










# WAX ADDITIVES



**EUROPE**  
PORTFOLIO



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# Methods of Measurement

PARTICLE SIZE	PICTURE PARTICLE ANALYZING SYSTEM	= 1
	ISO 13320	= 2
DROP POINT	DGF M-III 3	= 3
MELTING RANGE	DSC (DIN EN ISO 11357-3)	= 4
MELT VISCOSITY	DIN EN ISO 3104	= 5
pH-VALUE	DIN ISO 976	= 6



# Wax Additives

**CERETAN® LUBA-print®**  
**LUBRANIL® SÜDRANOL®**  
**WÜKONIL® WÜKOSEAL®**



MÜNZING is a highly regarded, privately owned company for specialty additives with headquarters in Abstatt, Germany. We have a global presence in over 40 countries and are a technology driven organization with an extensive staff of highly experienced R&D and technical service personnel in Europe, America and Asia. MÜNZING's mission is CREATING ADDITIVE VALUE by solving our customers' formulation problems in various industries and applications like wood coatings, industrial coatings, printing ink, speciality sectors etc. We offer state of the art technical service testing to all customers regardless of company size. Based on our holistic

range of specialty wax products, MÜNZING's technical service provides our customers best solutions in technical aspects at great value.

MÜNZING's wax portfolio spans from non-micronized waxes, micronized waxes, coated waxes, wax emulsions to water and solvent based wax dispersions and reflects our broad innovative production capabilities like our unique spraying technology leading to spherical micronized waxes.

This brochure will provide you an overview of our sophisticated wax portfolio along with product attributes for specific application segments.



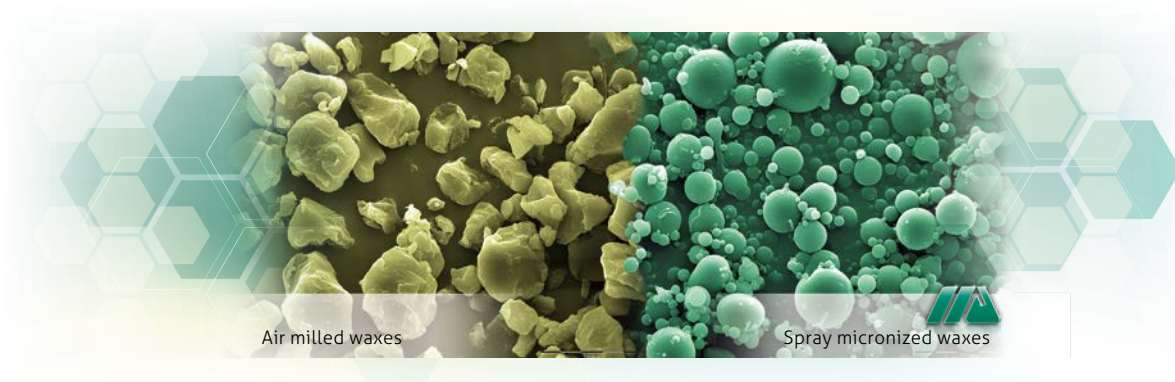
**MÜNZING – Your Partner for ALL WAX ADDITIVES**

**CERETAN® - micronized waxes**








CERETAN® micronized waxes are predominantly produced using our highly advanced spraying technology leading to spherical particles. The spherical shape and the particles' even surface help the dispersing process, reduce wax

usage as well as dust formation. We guarantee D<sub>99</sub> values to minimize oversized particles in your formulation.

**CREATING ADDITIVE VALUE** is the MÜNZING way of saying that we are happy to offer customized solutions.



# Additive Value Since 1830

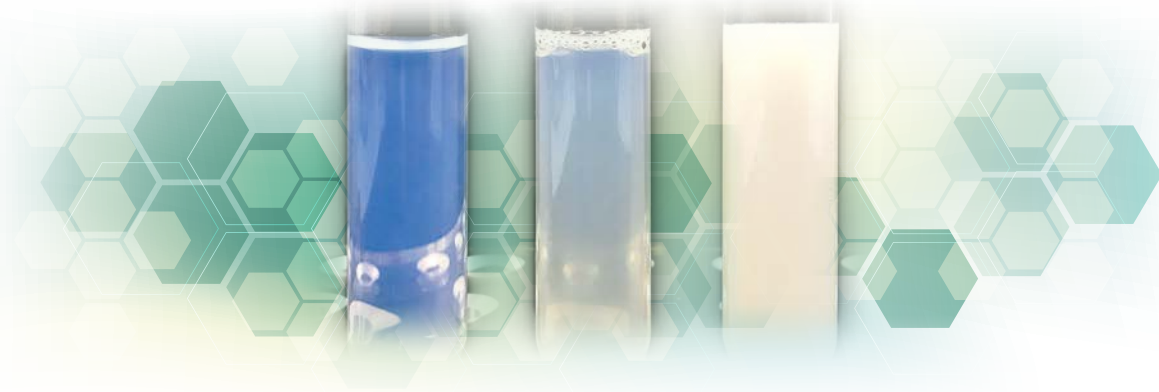
<p><b>1830</b> Foundation of MÜNZING by Friedrich Michael Münzing, first producer of sulfuric acid in Germany</p> 	<p><b>1960</b> Start of joint venture with DIAMOND SHAMROCK ("NOPCO") for the production and distribution of additives for paints, paper, adhesives and other industries</p> 	<p><b>2000</b> Expansion to North America, acquisition of ULTRA ADDITIVES, Bloomfield (NJ), USA, today MÜNZING North America</p> 	<p><b>2008</b> Acquisition of liquid defoamer business from HEXION SPECIALTY CHEMICALS, today AGITAN DF series</p> 
<p><b>1947</b> Build up of a new factory; production and development of fatliquors for the leather industry and auxiliaries for the paper industry</p> 	<p><b>1980</b> End of the joint venture with DIAMOND SHAMROCK, investment in new production facilities and a new research and development center</p> 	<p><b>2005</b> Opening of Office and Technical Service Center in Shanghai, China</p> 	

**LUBA-print<sup>®</sup>, LUBRANIL<sup>®</sup>, WÜKONIL<sup>®</sup>, SÜDRANOL<sup>®</sup>  
and WÜKOSEAL<sup>®</sup> – wax emulsions & dispersions**

Our high quality wax emulsions and dispersions are a necessity for all customers who prefer working with ready-made emulsions or dispersions in contrast to a dry wax. The ease of incorporation is the key benefit of liquid products.

In close cooperation with customers our R&D team in their state of the art laboratory is at your disposal to fulfill your specific requirements.

**CREATING ADDITIVE VALUE** to our customers is our daily passion.



**2010**

Start of production in Taixing, China



**2013**

Acquisition of Magrabar, Morton Grove (IL), USA, manufacturer of additives for the food industry



**2017**

New Office in Mumbai, India



**2019**

Opening of new subsidiary in Curitiba/PR, Brazil



**2009**

Acquisition of L.P. BADER, Rottweil, Germany, producer of wax dispersions, today MÜNZING CHEMIE



**2011**

Acquisition of DEUREX Micro Technologies, Elsteraue, Germany, producer of micronized waxes, today MÜNZING Micro Technologies



**2014**

Opening the new technology and administration center in Abstatt, Germany









**2018**

Acquisition of Süddeutsche Emulsions-Chemie (SEC), Mannheim, Germany, producer of wax emulsions. Acquisition of wood processing additives ("FENTAK") from HEXION with subsidiaries in Malaysia and Australia






# Micronized Waxes






## MICRONIZED WAXES






Product	Wax type	Renewable content classification <sup>*</sup>	Particle size <sup>2</sup>		Drop point <sup>3</sup> °C
			D <sub>99</sub> µm	D <sub>50</sub> µm	
CERETAN <sup>®</sup> MA 7008	EBS		8	3	143–151
CERETAN <sup>®</sup> MA 7019	EBS		19	6	143–151
CERETAN <sup>®</sup> MA 7020	EBS		20	5	143–151
CERETAN <sup>®</sup> MA 7050	EBS		50	12	143–151
CERETAN <sup>®</sup> MA 7080	EBS		80	25	143–151
CERETAN <sup>®</sup> MA 7150	Erucamide		50	13	80–88
CERETAN <sup>®</sup> MA 7250	Stearamide		50	13	98–108
CERETAN <sup>®</sup> MBP 00125	Biopolymer		25	8	n.a.
CERETAN <sup>®</sup> MC 6015	Carnauba		15	6	81–89
CERETAN <sup>®</sup> MC 6030	Carnauba		30	11	81–89
CERETAN <sup>®</sup> MCX 60215 <b>New</b>	Functional Blend		15	4	136
CERETAN <sup>®</sup> MCX 6610	Carnauba, Polyethylene		10	4	118–128
CERETAN <sup>®</sup> MCX 6625	Carnauba, Polyethylene		25	9	118–128
CERETAN <sup>®</sup> ME 0520	Polyethylene		20	7	109–117
CERETAN <sup>®</sup> ME 0825	Polyethylene		25	8	110–118
CERETAN <sup>®</sup> ME 1430	Polyethylene		30	10	110–118
CERETAN <sup>®</sup> ME 1620	Polyethylene		20	7	122–130
CERETAN <sup>®</sup> ME 1715	Polyethylene		15	6	122–130
CERETAN <sup>®</sup> MF 5010	Polyethylene, PTFE modified		10	4	108–118 (PTFE: 320–340*)
CERETAN <sup>®</sup> MF 5108	PTFE		8	5	320–340*
CERETAN <sup>®</sup> MF 5715	Polyethylene, PTFE modified		15	6	108–118 (PTFE: 320–340*)
CERETAN <sup>®</sup> MM 8015	Montan		15	6	90–98
CERETAN <sup>®</sup> MM 8120	Montan		20	7	81–89
CERETAN <sup>®</sup> MO 3220	Oxidized Polyethylene		20	7	104–112






\* = Melting Point

\* = Renewable content classification based on solid content:






 > 50% |  = 20–50% |  < 20%

 = Abrasion Resistance  
 = Adhesion Promoter  
 = Anti-Blocking  
 = Anti-Graffiti  
 = Anti-Slip

 = Brilliance  
 = Barrier Coating  
 = Burnish Resistance  
 = Backside Treatment  
 = Chelating Agent


 = Chemical Resistance  
 = Degassing  
 = Less Dirt Pick-up  
 = Feel  
 = Flexibility

 = Gloss  
 = Glass Protection  
 = Good Set  
 = Hot Blocking  
 = Hydrophobicity

 = Matting  
 = Meat Release  
 = Metal Marking  
 = Pigment stabilisation  
 = Oil, Gas Resistance




Wood coatings	Can coatings	Coil coatings	Powder coatings	Printing inks	Masterbatch
M S	MR				
AB M S SA			DG G		●
AB M S SA			DG G		●
					●
				AB G S	
				AB S	
AB SG SR				AB R SG	
S SG SR	G S SR				
AB S SG SR					
	AB MR S SR				
	AR G S SR			AB G R S	
AB S SR					
AB S SG SR				AB R S SG	
AB S SG SR			DG G	AB R S SG	●
AB S SG SR				AB R S SG	
HB S SG SR					
S SG SR	AR SR			AB R S	
CR HB S SR	AR SR			AB R S	
CR G HB MM S SR	AR SR			AB M R S	
MM S SR	AR SR			AB R S SG	
M S SR					●
					●
AB M S SR			DG G	AB M R S	●

... further Micronized Waxes on Page 8–9 ►

-  OT = Opentime
  -  pH = pH Stabilizer
  -  R = Rub Resistance
  -  RA = Release Agent
  -  RC = Recoatability
-  RP = Reduction & Prevention of Cracks & Pinholes
  -  SA = Sandability
  -  SR = Scratch Resistance
  -  SG = Semi Gloss
-  S = Slip
  -  ST = Sterilization Resistance
  -  T = Texture
  -  TT = Thixotropic
  -  WR = Water Retention
-  = Recommended (detailed information to be found in respective application brochure)

# Micronized Waxes

## MICRONIZED WAXES




Product	Wax type	Renewable content classification *	Particle size <sup>2</sup>		Drop point <sup>3</sup> °C
			D <sub>99</sub> µm	D <sub>50</sub> µm	
CERETAN® <b>MO 4715</b>	Polar Polyolefin		15	6	108–116
CERETAN® <b>MP 2120</b>	Polypropylene		20	10	156–164
CERETAN® <b>MP 2140</b>	Polypropylene		40	18	156–164
CERETAN® <b>MT 9015</b>	Fischer-Tropsch		15	6	110–115
CERETAN® <b>MT 9120</b>	Fischer-Tropsch		20	7	112–120
CERETAN® <b>MT 9220</b>	Fischer-Tropsch		20	6	108 - 112
CERETAN® <b>MX 2919</b>	Functional blend		19	6	140–146
CERETAN® <b>MX 9510</b>	Polyolefin		10	4	108–118
CERETAN® <b>MX 9620</b>	Functional blend		20	6	139–149
CERETAN® <b>MX 9720</b>	Functional blend		20	7	138–146
CERETAN® <b>MX 9815</b>	Polyolefin		15	6	111–119
CERETAN® <b>MX 9820</b>	Polyolefin		20	7	111–119
CERETAN® <b>MX 9825</b>	Polyolefin		25	9	111–119
CERETAN® <b>MXBP 00825</b>	Functional wax blend & biopolymer		25	7	110–118
CERETAN® <b>MXBP 60125</b>	Functional wax blend & biopolymer		25	6	81–89
CERETAN® <b>XT 23099</b> 	Polypropylene-Wax		100	40	160






## SURFACE MODIFIED WAXES






Product	Wax type	Particle size <sup>2</sup>	
		D <sub>99</sub> µm	D <sub>50</sub> µm
CERETAN® <b>MO 3220 WD</b>	Oxidized Polyethylene	20	7
CERETAN® <b>MX 9820 WD</b> <sup>ns</sup>	Polyolefin	20	7






ns = non-standard

\* = Renewable content classification based on solid content:






 > 50% |  = 20–50% |  < 20%

 = Abrasion Resistance  
 = Adhesion Promoter  
 = Anti-Blocking  
 = Anti-Graffiti  
 = Anti-Slip

 = Brilliance  
 = Barrier Coating  
 = Burnish Resistance  
 = Backside Treatment  
 = Chelating Agent

 = Chemical Resistance  
 = Degassing  
 = Less Dirt Pick-up  
 = Feel  
 = Flexibility

 = Gloss  
 = Glass Protection  
 = Good Set  
 = Hot Blocking  
 = Hydrophobicity

 = Matting  
 = Meat Release  
 = Metal Marking  
 = Pigment stabilisation  
 = Oil, Gas Resistance



Wood coatings	Can coatings	Coil coatings	Powder coatings	Printing inks	Masterbatch
AB M S SR				M R S	
AB AS BR HB M SR			DG SG		
AB AS BR HB M SR T					●
AB S SG SR	S SR		DG G	AB R S	
AB S SG SR	S SR		DG G	AB R S	
AB S SG SR	S SR		DG G	AB R S	
AB BR CR F M MM SR					
	S SR			R S SG SR	
AB HB M S SR			DG G		●
AB BR HB M SR					
				R S SG	
AB S SG SR				AB R S	
AB S SG SR			DG G		●
AB S SG SR				AB R S SG	
AB S SG SR				AB R S SG	
AR SG SR T		AR SG SR T			




Drop point of the wax <sup>3</sup> °C	Wood coatings	Printing inks
104–112	AR M S SR	AB M R S
111–119	AB S SG SR	AB R S

- OT = Opentime
- RP = Reduction & Prevention of Cracks & Pinholes
- S = Slip
- = Recommended (detailed information to be found in respective application brochure)
- pH = pH Stabilizer
- SA = Sandability
- ST = Sterilization Resistance
- R = Rub Resistance
- SR = Scratch Resistance
- T = Texture
- RA = Release Agent
- SG = Semi Gloss
- TT = Thixotropic
- RC = Recoatability
- DG = Dusting
- G = Gloss
- WR = Water Retention

# Coated & Non-Micronized Waxes

## COATED WAXES

Product	Wax type	Coating	Renewable content classification *	Particle size <sup>2</sup>	
				D <sub>99</sub> μm	D <sub>50</sub> μm
CERETAN® <b>MAB 7055</b>	EBS	Benzoin		55	13
CERETAN® <b>MCXF 6610</b>	Carnauba, Polyethylene	PTFE		10	4
CERETAN® <b>MPF 2520 D</b>	Polypropylene	PTFE		20	10
CERETAN® <b>MPS 3120</b>	Polypropylene	Silica		20	5
CERETAN® <b>MTZ 9335</b>	Fischer-Tropsch	Zinc		35	7
CERETAN® <b>MXD 3920</b>	Functional blend	Diamond-like hardness		20	4
CERETAN® <b>MXF 9510 D</b>	Polyolefin	PTFE		10	4
CERETAN® <b>MXF 9820 D</b>	Polyolefin	PTFE		20	7
CERETAN® <b>MXF 9899</b>	Functional blend	PTFE		–	50
CERETAN® <b>MXF 10115</b>	Polyethylene	PTFE		15	6
CERETAN® <b>MXF 10215</b>	Polyethylene	PTFE		15	6
CERETAN® <b>MXF 10325</b>	Polyethylene	PTFE		25	8
CERETAN® <b>MXF 10425</b>	Polyethylene	PTFE		25	8
CERETAN® <b>MXS 3615</b>	Functional blend	Silica		15	4
CERETAN® <b>MXS 3815</b>	Functional blend	Silica		15	5

\* = Renewable content classification based on solid content:  
 > 50% |  = 20–50% |  < 20%

## NON-MICRONIZED WAXES

Product	Wax type	Drop point <sup>3</sup>
		°C
CERETAN® <b>A 70</b>	EBS	143–151
CERETAN® <b>A 71</b>	Erucamide	80–88
CERETAN® <b>A 72</b>	Stearamide	98–108
CERETAN® <b>A 73</b>	Oleamide	70–78
CERETAN® <b>O 32</b>	Oxidized Polyethylene	105–111
CERETAN® <b>P 21</b>	Polypropylene	156–164
CERETAN® <b>T 91</b>	Fischer-Tropsch	112–120

\* = Melting Point

\*\* = at 130°C

\*\*\* = at 150°C


\*\*\*\* = at 170°C


 AR = Abrasion Resistance

 AP = Adhesion Promoter


 AB = Anti-Blocking

 AG = Anti-Graffiti

 AS = Anti-Slip

 B = Brilliance

 BC = Barrier Coating

 BR = Burnish Resistance


 BT = Backside Treatment

 CA = Chelating Agent


 CR = Chemical Resistance

 DG = Degassing


 DP = Less Dirt Pick-up

 F = Feel


 FL = Flexibility


 G = Gloss

 GP = Glass Protection

 GS = Good Set


 HB = Hot Blocking

 H = Hydrophobicity

 M = Matting

 MR = Meat Release













 MM = Metal Marking

 PS = Pigment stabilisation

 OR = Oil, Gas Resistance




Drop point of the wax <sup>5</sup> °C	Wood coatings	Can coatings	Powder coatings	Printing inks
135–145			DG G	
118–128		AR G S SR		AB G R S
156–164	AB HB M S SR			
156–164	AB BR HB M SR			
108–116			DG M	
138–146	AR M SR		AR DG SR	
108–118		AR S SR		AB G R S
111–119	AB F HB S SR		AR DG G SR	AB M R S
108–118			AR DG M S SR T	
122–130		AR S SR		AB SG R S
122–130		AR S SR		AB SG R S
110–118	AB F HB S SR			AB M R S
110–118	AB F HB S SR			AB M R S
81–89	AB M SR	AB M S SR		AB M R
105–120	AB M SR			AB M R

Viscosity of the wax <sup>5</sup> at 140°C mPas	Printing inks	Masterbatch
20–40***		●
8–12	G S	●
8–12	S SG	●
7–11**	G S	
150–300		●
100–200****		●
10–20		●

-  OT = Opentime
-  PH = pH Stabilizer
-  R = Rub Resistance
-  RA = Release Agent
-  RC = Recoatability
-  RP = Reduction & Prevention of Cracks & Pinholes
-  SA = Sandability
-  SR = Scratch Resistance
-  SG = Semi Gloss
-  S = Slip
-  ST = Sterilization Resistance
-  T = Texture
-  TT = Thixotropic
-  WR = Water Retention
-  ● = Recommended (detailed information to be found in respective application brochure)




# Waterbased Dispersions & Emulsions





## WATERBASED DISPERSIONS & EMULSIONS






Product	Wax type	Renewable content classification*	Solid content in %	Particle size <sup>1,2</sup>		Melting range <sup>4</sup> °C	pH-Value <sup>6</sup>
				D <sub>98</sub> μm	D <sub>50</sub> μm		
LUBA-print® <b>154/S</b>	Polyethylene		60	24	5.5	115–121	8.5
LUBA-print® <b>164/G</b>	Amide		32	30	9	143–151	8.5
LUBA-print® <b>184/W</b>	Polyethylene / PTFE		50	18	6.5	104–114	8
LUBA-print® <b>184/W-35F</b>	Polyethylene / PTFE		35	18	6.5	104-114	8
LUBA-print® <b>280/F</b>	Hydrocarbon blend		40	–	–	81 *	9.5
LUBA-print® <b>280/W</b>	Hydrocarbon blend		50	5	–	82 *	9.5
LUBA-print® <b>280 AG</b>	Functional blend		40	–	–	–	10
LUBA-print® <b>333/B</b>	Carnauba		30	3	–	87–93	7.5
LUBA-print® <b>333/X</b>	Carnauba		31	5	–	87–93	8
LUBA-print® <b>338</b>	Polyethylene		41	22	8	124–130	4.5
LUBA-print® <b>434/F</b>	Carnauba blend		40	10	–	–	5.5
LUBA-print® <b>445/W</b>	Paraffin		50	–	–	59–69	7.5
LUBA-print® <b>499</b>	Polyethylene		40	9	4	125–135	4
LUBA-print® <b>539/S</b> <b>New</b>	Functional blend		35	–	–	54–64	7.5–9.5
LUBA-print® <b>551/2</b>	Polyethylene		45	25	8	130–136	3.5
LUBA-print® <b>552/A</b>	Polyethylene / Organic matting agent		41	22	6	130–136	5
LUBA-print® <b>559/G</b>	Paraffin combination		26	–	–	78 *	–
LUBA-print® <b>645/A</b>	Polymers		41	17	8	172-182	8.5
LUBA-print® <b>725</b>	Functional blend		–	–	–	–	3
LUBA-print® <b>760/D</b>	Polyethylene		64	20	6	124–134	4
LUBA-print® <b>914/A</b>	Functional blend		38	20	6	136–146	7






\* = Drop Point

\* = Renewable content classification based on solid content:






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 = Abrasion Resistance  
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 = Anti-Blocking  
 = Anti-Graffiti  
 = Anti-Slip

 = Brilliance  
 = Barrier Coating  
 = Burnish Resistance  
 = Backside Treatment  
 = Chelating Agent

 = Chemical Resistance  
 = Degassing  
 = Less Dirt Pick-up  
 = Feel  
 = Flexibility

 = Gloss  
 = Glass Protection  
 = Good Set  
 = Hot Blocking  
 = Hydrophobicity

 = Matting  
 = Meat Release  
 = Metal Marking  
 = Pigment stabilisation  
 = Oil, Gas Resistance

Wood coatings	Can coatings	Printing inks	Industrial coatings	Leather finishing	Deco wax	Care products
AB S SG SR			AB SG SR	M R S		
AB M SA SR			AB M SR			
		AB SG R S	AB SG SR			
	AR S SR	AB SG R S				
AB CR G H S			H S	H S		H S
AB CR H MM S			H MM S	G H S		H S
			AG CR H S			
AB G S SR	G S SR					G SR
AB G S SR	G S SR					G SR
		AB G R S		M R S		
AB G H S			G H S	G H S		S SG
AB H MM S			AB H MM S	G H S		H S
AB G S SR		AB G R S	G S SR			
			AG CR H S	G H S		
		AB G R S		M R S		
F M S SR			M S SR	M R S		
					B H	
BR HB M SR			M SR			
PS G B			PS G B			
AB S SG SR		AB G R S	AB S SG SR			
AB BR CR F M			AB BR CR F			
MM S SR			M MM S SR			





... further Waterbased Dispersions & Emulsions on Page 14–15 ▶

- OT = Opentime
  - pH = pH Stabilizer
  - R = Rub Resistance
  - RA = Release Agent
  - RC = Recoatability
- RP = Reduction & Prevention of Cracks & Pinholes
  - SA = Sandability
  - SR = Scratch Resistance
  - SG = Semi Gloss
- S = Slip
  - ST = Sterilization Resistance
  - T = Texture
  - TT = Thixotropic
  - WR = Water Retention
- = Recommended (detailed information to be found in respective application brochure)

Waterbased Dispersions & Emulsions

# Waterbased Dispersions & Emulsions

## WATERBASED DISPERSIONS & EMULSIONS




Product	Wax type	Renewable content classification *	Solid content in %	Particle size <sup>1,2</sup>		Melting range <sup>4</sup> °C
				D <sub>98</sub> μm	D <sub>50</sub> μm	
LUBA-print® <b>942</b>	Polyethylene		39	3	–	–
LUBA-print® <b>965/A</b>	Carnauba		30	5	–	87–93
LUBA-print® <b>965/K</b>	Shellac		20	–	–	–
LUBA-print® <b>967/A</b>	Functional blend		12	–	–	–
LUBA-print® <b>3520</b>	Polyethylene		35	–	–	120–130
LUBA-print® <b>5500</b>	Polyethylene		50	6	3.5	125–133
LUBA-print® <b>CA 30</b>	Carnauba blend		30	3	–	72–80
LUBA-print® <b>KL 30</b>	Ester wax		30	5	–	72–80
LUBA-print® <b>W 5700</b>	Polyethylene		47	7.5	3.5	108–118
LUBA-print® <b>SC 5700**</b>	Polyethylene		47	7.5	3.5	108–118
LUBA-print® <b>W 5725</b>	Polyethylene		58	25 bi	3 bi	–
LUBA-print® <b>W 5800</b>	Fischer-Tropsch		47	2	–	–
LUBA-print® <b>WC 6015</b>	Carnauba		45	15	5	81–89*
LUBA-print® <b>WE 0520</b>	Polyethylene		57.5	20	5	109–117*
LUBA-print® <b>WE 1620</b>	Polyethylene		45	20	6	122–130*
LUBA-print® <b>WEF 1617</b>	Polyethylene / PTFE		54	17	6	122–130*
LUBA-print® <b>WP 2120</b>	Polypropylene		45	21	7.5	156–164*
LUBA-print® <b>WXF 9510</b>	Polyolefin / PTFE		45	18	6	108–118*

\*\* = only available for NAFTA

\* = Drop Point

bi = bi-modal particle size distribution

\* = Renewable content classification based on solid content:

 > 50% |  = 20–50% |  < 20%


Product	Wax type	Renewable content classification *	Melting range <sup>4</sup> °C	Solid content in %	Ionic	pH-Value <sup>6</sup>
WÜKOSEAL® <b>630</b>	Functional blend		–	30	ai	9.0
WÜKOSEAL® <b>805</b>	Functional blend		–	40	ai	8.5
WÜKOSEAL® <b>1512</b>	Functional blend		–	52	ai	8.5
WÜKOSEAL® <b>2800</b>	Functional blend		–	45	ai	8.0


 AR = Abrasion Resistance


 AP = Adhesion Promoter


 AB = Anti-Blocking

 AG = Anti-Graffiti

 AS = Anti-Slip

 B = Brilliance

 BC = Barrier Coating

 BR = Burnish Resistance

 BT = Backside Treatment

 CA = Chelating Agent


 CR = Chemical Resistance

 DG = Degassing


 DP = Less Dirt Pick-up


 F = Feel


 FL = Flexibility


 G = Gloss

 GP = Glass Protection

 GS = Good Set


 HB = Hot Blocking

 H = Hydrophobicity

 M = Matting

 MR = Meat Release

 MM = Metal Marking

 PS = Pigment stabilisation


 OR = Oil, Gas Resistance


pH-Value <sup>6</sup>	Wood coatings	Can coatings	Printing inks	Industrial coatings	Leather finishing	Care products
7.5	AB G H S			AB G H S	H SR	
7	AB G S SR	G S SR			G H SR	G SR
7.3	AB CR G SR		AB G R S		G H SR	CR G SR
8.5						AS SG
10			AB G R S	G S SR	G R S	G S SR
7	AB G S SR		AB G R S	AB G S SR		
6.5	AB G S SR		R S SR	AB G S SR	G S	G S
6.5	AB S SR			S SR		G S
5-7	AB S SR		AB G R S	G S SR		
8	AB S SR		AB G R S	G S SR		
5-7	AB S SR		AB R S SG	S SG SR		
5	AB S SR		AB G R S	G S SR		
6	AB S SG SR		AB R S SG	S SG SR		
7	AB S SR		AB G R S	S SR		
7	AB S SR					
7.4	AB S SR	AR S SR		AB S SR		
7.5	AS BR M MM SR			AB AS M SR		
5.5	S SG SR		AB G R S	AB S SR		

Waterbased Dispersions & Emulsions


Deco Wax	Wood Coatings	Printing Inks	Dispersion Paints & Plasters	Care Products	Paper & Foil Coatings, Cardboards	Leather	Concrete Curing
					AP BC OR		
					BC BT H		
					BC H OR		
					AP BC H OR		



... further Waterbased Dispersions & Emulsions on Page 16-17 ▶


-  OT = Opentime


 pH = pH Stabilizer



 R = Rub Resistance


 RA = Release Agent


 RC = Recoatability
-  RP = Reduction & Prevention of Cracks & Pinholes

 SA = Sandability



 SR = Scratch Resistance

 SG = Semi Gloss
-  S = Slip

 ST = Sterilization Resistance




 T = Texture

 TT = Thixotropic




 WR = Water Retention
-  = Recommended (detailed information to be found in respective application brochure)

# Waterbased Dispersions & Emulsions

## WATERBASED DISPERSIONS & EMULSIONS

Product	Wax type	Renewable content classification*	Melting range <sup>4</sup> °C	Solid content in %	Ionic	pH-Value <sup>6</sup>
WÜKONIL® AS 50	Paraffin		60	50	ci	7.0
WÜKONIL® ESW 30	Functional blend		80	30	ni	7.0
WÜKONIL® FC 950	Paraffin		58	51	ai	9.0
WÜKONIL® FC 960 eco** <b>New</b>	Paraffin		58	60	ai	9.0
WÜKONIL® HB 4000	Functional blend		–	40	ai	8.0
WÜKONIL® HS	Functional blend		–	30	ni	7.0
WÜKONIL® LP 35	Paraffin		55	35	ai	7.0
WÜKONIL® O-33 A/N	Paraffin		–	25	ki	5.0
WÜKONIL® PW	Polyethylene, Paraffin		90	30	ni	9.0
WÜKONIL® RT 50	Paraffin		54	50	ni	7.0
WÜKONIL® RT 50 F	Paraffin		56–58	50	ni	7.0
SÜDRANOL® 135	Polyethylene (HDPE)		120–130	35	ai/ni	9.0
SÜDRANOL® 200	Polyethylene		110	30	ni/ai	9.0
SÜDRANOL® 240	Polyethylene blend		105	30	ni/ai	9.0
SÜDRANOL® 250 CR <b>New</b>	Polyethylene blend		115	30	ni/ai	9.5
SÜDRANOL® 340	Functional blend		95	30	ni/ai	9.0
SÜDRANOL® 670	Functional blend		95	35	ai	9.5
SÜDRANOL® BEE	Bees wax		65	18	ni	7.0
SÜDRANOL® CAR 20	Carnauba		80	20	ni	6.5
SÜDRANOL® HD 35	Polyethylene (HDPE)		128–137	35	ni	9.0
SÜDRANOL® NAT 30	Natural wax blend		–	30	ai	9.0
LUBRANIL® DEKO 7	Functional blend		–	30	ni	9.0
LUBRANIL® DEKO 550B	Functional blend		–	40	ni	4.5
LUBRANIL® DEKO 600/A <b>New</b>	Functional blend		–	10	ni	10.5
LUBRANIL® DF 45	Functional blend		–	45	ai	7.0
LUBRANIL® MA 1	Functional blend		–	30	ni	7.5
LUBRANIL® N 20	Functional blend		–	20	ni	7.0
LUBRANIL® RN 20 <b>New</b> <b>SVOC free</b>	Functional blend		–	20	ni	7.5
LUBRANIL® X 4000	Functional blend		–	31	ni	7.5
LUBRANIL® X 9030	Functional blend		–	30	–	7.5

\*\* = EU Ecolabel suitability


\* = Renewable content classification based on solid content:  
 > 50% |  = 20–50% |  < 20%


 AR = Abrasion Resistance

 AP = Adhesion Promoter


 AB = Anti-Blocking

 AG = Anti-Graffiti

 AS = Anti-Slip

 B = Brilliance

 BC = Barrier Coating

 BR = Burnish Resistance

 BT = Backside Treatment


 CA = Chelating Agent


 CR = Chemical Resistance


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 DP = Less Dirt Pick-up

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 G = Gloss

 GP = Glass Protection

 GS = Good Set


 HB = Hot Blocking

 H = Hydrophobicity

 M = Matting

 MR = Meat Release

 MM = Metal Marking


 PS = Pigment stabilisation

 OR = Oil, Gas Resistance




Deco Wax	Wood Coatings	Printing Inks	Dispersion Paints & Plasters	Care Products	Paper & Foil Coatings, Cardboards	Leather	Concrete Curing
							AB GS H WR
				AB S	AB S		
			AB H				
	H S		AB H			H S	
	AB CR H MM S		H OT	H S			
			H OT				
	AB H S		H	H S			
					H S	H S	
	AB G H S		H			H SR	
	AB G H S		H		H	H SR	AB H WR
					AB H S		
				G GP S SR			
	AB G S			G S SR			
	AB G H S SR		H R				
	AB AR G S SR				AB AR G S SR		
	AB G H S		H			H SR	
	AB G H S SR		H R				
	H S			H S		F H S	
	G H S SR			G H S		H S SR	
G S SR		AB G R S		G S SR		G R S	
				H S SR			
G H							
B G H							
B G H							
	AB H S		H OT				
			OT				
			OT RP				
			OT RP				
			OT RP				
			OT RP				


Waterbased Dispersions & Emulsions


-  OT = Opentime


 pH = pH Stabilizer

 R = Rub Resistance


 RA = Release Agent

 RC = Recoatability
-  RP = Reduction & Prevention of Cracks & Pinholes


 SA = Sandability



 SR = Scratch Resistance

 SG = Semi Gloss
-  S = Slip

 ST = Sterilization Resistance



 T = Texture

 TT = Thixotropic

 WR = Water Retention
-  = Recommended (detailed information to be found in respective application brochure)













# Solvent Based Dispersions

## SOLVENT BASED DISPERSIONS

Product	Wax type	Solvent	Renewable content classification *	Solid content in %
LUBA-print® <b>103/A-neu</b>	Zinc stearate	Butyl acetate		24
LUBA-print® <b>121/C</b>	Hydrocarbon	Ethyl acetate		10
LUBA-print® <b>121/F (ND)</b>	Hydrocarbon	Solvent naphtha (ND), Methoxy propyl acetate		10
LUBA-print® <b>161/T</b>	Amide	Ethanol		40
LUBA-print® <b>246/D3</b>	EVA-Copolymer	Butyl acetate, Isobutanol		11
LUBA-print® <b>246/D8</b>	EVA-Copolymer	Xylene, Butyl acetate, Isobutanol		10
LUBA-print® <b>276/A (ND)</b>	Polyethylene / PTFE	Solvent naphtha (ND)		12
LUBA-print® <b>301/C</b>	Polyethylene	Ethanol		30
LUBA-print® <b>301/K-2</b>	Polyethylene	Butyl acetate		40
LUBA-print® <b>346/F</b>	EVA-Copolymer	Hydrocarbon, Butyl acetate, Isobutanol		15
LUBA-print® <b>351/G</b>	Functional blend	Solvent naphtha (ND), Isobutanol		18
LUBA-print® <b>352</b>	Functional blend	Butyl glycol		20
LUBA-print® <b>420</b>	Functional blend	Butyl glycol, Water		30
LUBA-print® <b>436 (ND)</b>	Synthetic wax	Solvent naphtha (ND), 1-Methoxy-2-Propanol, Butyl glycol acetate		15
LUBA-print® <b>447/A (ND)</b>	Polyethylene / Carnauba	Solvent naphtha (ND), Butyl acetate		10
LUBA-print® <b>459/H-2</b>	Paraffin	Isoparaffin, Water		28
LUBA-print® <b>501/S (ND)</b>	Polyethylene	Solvent naphtha (ND)		10
LUBA-print® <b>501/S-100</b>	Polyethylene	Solvent naphtha		10
LUBA-print® <b>501/XB</b>	Polyethylene	Xylene, Butyl acetate		10
LUBA-print® <b>502</b>	Polyethylene / PTFE	Butyl glycol		20
LUBA-print® <b>582/E</b>	Functional blend	Butyl acetate		12
LUBA-print® <b>654/D</b>	Polyethylene	Ethanol		40
LUBA-print® <b>654/S</b> <b>New</b>	Polyethylene	2-Propanol (IPA)		33
















\* = Drop Point

\* = Renewable content classification based on solid content:

 > 50% |  = 20-50% |  < 20%
 AR = Abrasion Resistance AP = Adhesion Promoter AB = Anti-Blocking AG = Anti-Graffiti AS = Anti-Slip B = Brilliance BC = Barrier Coating BR = Burnish Resistance BT = Backside Treatment CA = Chelating Agent CR = Chemical Resistance DG = Degassing DP = Less Dirt Pick-up F = Feel FL = Flexibility G = Gloss GP = Glass Protection GS = Good Set HB = Hot Blocking H = Hydrophobicity M = Matting MR = Meat Release MM = Metal Marking PS = Pigment stabilisation QR = Oil, Gas Resistance





Particle size <sup>1</sup>		Melting range <sup>4</sup> °C	Wood coatings	Can coatings	Printing inks	Industrial coatings	Deco wax
D <sub>98</sub> µm	D <sub>50</sub> µm						
10	4	121–127	AB R SA SG				
20	8	71–82 *			AB H S SG		
18	7	71–82 *		S ST			
–	–	86–92			AB G S		
–	–	88–98	B G PS TT			B G PS TT	
–	–	93–103	B G PS TT			B G PS TT	
8	2.5	109–115		AR G S SR			
18	6.5	103–114			R S SG		
20	6.5	103–114	AB F S SG SR M				
–	–	93–105	B G PS TT			B G PS TT	
5	2.5	87–93		B S SR			
7	3	71–82 *		G S SR			
12	4.5	117–127		AR G S SR			
6	3	101–107		G S SR			
5	2.5	87–93		G S SR			
–	–	–					B H
6	2.5	109–115		G S SR			
6	2.5	109–115		G S SR		S SR	
9	3.5	109–115	AB PS S SR				
13	4.5	102–112		AR S SR			
–	–	113	AB H MM S SR			AR MM S SR	
25	9.5	130–136			AB R S SG		
13	4.0–6.0	105–115			AR R S SG		

... further Solvent Based Dispersions on Page 20–21 ►

-  OT = Opentime
-  RP = Reduction & Prevention of Cracks & Pinholes
-  S = Slip
-  = Recommended (detailed information to be found in respective application brochure)
-  pH = pH Stabilizer
-  SA = Sandability
-  ST = Sterilization Resistance
-  T = Texture
-  R = Rub Resistance
-  SR = Scratch Resistance
-  TT = Thixotropic
-  RA = Release Agent
-  SG = Semi Gloss
-  WR = Water Retention
-  RC = Recoatability




# Solvent Based Dispersions


## SOLVENT BASED DISPERSIONS





Product	Wax type	Solvent	Renewable content classification*	Solid content in %
LUBA-print® <b>660</b>	Polyethylene	2-Propanol (IPA)		20
LUBA-print® <b>693/M</b>	Functional blend	Butyl glycol		21
LUBA-print® <b>694/R</b>	Polypropylene, MSA modified	Isoparaffin, 1- Methoxy-2-Propanol		15
LUBA-print® <b>706/F</b>	Polyethylene / Silica	Butyl acetate		18
LUBA-print® <b>715/A</b>	EAA-Copolymer	Xylene, Butyl acetate, Isobutanol		11
LUBA-print® <b>749/PM</b>	Amide	Xylene, 1- Methoxy-2-Propanol		15
LUBA-print® <b>754</b>	Polyethylene	Ethanol		40
LUBA-print® <b>887/C</b>	Carnauba	Dipropylene glycol methyl ether		20
LUBA-print® <b>887/H</b>	Carnauba	Ethanol		25
LUBA-print® <b>887/K</b>	Carnauba	Hydrocarbon		20
LUBA-print® <b>897/PM (ND)</b>	Carnauba	Solvent naphtha (ND), 2-Propanol (IPA)		10
LUBA-print® <b>934/G (ND)</b>	Polyethylene / PTFE	Solvent naphtha (ND)		14
LUBA-print® <b>2036/A</b>	Polyethylene	Ethanol		20
LUBA-print® <b>3036/A</b>	Polyethylene	Ethanol, 2-Propanol (IPA)		30
LUBA-print® <b>A 620</b>	Polyethylene	Xylene, Isobutanol		20
LUBA-print® <b>B 15/XB</b>	Polyethylene	Xylene, Butyl acetate		15
LUBA-print® <b>C 10/XB</b>	Amide	Xylene, Butyl acetate		10
LUBA-print® <b>SEB 0820 ET</b>	Biopolymer, Polyethylene	Ethanol		40
LUBA-print® <b>SXF 9510 BG</b>	Functional blend	Butyl glycol		50
LUBA-print® <b>T-152/35%-D30</b>	Functional blend	Hydrocarbon		35
LUBA-print® <b>T-152/D30</b>	Functional blend	Hydrocarbon		20






\* = Drop Point

\* = Renewable content classification based on solid content:






 > 50% |  = 20-50% |  < 20%

 = Abrasion Resistance  
 = Adhesion Promoter  
 = Anti-Blocking  
 = Anti-Graffiti  
 = Anti-Slip

 = Brilliance  
 = Barrier Coating  
 = Burnish Resistance  
 = Backside Treatment  
 = Chelating Agent

 = Chemical Resistance  
 = Degassing  
 = Less Dirt Pick-up  
 = Feel  
 = Flexibility

 = Gloss  
 = Glass Protection  
 = Good Set  
 = Hot Blocking  
 = Hydrophobicity

 = Matting  
 = Meat Release  
 = Metal Marking  
 = Pigment stabilisation  
 = Oil, Gas Resistance

Particle size <sup>1</sup>		Melting range <sup>4</sup> °C	Wood coatings	Can coatings	Printing inks	Industrial coatings	Deco wax
D <sub>98</sub> µm	D <sub>50</sub> µm						
10	5	103–114		G S SR	AB G R S		
10	4.5	87–93		AR G S SR			
23	8.5	141–151		AP			
30	9	105–111	AB M R SR				
–	–	102–108				G PS S	
8	3	147–153	R S SR	MR S SR			
20	7	103–114			AB R S SG		
11	4.5	87–93		G S SR			
10	4.5	81–87			AB G R S		
12	5.5	87–93	AB S SG SR			AB S SG SR	
7	3	87–93		G S SR			
6	2.5	109–115		AR G R S			
18	6	130–136			AB R S SG		
18	6	130–136			AB R S		
25	9	104–110				R S SR	
13	5	105–115	AB M R S SR				
21	9	143–151	AB M SR				
20	5	110–118*			AB G R S		
18	6	108–119		AR G S SR			
–	–	102					B H
–	–	102	G H MM S SR			G H MM S SR	

- OT = Opentime
- pH = pH Stabilizer
- R = Rub Resistance
- RA = Release Agent
- RC = Recoatability
- RP = Reduction & Prevention of Cracks & Pinholes
- SA = Sandability
- SR = Scratch Resistance
- SG = Semi Gloss
- S = Slip
- ST = Sterilization Resistance
- T = Texture
- TT = Thixotropic
- WR = Water Retention
- = Recommended (detailed information to be found in respective application brochure)

## Oil Based Dispersions

### OIL BASED DISPERSIONS

Product	Wax type	Solvent	Solid content in %
LUBA-print® <b>OF 5108</b>	PTFE	Linseed oil	47
LUBA-print® <b>OX 9815</b>	Polyolefin	Linseed oil	35
LUBA-print® <b>OXF 9120</b>	Polyolefin / PTFE	Linseed oil	50
LUBA-print® <b>OXF 9510</b>	Polyolefin / PTFE	Linseed oil	35

## Radiation Curing Dispersions

### RADIATION CURING DISPERSIONS

Product	Wax type	Solvent	Solid content in %
LUBA-print® <b>309/C</b>	Polyethylene	Oligotriacrylate	30
LUBA-print® <b>709/P</b>	Functional blend	Tripropylenglycol-diacrylate, Oligotriacrylate	18

## Compatibility Agents

### COMPATIBILITY AGENTS

Product	Amine Value in mgKOH/g	pH-Value	Active Content in %
STABI <b>95 P</b>	600	11	90-97

AR = Abrasion Resistance  
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 AB = Anti-Blocking  
 AG = Anti-Graffiti  
 AS = Anti-Slip

B = Brilliance  
 BC = Barrier Coating  
 BR = Burnish Resistance  
 BT = Backside Treatment  
 CA = Chelating Agent

CR = Chemical Resistance  
 DG = Degassing  
 DP = Less Dirt Pick-up  
 F = Feel  
 FL = Flexibility

G = Gloss  
 GP = Glass Protection  
 GS = Good Set  
 HB = Hot Blocking  
 H = Hydrophobicity









M = Matting  
 MR = Meat Release  
 MM = Metal Marking  
 PS = Pigment stabilisation  
 OR = Oil, Gas Resistance

D <sub>98</sub> µm	Particle size <sup>2</sup>		Drop point of the wax <sup>3</sup> °C	Printing Inks
	D <sub>50</sub> µm			
8		3	–	AB G HB R S
12		5	–	AB R S
20		5	108 – 112	AB R S
17		4	–	AB G R S

Particle size <sup>1</sup>		Drop point of the wax <sup>3</sup> °C	Wood coatings	Printing inks	Industrial coatings
D <sub>98</sub> µm	D <sub>50</sub> µm				
22	8	130– 136	S SG SR	R S	R S SG SR
10	5	71–82	G S SR		G S SR

Waterborne Paints, Plasters & Lacquers

pH

-  OT = Opentime
-  pH = pH Stabilizer
-  R = Rub Resistance
-  RA = Release Agent
-  RC = Recoatability
-  RP = Reduction & Prevention of Cracks & Pinholes
-  SA = Sandability
-  SR = Scratch Resistance
-  SG = Semi Gloss
-  S = Slip
-  ST = Sterilization Resistance
-  T = Texture
-  TT = Thixotropic
-  WR = Water Retention
-  = Recommended (detailed information to be found in respective application brochure)



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