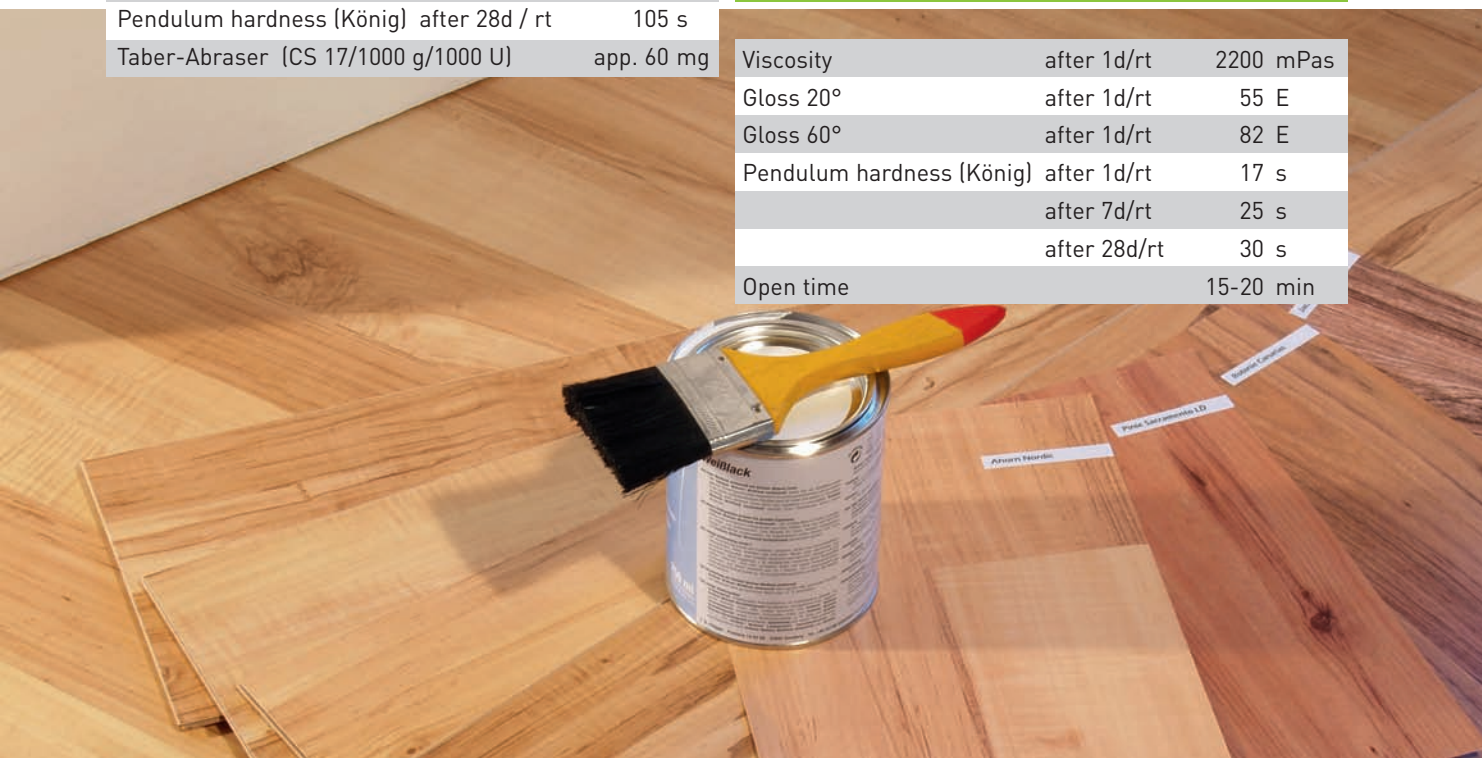
### White top coat, brush application

1 Water		2,00
2 Butyldiglycol		3,00
3 Edaplan 480	Münzing Chemie GmbH	0,70
4 Foamex 805	Evonik Industries	0,20
5 Tioxide R-HD 2	Huntsman International LLC.	22,00
pos. 1 - 5 add successively under stirring and dispers until grinding down to < 20µm		
<b>6 Ecrothan 557</b>	<b>Ecronova Polymer GmbH</b>	<b>63,00</b>
pos. 1 let down and add pos. 1- 5 under stirring		
7 Methoxybutanol		4,00
8 Tego Twin 4100	Evonik Industries	0,30
9 Byk 333	Byk Chemie GmbH	0,20
10 CHE-COAT-CI L 8AF C.H.	Erbslöh KG	0,15
11 CHE-COAT-CI L 8NF C.H.	Erbslöh KG	0,15
12 Rheolate 278	Elementis Specialties, Inc.	0,80
13 DSX 1514	Cognis Deutschland GmbH	0,80
14 Byk 093	Byk Chemie GmbH	0,30
pos. 7 - 14 add successively under stirring		

15 Water 2,40  
pos. 15 to adjust the viscosity

**Total 100,00**


Viscosity	after 1d/rt	2200 mPas
Gloss 20°	after 1d/rt	55 E
Gloss 60°	after 1d/rt	82 E
Pendulum hardness (König)	after 1d/rt	17 s
	after 7d/rt	25 s
	after 28d/rt	30 s
Open time		15-20 min





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Edition: 05/2011



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