

Technology Information



Dispersions for decorative applications



Content

ALBERDINGK BOLEY in a nutshell	4
Introduction	5
Interior paint binders	5
Styrene acrylics & pure acrylics	5
Styrene acrylic for silicate and preservative free paints	6
Multiphase acrylics for high stain resistant paints	6
Renewable resource PUD	7
Primers / stabilisers	8
Hydrosol	8
Exterior paints	9
Pure acrylics	9
Styrene acrylics	10
Binders for renders / plasters	11
Binders for colour quartz renders	12
Fast drying acrylics for autumn / spring	13
PUDs for exterior coatings	14
Binders for multicolour paints (MCP)	16
Enamels / lacquers / trim paints / stains	17
Acrylics for enamels	17
Improved open time acrylics	18
Acrylics for stick to anything paints	22
Acrylics for trim paints	23
Binders for stains	24
Metal paints	25
Stain locking primers	27
Floor paints	28
Varnishes	29
Artist paints	29
Construction products	30
Waterproofing	30
Grouts and mortars	32
Ceramic tiles	32

Last update March 20, 2024 Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax+49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de

Page 3 of 36



ALBERDINGK BOLEY in a nutshell



Leading international manufacturer of environmentally friendly water-based binders and oils with unique properties to refine, refurbish, bind and protect multiple types of substrates



Medium sized, privately owned company

> a partner to our customers for more than 250 years



> 500 employees



Dynamic, Innovative and flexible

Pioneers in biobased polymer dispersions



Dispersions: Acrylic, Vinyl acetate, Polyurethane and hybrid dispersions

Oils: Linseed oil, Castor oil, Derivatives



Locations:

- Krefeld, Germany
- Kerpen, Germany
- Leuna, Germany
- · Treviso, Italy
- · Congleton, UK
- Greensboro, USA
- Shenzhen, China
- · Zhuhai, China

For more information about ALBERDINGK BOLEY and our product offerings, visit www.alberdingk-boley.de.

Last update March 20, 2024 Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax+49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de

Page 4 of 36



Introduction

Decorative applications can be divided into the following sections of paints / primers and stabilizers

Interior paint binders

Low MFFT stryrene acrylic and pure acrylic disperisons for high PVC paints.

ALBERDINGK® AS 6004 is the latest addition to the product range and offers superior scrub resistance even at low polymer content.

Styrene acrylics & pure acrylics

Alberdingk®- product	Solids [%]	Viscosity [mPas]	pH- value	MFFT [°C]	Features
AC 2003	49.0- 51.0	20-2,000	7.0- 9.0	3	For class 1+2 paints, superior water resistance, ammonia neutralised
Ren AC 8003	49.0- 51.0	20-2,000	7.0- 9.0	3	Biobased, for class 1+2 paints, superior water resistance, ammonia neutralized (bio content: ca. 45%)
AC 2006	45.0- 47.0	20-200	7.5- 8.5	6	For interior and exterior flat to semi-gloss paints featuring superior scrub resistance
AC 2022	53.0- 55.0	50-2,000	7.0- 8.0	0	Pure acrylic for preservative- free paints with high pH value / silicate paints
AS 6004	49.5- 51.0	200- 2,000	8.0- 9.0	0	For class 1+2 paints, silicate compatible, very hydrophobic
AS 6500	49.0- 51.0	100- 2,000	7.0- 9.0	0	For class 1+2 paints, for class 1 silicate paints, low odour, suitable for preservative-free paints
AS 6900	48.0- 50.0	20-2,000	7.0- 8.0	0	For class 1+2 paints, for class 1 silicate paints, low odour
Ren AS 7900	48.0- 50.0	20-2,000	7.0- 8.0	0	Biobased styrene acrylic for class 1+2 paints, for class 1 silicate paints, low odour (bio content: ca. 40%)

Last update March 20, 2024 Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax+49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de

Page 5 of 36



Due to the new biocide restriction published in the 13th ATP of the CLP regulation and the new criteria for the german "Blauer Engel" environmental logo (RAL-UZ 102) more and more preservative free or silicate paints are being produced.

ALBERDINGK BOLEY has a wide portfolio of silicate compatible dispersions with only CMIT preservation as well as for classical silicate paints which may still contain some traces of preservatives.

Special products such as **ALBERDINGK® AS 6500**, which is designed for long shelf life in silicate paints as well as scrub class 1 (EN 13 300) with only 5% organic content are most suitable for making future proof paints.

Styrene acrylic for silicate and preservative free paints

Alberdingk®- product	Solids [%]	Viscosity [mPas]	pH- value	MFFT [°C]	F eatures
AC 2022	53.0- 55.0	50- 2,000	7.0- 8.0	0	Pure acrylic for preservative-free paints with high pH value / silicate paints
AS 6500	49.0- 51.0	100- 2,000	7.0- 9.0	0	For class 1+2 paints, for class 1 silicate paints, low odour

Multiphase acrylics for high stain resistant paints

For high resistant paints and for formulations with lower PVC levels, multiphase polymers which consist of hard and soft domains offer superior stain and wet scrub resistance combined with a block free surface.

ALBERDINGK[®] **AC 2025** is particularly designed for low temperature film formation and excellent pigment wetting/binding capacity.

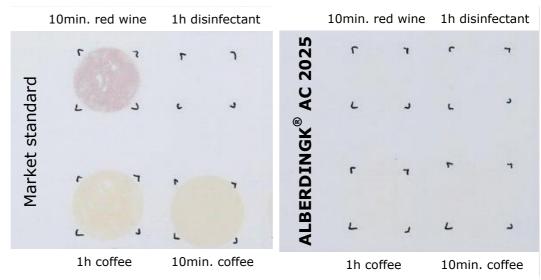
Alberdingk®- product	Solids [%]	Viscosity [mPas]	pH- value	MFFT [°C]	Features
AC 2025	48.0- 50.0	500- 4,000	8.0- 9.0	0	Multiphase acrylic, optimised for very high scrub and chemical resistance, excellent blocking resistance
Ren AC 8025	48.0- 50.0	500- 5,000	7.5- 8.5	0	Biobased, multiphase acrylic, optimised for very high scrub and chemical resistance, excellent blocking resistance (bio content: ca. 38%)

Last update March 20, 2024 Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax+49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de

Page 6 of 36



Stain resistance-comparison:



White paint based on ALBERDINGK® AC 2025 compared to a market standard

Renewable resource PUD & Acrylics

Paints which are based on renewable resources are becoming more and more attractive as consumers are looking for "green" chemistry which is more environmental friendly.

ALBERDINGK® CUR 751 based paints reach approx. 80% of renewable content (incl. water). Since it's based on castor oil, it has a non-yellowing film and fast drying. Castor oil is ethically correct as it's not a food crop. Paints based on **ALBERDINGK®CUR 751** have no odour – unlike alkyd based paints.

Last update March 20, 2024 Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax+49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de

Page 7 of 36



Alberdingk®- product	Solids [%]	pH-value	MFFT [°C]	Features
CUR 751	34.0- 36.0	7.0-8.5	0	Castor oil based PUD, class 2 paints with excellent wet scrub resistance and low odour (bio content: ca. 57%)
Ren AC 8003	49.0- 51.0	7.0-9.0	3	Biobased pure acrylic for class 1+2 paints, superior water resistance, ammonia neutralized (bio content: ca. 45%)
Ren AC 8025	48.0- 50.0	7.5-8.5	0	Biobased, multiphase acrylic, optimised for very high scrub and chemical resistance, excellent blocking resistance (bio content: ca. 38%)
Ren AS 7900	48.0- 50.0	7.0-8.0	0	Biobased styrene acrylic for class 1+2 paints, for class 1 silicate paints, low odour (bio content: ca. 40%)

Primers / stabilisers

Hydrosols are used in stabilisers and primers since a long time. Ultra-fine particle size and excellent wetting and binding properties are key features of our hydrosols.

Hydrosol

Alberdingk®-	Solids	Viscosity	pH-	MFFT	Features
product	[%]	[mPas]	value	[°C]	
Н 595	29.0- 31.0	20-35	7.5- 9.0	0	Workhorse styrene acrylic hydrosol, silicate compatible

Last update March 20, 2024 Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax+49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de

Page 8 of 36



Exterior paints

Pure acrylics

Our pure acrylics are designed for long lasting exterior coatings. **ALBERDINGK® AC 2077** is developed for colour stable exterior coatings / house paints.

ALBERDINGK® AC 2003 is a new product with superior early water resistance and **ALBERDINGK® AC 2008** offers a very high solids which offers an extremely broad formulation latitude.

Alberdingk®- product	Solids [%]	Viscosity [mPas]	pH- value	MFFT [°C]	Features
AC 2003	49.0- 51.0	20- 2,000	7.0- 9.0	3	Superior water resistance, low surface tack
Ren AC 8003	49.0- 51.0	20-2,000	7.0- 9.0	3	Biobased, for class 1+2 paints, superior water resistance, ammonia neutralized (bio content: ca. 45%)
AC 2006	45.0- 57.0	20-200	7.5- 8.5	6	Superior scrub resistance, excellent non-leaching properties & water resistance
AC 2008	58.0- 60.0	200- 2,000	8.0- 9.0	0	Ultra-high solids, suitable for fast drying systems, excellent weathering resistance, low surface tack
AC 2019	45.0- 47.0	500- 1,500	8.0- 9.0	17	Universal, very good water resistance
AC 2022	53.0- 55.0	50-2,000	7.0- 8.0	0	Pure acrylic for preservative- free paints with high pH value / silicate paints
AC 2077	45.0- 47.0	20-300	8.0- 9.0	17	Wet adhesion promoted, with optimized colour stability
AC 548	49.0- 51.0	3,000- 6,000	7.5- 8.5	13	Universal, very good water resistance

Last update March 20, 2024 Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax+49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de

Page 9 of 36



Styrene acrylics

Our styrene acrylics are workhorse products which find use in cost effective exterior coatings, thanks to the improved pigment binding capability of styrene.

Alberdingk®- product	Solids [%]	Viscosity [mPas]	pH- value	MFFT [°C]	Features
AS 6900	49.5- 51.0	200- 2,000	8.0- 9.0	0	For class 1+2 paints, for class 1 silicate paints, low odour
Ren AS 7900	48.0- 50.0	20-2,000	7.0- 8.0	0	Biobased styrene acrylic for class 1+2 paints, for class 1 silicate paints, low odour
SC 48	49.0- 51.0	3,000- 5,000	7.0- 7.5	14	Most hydrophobic styrene acrylic
SC 4400	49.0- 51.0	2,000- 5,000	7.0- 8.0	17	Workhorse product, extremely versatile
SC 4450	49.5- 51.0	500- 5,000	7.5- 8.5	18	Low odor, for indoor & outdoor, matt & glossy



Last update March 20, 2024 Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax+49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de

Page 10 of 36



Binders for renders / plasters

Alberdingk®- product	Solids [%]	Viscosity [mPas]	pH- value	MFFT [°C]	Features
AC 2019	45.0- 47.0	500- 1,500	8.0- 9.0	17	Universal, very good water resistance
AS 6900	49.5- 51.0	200- 2,000	8.0- 9.0	0	For class 1+2 paints, for class 1 silicate paints, low odour
Ren AS 7900	48.0- 50.0	20-2,000	7.0- 8.0	0	Biobased styrene acrylic for class 1+2 paints, for class 1 silicate paints, low odour
SC 48	49.0- 51.0	3,000- 5,000	7.0- 7.5	14	Most hydrophobic styrene acrylic
SC 4400	49.0- 51.0	2,000- 5,000	7.0- 8.0	17	Workhorse product, extremely versatile
SC 4450	49.5- 51.0	500- 5,000	7.5- 8.5	18	Low odor, for indoor & outdoor, matt & glossy



Last update March 20, 2024

Page 11 of 36

Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax+49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de



Binders for colour quartz renders

ALBERDINGK[®] acrylics for colour quartz renders offer superior early water resistance and long durability at various MFFT levels.

Alberdingk®- product	Solids [%]	Viscosity [mPas]	pH- value	MFFT [°C]	Features
AC 548	49.0- 51.0	3,000- 6,000	7.5- 8.5	13	Universal, very good water resistance
AC 2003	49.0- 51.0	20- 2,000	7.0- 9.0	3	Superior early water resistance, low surface tack
Ren AC 8003	49.0- 51.0	20- 2,000	7.0- 9.0	3	Biobased pure acrylic for class 1+2 paints, superior water resistance, ammonia neutralised
AC 2019	45.0- 47.0	500- 1,500	8.0- 9.0	17	Universal, very good water resistance, higher Tg



Last update March 20, 2024

Page 12 of 36

Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax+49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de

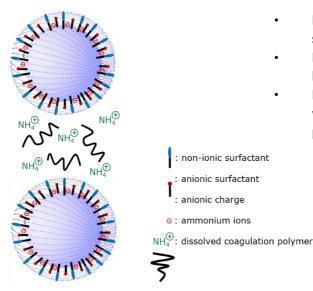


Fast drying acrylics for autumn / spring

ALBERDINGK's quick drying system based on controlled coagulation is based on **ALBERDINGK**® **AC 2008** (high solids pure acrylic) and **ALBERDINGK**® **ALBO***rapid* **22** (coagulation polymer) for paints and renders which set quickly in marginal conditions.

Alberdingk®- product	Solids [%]	Viscosity [mPas]	pH- value	MFFT [°C]	Features
AC 2008	58.0- 60.0	200- 2,000	8.0- 9.0	0	Ultra-high solids, suitable for fast drying systems, excellent weathering resistance, low surface tack
ALBOrapid 11	24.0- 26.0	100- 1,000	10.4- 11.4	n.a.	Additive polymer which can significantly increase the drying speed of water based coatings, recommended for alkaline substrates
ALBOrapid 22	19.0- 22.0	n.a.	9.0- 10.0	n.a.	Additive polymer which can significantly increase the drying speed of water based coatings

Formulation with Dispersion and ALBOrapid at high pH level



- Particles with electrostatic and steric stabilization
- High concentration of ammonia at high pH level
- Dissolved coagulation polymer without electrostatic charge at high pH level

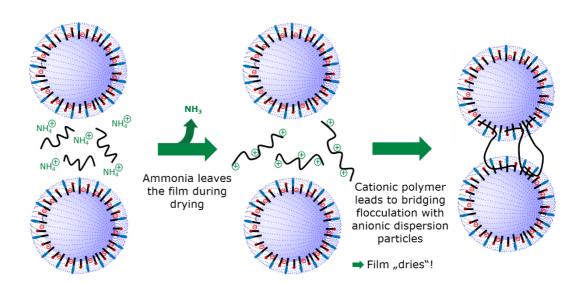
Last update March 20, 2024

Page 13 of 36

Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax+49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de



Coagulation Mechanism of ALBOrapid-base



PUDs for exterior coatings

Polyurethane dispersions in exterior masonry coatings are still "exotic" due to their higher raw material cost. PUD's offer a non-tacky surface at very low Tg, combined with high elongation and superior colour stability compared to acrylic dispersions. Thanks to their high water vapor permeability and low water absorption they can be easily formulated into high performance paints.

Alberdingk®- product	Solids [%]	Viscosity [mPas]	pH- value	MFFT [°C]	Features
U 199	59.0- 61.0	20-1,000	7.5- 9.5	0	Very high solids, excellent weathering resistance
U 400 N	39.0- 41.0	20-200	7.0- 8.0	0	Saponification and hydrolysis resistant, high water vapour permeability

Last update March 20, 2024 Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax+49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de

Page 14 of 36



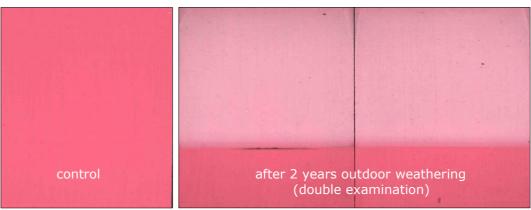
Outdoor weathering resistance

Formulation FP 400-11 + 0.5% addition of 40% red pigment preparation: Permanent Red FGR (Clariant, 17% s.o.p. DISPERBYK-199)

ALBERDINGK® U 400 N:



Competitor (optimized acrylic for coloured exteriour paints



Last update March 20, 2024 Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax+49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de

Page 15 of 36



Binders for multicolour paints (MCP)

Multicolour paints are using a special rheology / rheology modifier to have several colours in one paint. This requires polymer dispersions with very hydrophobic stabilization mechanism that reacts better with OPTIGEL®-thickeners.

Alberdingk®- product	Solids [%]	Viscosity [mPas]	pH- value	MFFT [°C]	Features
AC 2019	45.0- 47.0	500-1,500	8.0- 9.0	17	Universal, very good water resistance
AC 2523	47.0- 49.0	500-4,000	7.5- 8.5	0	Multiphase, very good chemical resistance



Last update March 20, 2024 Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax+49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de

Page 16 of 36



Enamels / lacquers / trim paints / stains

ALBERDINGK offers a variety of acrylics for enamels – all based on multiphase technology to ensure excellent blocking and weathering resistance.

ALBERDINGK® AC 3600 and other members of the AC 36xx-family of products offer a significantly improved open time due to their special grafted hydrophilic stabilization system. AC 36xx products develop immediate blocking resistance and a very hard, almost solvent based like surface hardness even at low MFFT.

Acrylics for enamels

Alberdingk®- product	Solids [%]	Viscosity [mPas]	pH- value	MFFT [°C]	Features
AC 2025	48.0- 50.0	500- 4,000	8.0- 9.0	0	multiphase acrylic, optimized for very high gloss an chemical resistance
Ren AC 8025	48.0- 50.0	500- 5,000	7.5- 8.5	0	Biobased, multiphase acrylic, optimised for very high scrub and chemical resistance, excellent blocking resistance
AC 2360	46.0- 48.0	100- 3,000	7.0- 9.0	0	Multiphase, high gloss and good wet adhesion
AC 25381	47.0- 49.0	2,000- 8,000	7.5- 8.5	9	Harder multiphase acrylic, very versatile and easy to formulate

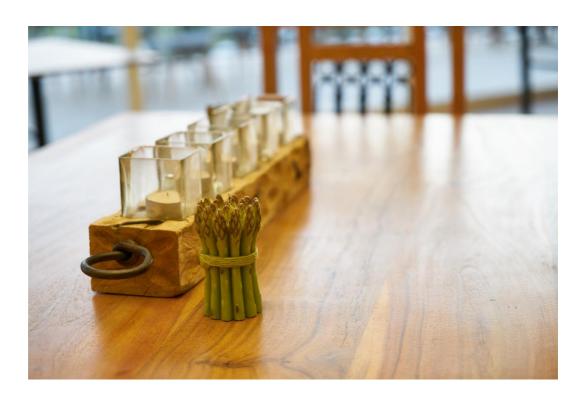
Last update March 20, 2024 Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax+49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de

Page 17 of 36



Improved open time acrylics

Alberdingk®- product	Solids [%]	Viscosity [mPas]	pH- value	MFFT [°C]	features
AC 3600	40.0- 42.0	20-200	7.5- 8.5	0	Very hard with low MFFT, superior chemical and blocking resistance
AC 3626	39.0- 41.0	50-200	8.0- 9.0	45	Superior hand fat resistance
Ren AC 9630	40.0- 42.0	50-500	7.0- 8.5	25	Biobased acrylic or high quality furniture coatings with excellent "Anfeuerung" and transparency



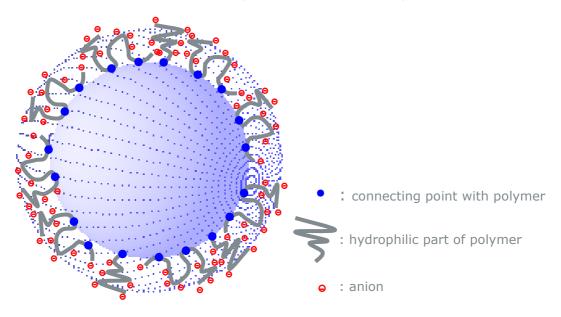
Last update March 20, 2024 Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax+49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de

Page 18 of 36

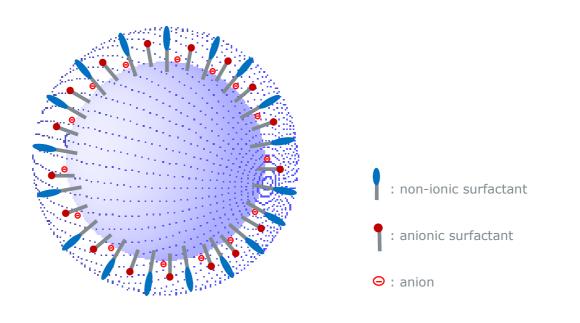


AC 36xx-family stabilization system vs. conventional surfactant stabilization

Grafted electrosteric stabilization of particle in AC 36xx-family:



Conventional surfactant based electrosteric stabilization of particle:



Last update March 20, 2024 Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax+49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de

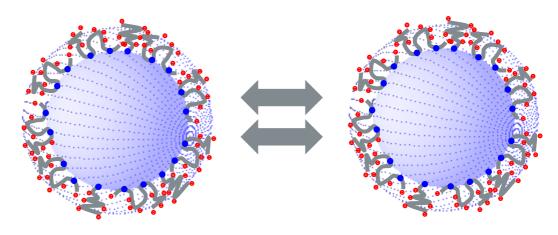
Page 19 of 36



Impact of stabilization on open time

AC 36xx-family:

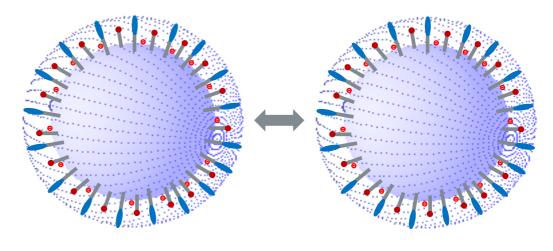
- Strong repulsive force between the particles
- More hydrophilic particle surface



- → Longer open time
- More newtonian, less thickener response

Conventional acrylics:

- Weaker repulsive force between the particles
- More hydrophobic particle surface



→ Shorter open time

→ Stronger thickener response

Last update March 20, 2024 Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax+49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de

Page 20 of 36



Open Time Test (ASTM D7488; 21°C 50% humidity)



Handfat resistance*

FP 3626-04

enamel for brush application

trade quality paint (alkyd/PUD)

FP 3626-04 = **ALBERDINGK®** AC 3626



*16h Alberdingk-fatty acid test which simulates the resistance of the film to human hand fat or hand lotions.

Visualisation of the softening by applying carbon black powder.

Last update March 20, 2024 Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax+49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de

Page 21 of 36



Acrylics for stick to anything paints

Multisubstrate or "stick to anything" paints have become very popular over recent years. Combinations of **ALBERDINGK® AC 2403** (adhesion, hydrophobic properties) with harder polymers (**ALBERDINGK®AC 3687** or **ALBERDINGK® AC 3660**) to adjust application and mechanical properties are first choice for high class paints.

Alberdingk®- product	Solids [%]	Viscosity [mPas]	pH- value	MFFT [°C]	Features
AC 2403	46.0- 48.0	200-2,000	8.0- 9.0	16	Best adhesion and super hydrophobic properties
Ren AC 8403	46.0- 48.0	200- 2,000	8.0- 9.0	20	Biobased acrylic with highest corrosion resistance & universal adhesion
AC 3687	40.0- 42.0	20-200	7.5- 8.5	0	High hardness @low MFFT, enhanced open time
AC 3660	39.0- 41.0	20-200	8.0- 9.0	55	Highest chemical resistance, enhanced open time

Adhesion properties

FP 3600-05 stick to everything paint, white, multipurpose

(based on ALBERDINGK® AC 3600 & ALBERDINGK® AC 2403)

Test	Substrates	Results*	Test Conditions
	ABS	GT 1	_
	PS	GT 2	_
	PVC	GT 0	
Adhesion	Steel	GT 1	Cross hatch cut,
(according to ISO 2409)	Aluminium	GT 1	Tape peel-off
	Galvanized steel	GT 1	_
	Tiles	GT 0	-

^{*} GT 0 = best / Gt 5 = worst

Last update March 20, 2024 Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax+49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de

Alberdingk Boley, Inc. | Greensboro, NC| USA | www.alberdingkusa.com Alberdingk Resins (Shenzhen) Co., Ltd. | Shenzhen | P. R. China | www.alberdingkchina.com

Page 22 of 36



Acrylics for trim paints

Full colour trim paints for wood can be based on economic single phase polymers such as **ALBERDINGK® AC 2019** and more sophisticated multiphase acrylics such as **ALBERDINGK® AC 25381**. In both cases a long durability is easily achieved.

Alberdingk®- product	Solids [%]	Viscosity [mPas]	pH- value	MFFT [°C]	Features
AC 2019	45.0- 47.0	500-1,500	8.0- 9.0	17	Universal, very good water resistance
AC 25381	47.0- 49.0	2,000- 8,000	7.5- 8.5	9	Workhorse polymer with excellent resistances and durability

Weathering resistance

Outdoor enamel formulation FP 2019-06 based on **ALBERDINGK® AC 2019** after 4 years outdoor weathering



Last update March 20, 2024 Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax+49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de

Page 23 of 36



Binders for stains

Acrylic and Polyurethane dispersions for wood stains / decking. **ALBERDINGK® AC 2019** and **ALBERDINGK® AC 5401** are single phase, economic products.

ALBERDINGK® AC 2736 is a multiphase acrylic with very high water vapor permeability and Lignocure-technology, which allows a reaction with the lignin of the wood in order to avoid/retard the degradation of the lignin/wood.

ALBERDINGK[®] **LUR 3** is a linseed oil based PUD with outstanding weathering resistance.

Alberdingk®- product	Solids [%]	Viscosity [mPas]	pH- value	MFFT [°C]	features
AC 2019	45.0- 47.0	500-1,500	8.0- 9.0	17	Universal, very good water resistance
AC 5401	48.0- 50.0	200-1,500	8.0- 9.0	5	Universal, exellent stain locking
AC 2736	39.0- 41.0	50-2,000	8.0- 9.0	0	High water vapor permeability, Lignocure- technology, blocking resistant
LUR 3	34.0- 36.0	20-400	7.5- 8.5	0	Linseed oil PUD, excellent weathering resistance

ALBERDINGK[®] **AC 2736**, wood stains in different colour shades after 5 years outdoor exposure:



Last update March 20, 2024 Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax+49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de

Page 24 of 36



Metal paints

Our acrylic dispersions for metal paints offer protection up to C5I-long level! **ALBERDINGK® AC 2403** is the leading market standard in metal protection.

ALBERDINGK® AC 2003 and **ALBERDINGK® SC 48** are single phase, economic solutions for primers and paints.

Alberdingk®- product	Solids [%]	Viscosity [mPas]	pH- value	MFFT [°C]	Features
AC 2003	49.0- 51.0	20- 2,000	7.0- 8.0	3	Good corrosion resistance, economic
Ren AC 8003	49.0- 51.0	20- 2,000	.0-9.0	3	Biobased acrylic with good weathering resistance, low water absorption
AC 2403	46.0- 48.0	200- 2,000	8.0- 9.0	16	Highest corrosion resistance & universal adhesion
Ren AC 8403	46.0- 48.0	200- 2,000	8.0- 9.0	20	Biobased acrylic with highest corrosion resistance & universal adhesion
AC 2420	46.0- 48.0	200- 3,000	8.0- 9.0	20	Harder version of AC 2403, optimized for galvanized surfaces
SC 48	49.0- 51.0	3,000- 5,000	7.0- 7.5	14	Good corrosion resistance, high PVC products, Zn- compatible

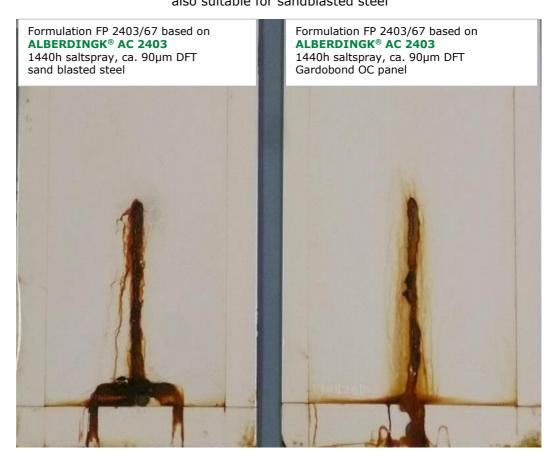
Last update March 20, 2024 Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax+49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de

Page 25 of 36



Test Results (after 1440 hours salt-spray test)

FP 2403-67 anti-corrosion coatings, PVC approx. 22% also suitable for sandblasted steel



Last update March 20, 2024 Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax+49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de

Page 26 of 36



Stain locking primers

Stain locking primers with exceptional water resistance prevent stain migration without the use of heavy metals.

Alberdingk®- product	Solids [%]	Viscosity [mPas]	pH- value	MFFT [°C]	Features
AC 2003	49.0- 51.0	20- 2,000	7.0-9.0	3	Good weathering resistance, low water absorption
Ren AC 8003	49.0- 51.0	20- 2,000	7.0-9.0	3	Biobased acrylic with good weathering resistance, low water absorption
AC 2403	46.0- 48.0	200- 2,000	8.0-9.0	16	Excellent stain locking, very good water barrier, improves intercoat adhesion
AC 5401	48.0- 50.0	200- 1,500	8.0-9.0	5	Economic and very versatile
Ren AC 8403	46.0- 48.0	200- 2,000	8.0-9.0	20	Biobased acrylic with excellent stain locking, very good water barrier, improves intercoat adhesion

Last update March 20, 2024 Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax+49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de

Page 27 of 36



Floor paints

1-pack, self-crosslinking multiphase acrylics with exceptional hot tire and chemical resistance.

ALBERDINGK® AC 3660 offers wet look when being formulated as clear coating.

Alberdingk®- product	Solids [%]	Viscosity [mPas]	pH- value	MFFT [°C]	Features
AC 2714	43.0- 45.0	30-300	8.0- 9.0	50	Very hydrophobic
AC 3660	39.0- 41.0	20-200	8.0- 9.0	55	Wet look, epoxy acrylic
AC 3687	40.0- 42.0	20-200	7.5- 8.5	0	Low VOC-applications

Hot tire resistance

ALBERDINGK® AC 3660:



commercial product:





Varnishes

Varnishes for DIY offer low co-solvent demand combined with high chemical resistance.

ALBERDINGK[®] **AC 2700** offers a good compromise of hand fat and general chemical resistance – **ALBERDINGK**[®] **AC 3600** has best application properties (flow, levelling & open time) combined with "snap drying".

Alberdingk®- product	Solids [%]	Viscosity [mPas]	pH- value	MFFT [°C]	Features
AC 2700	42.0- 44.0	50-500	7.0- 8.0	0	Good hand fat resistance, very good sanding properties
Ren AC 8700	42.0- 44.0	500- 4,000	7.0- 8.0	4	Biobased acrylic with good hand fat resistance, very good sanding properties
AC 25381	47.0- 49.0	2,000- 8,000	7.5- 8.5	9	Universal product with very good chemical resistance, economic
AC 3600	40.0- 42.0	20-200	7.5- 8.5	0	Outstanding hardness and sanding properties, clear in the can

Artist paints

Alberdingk®-	Solids	Viscosity	pH-	MFFT	Features
product	[%]	[mPas]	value	[°C]	
AC 2053	48.0- 50.0	500-2,500	7.0- 8.5	ca. 11	High clarity & elasticity, low yellowing

Last update March 20, 2024 Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax+49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de

Page 29 of 36



Construction products

Waterproofing

ALBERDINGK® AS 2040 is a workhorse styrene acrylic for sealants, waterproofing, etc. Our polyurethane dispersions offer excellent hydrolysis resistance, low Tg and very low dirt pickup.

Alberdingk®- product	Solids [%]	Viscosity [mPas]	pH- value	MFFT [°C]	Features
AS 2040	59.0- 58.0	1,500- 4,500	7.0- 9.0	0	Tg -8°C, universal compatibility (especially with cement)
CUR 2021	59.0- 61.0	100- 2,000	7.5- 8.5	0	Based on renewable resource, good hydrolysis resistance
U 199	59.0- 61.0	200- 1,000	7.5- 9.5	0	Very good hydrolysis resistance
U 228	59.0- 61.0	200- 1,000	7.5- 9.5	0	Superior hydrolysis resistance
U 400 N	39.0- 41.0	20-200	7.0- 8.0	0	Highest hydrolysis and alkaline resistance

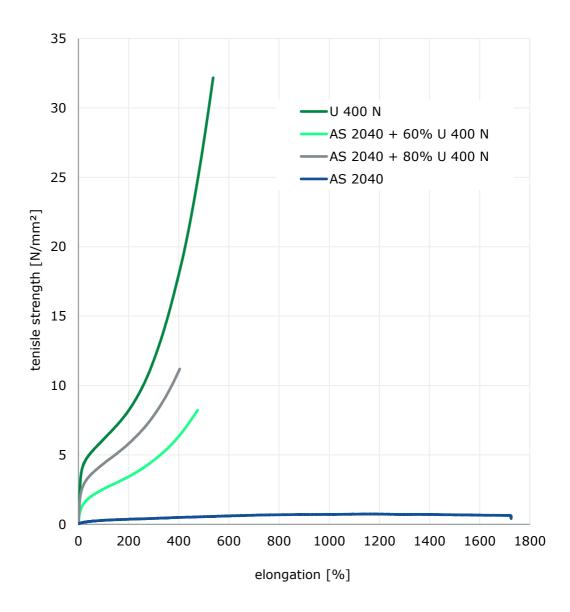
Last update March 20, 2024 Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax+49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de

Page 30 of 36



Film Properties

Tensile strength and elongation of the free film (according to DIN EN ISO 527-1)



Last update March 20, 2024

Phone +49 2151 528-0 | Fax+49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de

Page 31 of 36

Alberdingk Boley, Inc. | Greensboro, NC| USA | www.alberdingkusa.com Alberdingk Resins (Shenzhen) Co., Ltd. | Shenzhen | P. R. China | www.alberdingkchina.com

Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany



Grouts and mortars

Alberdingk®- product	Solids [%]	Viscosity [mPas]	pH- value	MFFT [°C]	Features
AS 2040	59.0- 58.0	1,500- 4,500	7.0- 9.0	0	Tg -8°C, universal compatibility (especially with cement)
SC 4400	49.0- 51.0	2,000- 5,000	7.0- 8.0	17	Universal, odorless, tough- elastic, water- and alkali resistant



Ceramic tiles

Alberdingk®- product	Solids [%]	Viscosity [mPas]	pH- value	MFFT [°C]	Features
AS 2110	49.0- 51.0	1,000- 2,000	6.8- 7.2	3	For waterproofing, cement- free tile adhesives and primers on difficult substrates
AS 2120	49.0- 51.0	500-2,000	7.0- 8.0	17	For waterproofing, cement- free tile adhesives and primers on difficult substrates

Last update March 20, 2024 Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax+49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de

Page 32 of 36



Notes:	

Last update March 20, 2024 Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax+49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de

Page 33 of 36



Notes:	
	—

Last update March 20, 2024 Alberdingk Boley GmbH | Düsseldorfer Str. 53 | 47829 Krefeld | Germany Phone +49 2151 528-0 | Fax+49 2151 573643 | info@alberdingk-boley.de | www.alberdingk-boley.de

Page 34 of 36



Alberdingk Boley GmbH Düsseldorfer Str. 53 | 47829 Krefeld | Germany Tel +49 2151 528-0 | Fax +49 2151 573643 info@alberdingk-boley.de | www.alberdingk-boley.de

