

**Technology Information** 



Waterbased Dispersions for Adhesives (PSA & Lamination)



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#### **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 > 250 million Euro group turnover in 2021

> a partner to our customers for 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
- Greensboro, USA
- Shenzhen, China
- Zhuhai, China

For more information about ALBERDINGK BOLEY and our product offerings, visit <a href="https://www.alberdingk-boley.de">www.alberdingk-boley.de</a>.

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# **Application fields**

- Specialty Tapes
- Labels
- Paper adhesives (packaging)
- Anti-Slip-Coatings
- Graphic Films
- Heat Activating Adhesives



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#### **General Product Overview Pressure Sensitive Adhesives**



Cohesion high

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# **Specialty Tapes / Labels**

AC 75011	Impregnation of sealing tapes, removable tapes Very soft and tacky, good low temperature behaviour
AC 75013	Removable tapes, anti-slip coatings
AC 75022	Impregnation of sealing tapes, Tackifier Dispersion High solid, very soft and tacky
AC 75032	Tapes for roof construction High water resistance, high initial tack
AC 75063	Tapes for construction Suitable for the production of tapes that meet the requirements for low-emission flooring adhesives (EMICODE EC1 Plus) Good balance of adhesion and cohesion
AC 75066	Tapes for automotive High cohesion and heat resistance
AC 75070	Tapes for construction, automotive Suitable for the production of tapes that meet the requirements for low-emission flooring adhesives (EMICODE EC1 Plus) Good adhesion to different substrates, good balance of adhesion and cohesion, high initial tack, high peel
AC 75222	Tapes for automotive & labels High cohesion and heat resistance, repositionable
AC 75241	Tapes for construction, automotive & labels Very high cohesion and heat resistance, high initial tack
AC 75275	Removable tapes, protective films

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# **Specialty Tapes / Labels**

	Solids [%]	pH-Value	Viscosity Brookfiled [mPa s]	Tg [°C]	Loop Tack [N/inch]	Peel Strength, 180° [N/inch]	Shear Resist., RT 10 N/6,25cm² [h]	Dynamic Shear Resist. [N/cm²]	Heat Resistance "Ford" [°C]
AC 75011	60	5.5-6.5	100- 1,500	-62					
AC 75013	60	6.0-7.0	100- 1,500	-43	5	2	>1,000	50	>160
AC 75022	67	4.0-6.0	200- 1,500	-40	35	17	0.5	30	52
AC 75032	60	6.0-7.0	500- 1,500	-35	26	26	3	50	90
AC 75063	65	3.5-5.0	1,000- 3,000	-39	23	24	30	55	130
AC 75066	62	5.0-6.5	500- 3,000	-39	29	24	>500	60	>160
AC 75070	65	3.0-5.0	2,000- 5,000	-34	28	26	25	55	125
AC 75222	68	4.5-5.5	2,000- 5,000	-46	27	21	>500	60	>160
AC 75241	65	4.0-5.0	3,000- 5,000	-32	20	16	>1,000	60	>160
AC 75275	60	4.5-5.5	100- 1,000	-51	10	10	500	61	>160

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### **Paper adhesives**

AC 75022	Envelopes, Food packaging High solid, high initial tack
AC 75070	Food packaging High tack, high peel
AC 75222	Envelopes, Food packaging High solid, high cohesion
AC 75241	Food packaging High tack, very high cohesion

Food Contact and registration status:

For detailed information please ask for our Regulatory Information Sheet



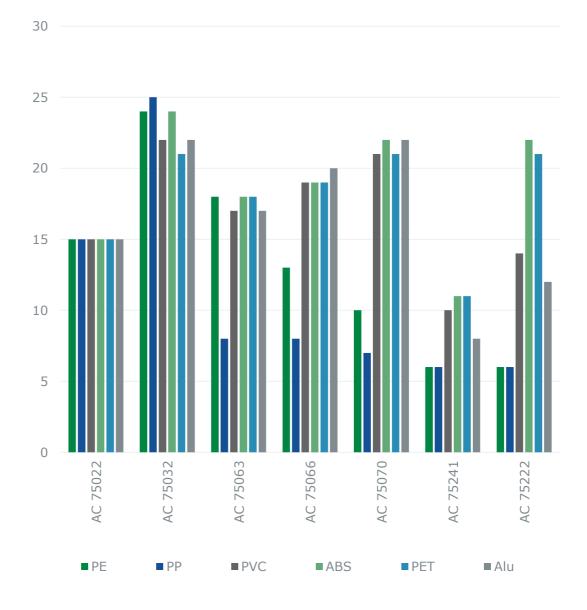
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### **Application Data / Peel Strength on different substrates**

FINAT Test Method FTM 1, Coating Weight: 30 g/m<sup>2</sup>, dry



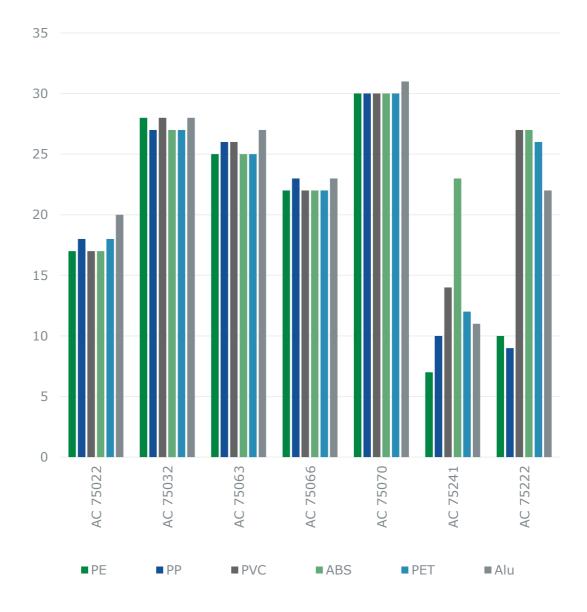
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# **Application Data / Peel Strength on different substrates**

FINAT Test Method FTM 1, Coating Weight: 65 g/m<sup>2</sup>, dry



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#### Suitable raw materials for formulation

#### **Defoamers:**

Tego Antifoam 2-57 (Evonik) BYK-094 (BYK Chemie)
Tego Foamex 822 (Evonik) BYK-039 (BYK Chemie)

#### **Substrate wetting agents:**

BYK-3400 (BYK Chemie) Dow Corning 67 (Dow Corning)

Tegopren 5840 (Evonik) BYK-3410 (BYK Chemie)
Tegopren 5890 (Evonik) BYK-349 (BYK Chemie)

#### **Rheology modifiers:**

Tego Rheo 8600 (Evonik), for food contact application

OPTIFLO-H 3300 VF (BYK Chemie) Tego Rheo 8510 (Evonik)
Coapur 830 W (Coatex) Coatex BR 125 NPF (Coatex)
Rheovis PU 1190 (BASF) Borchi Gel L 75 N (Borchers)

Coapur XS 22 (Coatex)

We recommend to check the properties of the formulation properly, as the add-on of additives can influence adhesive properties.

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#### **Modifiers for Pressure Sensitive Adhesives**

AC 2511	Hard acrylic dispersion, increases cohesion at levels of 3 – 5%

	AC 5503	Self-crosslinking	acrylate,	increases	cohesion
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	Solids [%]	pH-value	Viscosity Brookfiled [mPa s]
AC 2511	42	7.0-9.0	20-150
AC 5503	51	7.0-9.0	1,000-5,000

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# **Polyurethanes/Acrylics for Laminating Adhesivess**

	Application	
U 3251*	Polyester PU for lamination, soft and flexible	
U 400 N*	Polyether PU for lamination, high hydrolysis resistance, Adhesion Primer	
U 460*	Polyether PU for lamination, good adhesion to different substrates, furniture foil lamination with good heat- and hydrolysis resistance, leather adhesives	
U 355	Polyether PU for lamination, good adhesion to a variety of aubstrates	
U 4020	Polyether PU, blister varnish for cardboard & plastics with low activation temperature	
U 4040	Lamination, Adhesion Primer especially for shoe soles (EVA), good heat- and water resistance	
U 4101	Polyether PU, tacky, good adhesion to different substrates, high hydrolysis resistance, low activation temperature, contact adhesives	
U 5201	Polyester PU for lamination, high water resistance	
AC 4605	Heat sealable coatings for food packaging, good barrier properties on paper	
AC 548	Lamination, block-free Acrylate, Combination partner for PU's	
AC 5503	Self-crosslinking acrylate, for lamination	

#### \*Also available with renewable content



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# **Polyurethanes/Acrylics for Laminating Adhesives**

	Solids content [%]	pH-Value	Viscosity Brookfield [mPa s]	Activating- temperature [°C]
U 3251*	40	7.0-8.0	20-200	> 70
U 400 N*	40	7.0-8.0	20-200	> 110
U 460*	40	7.0-8.5	50-500	> 80
U 355	35	7.0-8.5	500-1000	> 80
U 4040	45	7.0-8.0	100-2,000	> 110
U 4020	40	7.0-8.5	20-500	> 80
U 4101	40	7.0-8.5	50-750	tacky
U 5201	40	7.0-8.5	20-300	>80
AC 4605	50	8.0-9.0	40-600	>80
AC 548	50	7.5-8.5	3,000-6,000	> 90
AC 5503	50	7.0-9.0	1,000-5,000	> 80

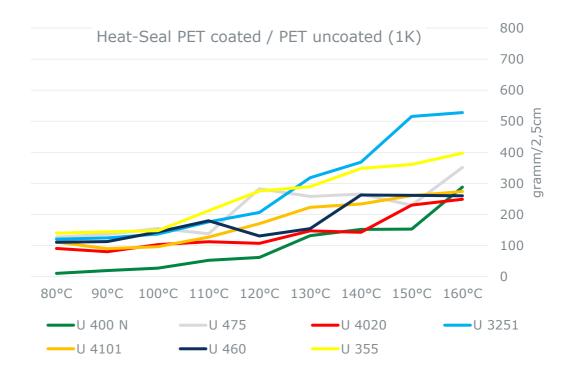
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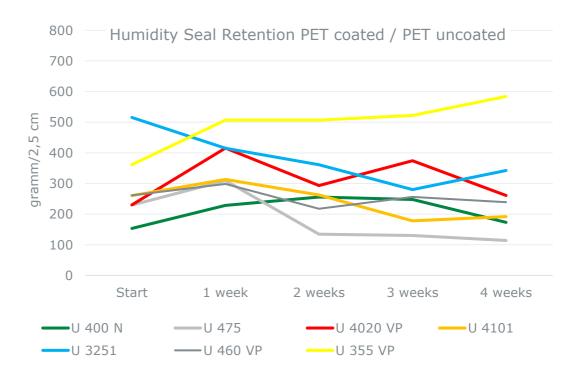
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#### **Polyurethanes/Acrylics for Laminating Adhesives**





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# **Speciality Products**

AC 2575	For hobby glue (when neutralized with potassiumhydroxide/ammonia), washable		
AC 7700	Translucent, solvent-free, all purpose glue, washable		
AS 2040	Acrylic styrene copolymer dispersion. For flexible sealants and screeds, very good cement- and bitumen- compatibility		
U 205	Release coating for craft liner		
SC 4450	Mixing Partner for polychloroprene adhesives to improve cohesion and heat stability		
U 4000*	Primer for plastic substrates (e.g. corona treated BOPP film), suitable for indirect food contact (EU No.10/2011)		
U 4500*	Hydrazine free primer for plastic substrates (e.g. corona treated BOPP film), suitable for indirect food contact (EU No.10/2011, Swiss Ordinance 817.023.021 Annex X)		

#### \*Also available with renewable content



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### **Specialty Products**

	Solids [%]	pH-value	Viscosity Brookfiled [mPa s]
AC 2575	40	4.0-4.5	10-300
AC 7700	44	8.0-8.5	20-200
AS 2040	57	7.0-9.0	1,500-4,500
U 205	40	7.0-8.0	20-200
SC 4450	50	7.5-8.5	500-5,000
U 4000*	30	8.0-9.5	10-200
U 4500*	30	7.0-9.0	20-200

<sup>\*</sup>Also available with renewable content

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