

UV/EB CURABLE RESINS CONSUMER ELECTRONICS & INDUSTRIAL PLASTICS



About allnex



Facts & Figures

- Global company with €2.2 bn in sales
- Broad Technology portfolio: liquid coating resins, energy curable resins, powder coating resins, crosslinkers and additives, composites and construction materials
- Approximately 4000 employees
- Customers in more than 100 countries
- 33 manufacturing facilities
- 23 research and technology centers
- 6 joint ventures
- Extensive range of solutions for key coating segments: automotive, industrial, packaging coating and inks, protective, industrial plastics and specialty architectural

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With manufacturing, R&D and technical facilities located throughout Europe, North America, Asia Pacific and Latin America, allnex offers global and reliable supply of resins and additives combined with local, responsive customer support.

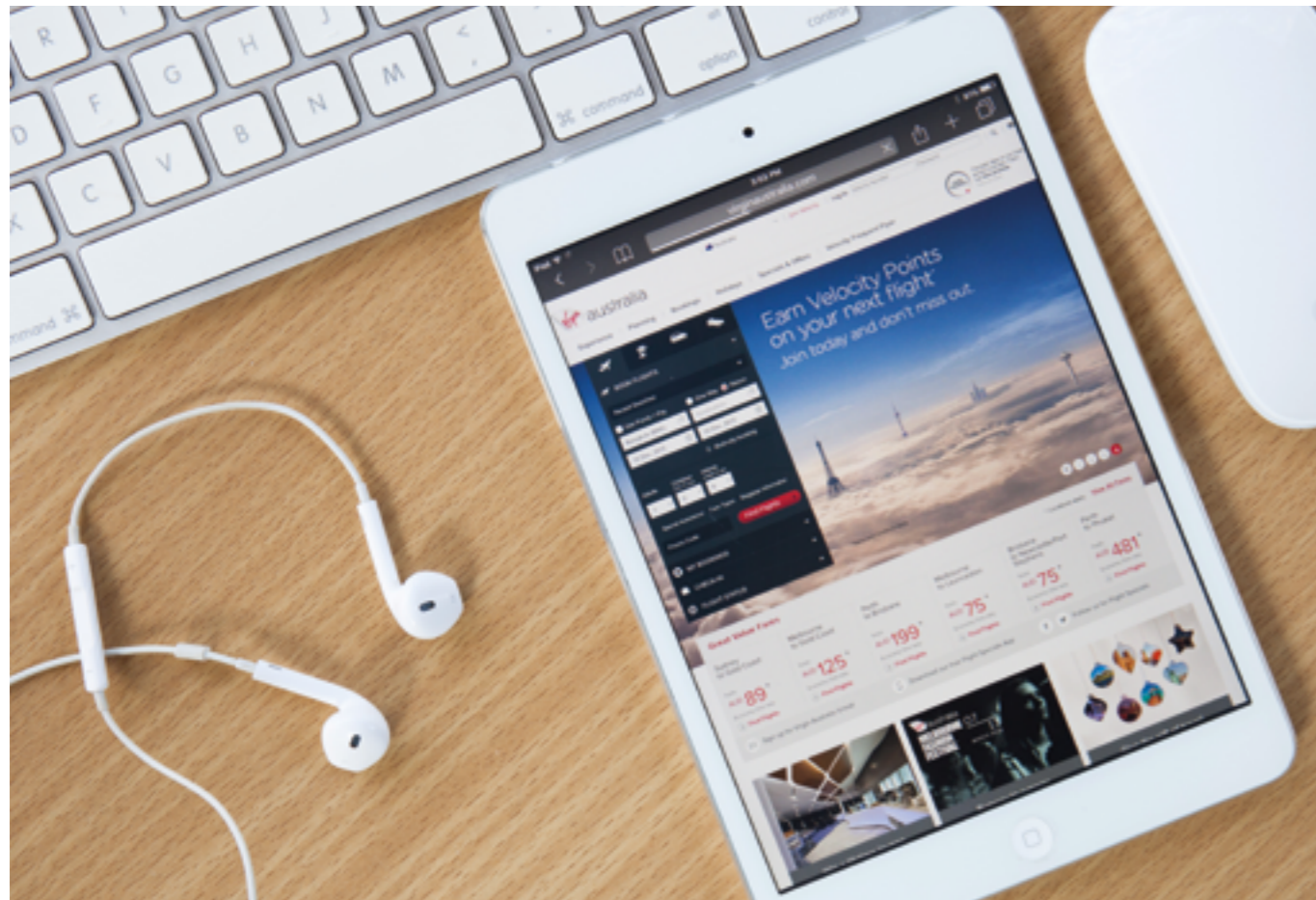
Introduction

UV/EB Curable Resins (Radcure)

Ultraviolet (UV) and electron beam (EB) energy-cured coatings have excellent appearance, durability, and little or no VOC emissions, while enabling increased productivity and lower overall costs per cured part. allnex is the pioneer in UV resin / Radcure technology and applications development. We are the world's leading producer of energy-curable resins for the industrial and plastic coatings as well as the packaging coatings and inks applications, driving market growth and end-user acceptance of this unique technology.

Our customers have come to rely on our broad range of innovative EBECRYL® and UCECOAT® resins including:

- 100% solids UV curable resins and oligomers
- Water borne UV curable resins
- UV curable resins derived from renewable raw materials
- Low Extractables and Odor (LEO) resins specifically formulated for use in low odor, low migration inks and coatings applied to food and pharmaceutical packaging
- A wide range of urethane acrylates, polyester acrylates, amino acrylates and epoxy acrylates
- Specially-designed photo initiators and additives that enhance the performance of energy-cured coatings.



Product Families

Urethane Acrylates

Urethane acrylates are versatile products, capable of providing a wide range of performance characteristics. Depending on the specific product chemistry, virtually any performance level can be achieved in terms of softness/hardness, flexibility, non-yellowing and cure speeds. Products are available in a wide range of viscosities. Aliphatic urethane acrylates are, in comparison to aromatic urethane acrylates, known for their non-yellowing performance.

Polyester (Meth)acrylates

Polyester acrylates cover a wide range of viscosities (low to high) and cure speeds and exhibit moderate to high shrinkage. Polyester acrylates can provide improved pigment wetting and proper water balance for lithographic printing.

Epoxy Acrylates

Epoxy acrylates provide a good combination of performance properties. Standard BADGE (bisphenol A diglycidyl ether) acrylates exhibit very fast cure response and are known for their good hardness, excellent chemical resistance, high gloss and high viscosity. Modified BADGE acrylates can also provide improved pigment wetting, greater toughness and increased flexibility.

Acrylic Acrylates

Acrylic acrylates provide a good adhesion to various substrates with a moderate cure speed and moderate to good flexibility. They are characterized by a low shrinkage and can give coatings excellent weatherability.

Diluting Acrylates

Diluting acrylates provide viscosity control of energy curable coatings and inks. Unlike volatile solvents, diluting acrylates react with acrylate resins to form the polymer network and have significant influence on the cured properties. Reactivity, hardness, chemical resistance and shrinkage will increase with the increasing functionality of the diluting acrylate, while flexibility and adhesion can decrease.

UV Curable Water borne Resins

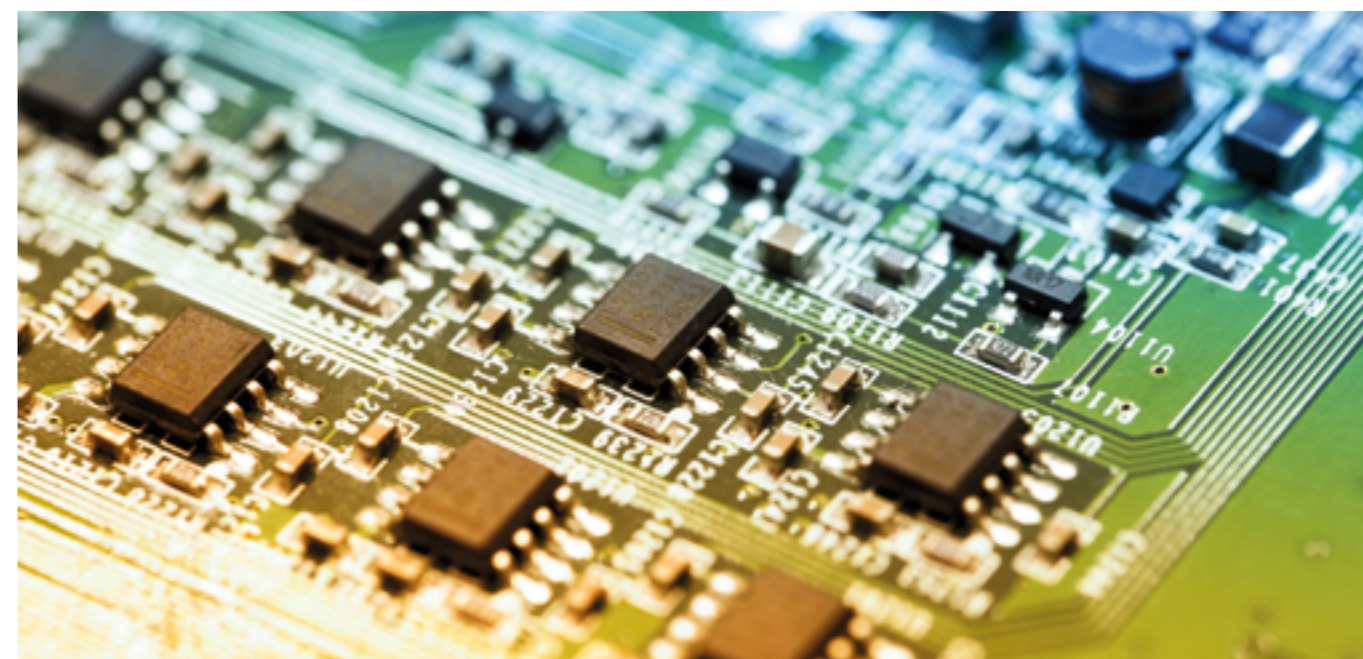
Reasons for the success of UV water borne radiation curing technology include outstanding performance of the coatings, very fast curing, low process costs per square metre of surface, and environmental compliance. The very low viscosity of the UCECOAT® range enables their application by different coating techniques (roller, spray, curtain and vacuum coating) and together with a low-solids content, allows a nice open-pore finish applied by spraying.

Additives

Reactive additives were developed for radiation curing applications to give specific additive characteristics (adhesion, wetting, levelling, slip) while becoming part of the network after curing.

Dual Cure Resins

Dual cure resins offer unique properties as adhesion promotion on difficult substrates and curing in non-irradiated areas. allnex provides a full range of dual cure resins, including isocyanate bearing urethane acrylates as well as their hydroxy bearing combination partners.



Performance Keys

	●	●●●●●
Reactivity	Low	Excellent
Hardness	Low	Excellent
Flexibility	Low	Excellent
Chemical resistance	Low	Excellent
Adhesion	Low	Excellent

Definitions

Acid value (AV)	The acid content expressed in mg KOH per gram
Color	Maximum values in Gardner (G) or Alpha (A) scale when no units are specified - range from light yellow to red defined by the chromaticities of glass standards numbered from 1 for the lightest to 18 for the darkest
Density	Expressed in g/cm ³
Elongation	Expressed in %
Functionality	Theoretical value, expressed as number of double bonds per molecule
Film form. temp.	Expressed in °C
Particle size	Expressed in nm
pH	Measured using a conventional glass electrode equipment
Tensile Strength	Expressed in psi/MPa
Viscosity	Viscosity in milliPascal-seconds (mPa.s) at the specified temperature Note: mPa.s = centiPoise (cP)

Product Overview

Products	Hardcoats	Flexible coatings/ forming after cure	Films & foils	Pre-primer for BOPET	Dual cure	Forming before UV cure	VM primer	VM topcoat	Outdoor applications	Resilient flooring	Haptic coatings	Easy-to-clean / hydrophobic coatings	Bio-based coatings	Adhesion promoters
Aliphatic Urethane Acrylates														
EBECRYL® 244		●	●				●	○						
EBECRYL 284	○	○	●						●					
EBECRYL 1290	●	○	○					●	○	○				
EBECRYL 1290N	●	○	○					●	○	○				
EBECRYL 1291	●	○	○					●	○	○				
EBECRYL 4101										●	●			
EBECRYL 4396					●	○								
EBECRYL 4491		●	●								●			
EBECRYL 4510	●				●									
EBECRYL 4513											●			
EBECRYL 4654			●			●			●					
EBECRYL 4666		○	○					○	○	●				
EBECRYL 4680	●		○						●					
EBECRYL 4765	●				●	●								
EBECRYL 4858	●	●	●			○			●	○				
EBECRYL 4859	●	●	●			○			●	○				
EBECRYL 5129	●		○					○						
EBECRYL 8100	●							●				●		
EBECRYL 8110	●							●				●		
EBECRYL 8210					●			●	○					○
EBECRYL 8213		○						●						
EBECRYL 8215		○						●	●					
EBECRYL 8296		○	○								●			
EBECRYL 8301R	●	○	○					●	○	○				
EBECRYL 8311	●								●					
EBECRYL 8402		●	●						●	●	●			
EBECRYL 8405		○	○				○		●	○				
EBECRYL 8413			●								○			
EBECRYL 8415	●	○	○					●	○					
EBECRYL 8465		●	●					○	●	●	●			
EBECRYL 8602	●	○	●					●	●					

● = especially suitable ○ = suitable

Product Overview

Products	Hardcoats	Flexible coatings/ forming after cure	Films & foils	Pre-primer for BOPET	Dual cure	Forming before UV cure	VM primer	VM topcoat	Outdoor applications	Resilient flooring	Haptic coatings	Easy-to-clean / hydrophobic coatings	Bio-based coatings	Adhesion promoters
Aromatic Urethane Acrylates														
EBECRYL 204							●							
EBECRYL 206							●							
EBECRYL 4501										●				
Acrylic Acrylates														
EBECRYL 745							○		○					○
EBECRYL 767		○					○		○					
EBECRYL 1200	●		○		●	●			●					
Epoxy Acrylates														
EBECRYL® 3416	●							●						
EBECRYL 3708							●			●				
EBECRYL 3730 / TM20							●							
Polyester (Meth)acrylates														
EBECRYL 154	●		●					●		●				
EBECRYL 438							○							○
EBECRYL 524		○					○			○				
EBECRYL 546							○							○
EBECRYL 800			○							●				
EBECRYL 884			○							●				
EBECRYL 4764					●	●								
EBECRYL 5781	●		○				○	○		○			●	
EBECRYL 5849	○		○							○			●	
Diluting Acrylates														
DPGDA		○								●				
EBECRYL 109									●					
EBECRYL 114		●	○							●	●			●
EBECRYL 130	●		○						●					○
EBECRYL 145		●	○							●	●			
EBECRYL ODA	●	●	●						●			●		○
HDDA	●	●	●				○	○	●	●				○
TMPTA	●		●				●	●	●	○				
TPGDA		○								●				


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Product Overview

Products	Hardcoats	Flexible coatings/ forming after cure	Films & foils	Pre-primer for BOPET	Dual cure	Forming before UV cure	VM primer	VM topcoat	Outdoor applications	Resilient flooring	Haptic coatings	Easy-to-clean / hydrophobic coatings	Bio-based coatings	Adhesion promoters
Water borne UV														
UCECOAT 7200	●	○	○					●	●					
UCECOAT 7210	●	●						●	●	○				
UCECOAT 7655	○	○		●			○	○		○				
UCECOAT 7734				●						○				
UCECOAT 7770		○								●				
UCECOAT 7773	●									●				
UCECOAT 7788		●								●				
Additives														
EBECRYL 168	●	●	○				○	●	○	○	○			●
EBECRYL 170	●	●	○				○	●	○	○	○			●
EBECRYL 350	●	●	●					○				●		
EBECRYL 1360	●	●	●					○				●		

● = especially suitable ○ = suitable

Aliphatic Urethane Acrylates

Products	Dilution	Viscosity (mPa.s)	Color	Molecular weight	Functionality	Tensile Strength psi/MPa	Elongation at break (%)	Characteristics	Reactivity	Hardness	Flexibility	Chemical resistance	Adhesion	Available Region*		
														AP	EMEA	Americas
EBECRYL® 244	10 HDDA	190000 (25°C)	0.5 G	-	2	3700 / 26	60	Good flexibility, good water and thermal resistance.	●●	●	●●●●	●	●●●●●	✓	✓	✓
EBECRYL 284	12 HDDA	2100 (60°C)	2 G	1200	2	5900 / 41	58	Excellent exterior durability.	●●●	●●●	●●●	●●●	●●●	✓	✓	✓
EBECRYL 1290	-	2000 (60°C)	1 G	1000	6	6700 / 46	2	High reactivity, scratch, chemical and abrasion resistances.	●●●●●	●●●●●	●	●●●●●	●	✓	✓	✓
EBECRYL 1290N	-	1600 (60°C)	200 A	1000	6	-	2	Low yellowing. High reactivity with good hardness Excellent scratch.	●●●●●	●●●●●	●	●●●●●	●	✓		✓
EBECRYL 1291 	-	2000 (60°C)	1 G	1000	6	6700 / 46	2	High reactivity, scratch, chemical and abrasion resistances.	●●●●●	●●●●●	●	●●●●●	●	✓	✓	✓
EBECRYL 4101	-	7000 (25°C)	150 A	1100	3	2175 / 15	27	Tough but flexible, high abrasion resistance, especially for resilient flooring.	●●●	●●	●●●	●●	●●●	✓	✓	✓
EBECRYL 4396	-	14000 (25°C)	150 A	1200	1	<	-	NCO-functional flexible oligomer for dual-cure technology, improves adhesion, suitable for moisture curing, NCO content 7.5 % on supply form.	●	●●	●●●●	●●●●	●●●●	✓	✓	✓
EBECRYL 4491	20 IBOMA	60000 (25°C)	200 A	7000	2	725 / 5	250	Extremely flexible, for removable protective coatings, improves elasticity in combination with hard resins, provides haptic effect when combined with EBECRYL 4101.	●	●	●●●●●	●●	●●●●●	✓	✓	✓
EBECRYL 4510	10 BuAc	17000 (25°C)	100 A	1200	2	-	-	NCO-functional hard oligomer for dual-cure technology, improves adhesion, high UV reactivity, NCO content 7% on supply form.	●●●●●	●●	●	●●●●●	●●●	✓	✓	✓
EBECRYL 4513	20 IBOMA	22000 (25°C)	100 A	2000	3,2	1015 / 7	30	Flexible, improves elasticity in combination with hard resins, good balance of properties.	●●●	●	●●●	●●●●	●●	✓	✓	✓
EBECRYL 4654	40 BuAc	750 (25°C)	100 A	1600	3,5	-	-	Physically drying UV resin with high chemical resistance, can be used for outdoor.	●●	●●●	●●●	●●●●●	●		✓	✓
EBECRYL 4666	-	50000 (25°C)	150 A	2000	4	9425 / 65	4	Hard and tough hardcoat oligomer with high chemical and scratch resistance, suitable for outdoor use.	●●●	●●●●	●●	●●●●	●●●●●	✓	✓	✓
EBECRYL 4680	20 HDDA	25000 (25°C)	150 A	1400	3,8	2900 / 20	2	Hard oligomer, excellent weathering resistance.	●●●●	●●●●	●	●●●●●	●●	✓	✓	✓
EBECRYL 4765	45 EA	125 (25°C)	100 A	2300	2	-	-	Hard oligomer for dual-cure technology, suitable for pre-coated formable films when combined with hydroxyl-bearing resins, 4.3 % NCO (form of supply).	●●●	●●●	●●	●●●●	●●●	✓	✓	
EBECRYL 4858	-	7000 (25°C)	1 G	450	2	5700 (39)	3.5	Low viscosity monomer-free oligomer with good hardcoat properties, good weatherability and good forming behavior after cure.	●●●	●●●	●●	●●●●	●●●		✓	✓
EBECRYL 4859	-	10000 (25°C)	< 100 A	-	2	2250 (15.5)	0.6	Tin-free low viscosity monomer-free oligomer with good hardcoat properties and good weatherability.	●●●	●●●	●●	●●●●	●●●	✓	✓	✓
EBECRYL 5129	-	700 (60°C)	2 G	800	6	9100 / 63	4	High reactivity, scratch, chemical and abrasion resistances.	●●●●●	●●●●●	●●	●●●●●	●●	✓	✓	✓
EBECRYL® 8100	25 TMPTA	784 (25°C)	2 G	-	4	5000 / 34	2	Oligomer for easy-to-clean applications, high gloss, excellent surface hardness and chemical resistance.	●●●●	●●●●	●	●●●●●	●●●	✓	✓	✓
EBECRYL® 8110	-	1630 (25°C)	2 G	-	-	-	-	Co-resin for easy-to-clean applications (25 % recommended content), high gloss, excellent surface hardness and chemical resistance.	●●●●	●●●●	●	●●●●●	●●●	✓	✓	✓
EBECRYL 8210	-	4500 (25°C)	2 G	600	4	6400 / 44	2	OH-functionalized hard urethane acrylate for dual cure application.	●●●●●	●●●●●	●	●●●●●	●●	✓	✓	✓
EBECRYL 8213	30 BuAc	1400 (25°C)	35 A	-	2	-	-	Recommended oligomer for topcoat on vacuum metalized layer, low yellowing, good outdoor resistance and flexibility, OH functional.	●	●●	●●●●	●●	●●●●	✓	✓	

* for equivalent grades in other zones than indicated in the table, please contact your allnex sales and technical representatives

 Sn-free

Aliphatic Urethane Acrylates

Products	Dilution	Viscosity (mPa.s)	Color	Molecular weight	Functionality	Tensile Strength psi/MPa	Elongation at break (%)	Characteristics	Reactivity	Hardness	Flexibility	Chemical resistance	Adhesion	Available Region*		
EBECRYL 8215	16 (solvent mixture)	1000 (25°C)	< 1 G	-	2	-	-	Recommended oligomer for topcoat on vacuum metalized layer with good pigment and dye wetting, OH functional.	●●	●●●	●●	●●●	●●●●	✓		✓
EBECRYL 8296	-	2500 (60°C)	50 A	2400	3	300 / 2	18	High flexibility, unique performance in formulations for haptic coatings.	●●	●	●●	●	●●●	✓	✓	✓
EBECRYL 8301R	-	24600 (25°C)	0.2 G	-	6	7750 / 53	3	Good reactivity, excellent hardness, outstanding scratch resistance and exterior durability.	●●●●●	●●●●●	●	●●●●●	●			✓
EBECRYL 8311	-	9500 (25°C)	2 G	-	3	5200 / 36	2,5	Nanocomposite with outstanding hardness and good weatherability, excellent abrasion, chemical and scratch resistances.	●●●	●●●●●	●●	●●●●	●●●	✓		✓
EBECRYL 8402	-	12500 (25°C)	2 G	1000	2	3300 / 23	90	Excellent flexibility, abrasion and outdoor resistance.	●●●	●●●	●●●	●●●	●●●●	✓	✓	✓
EBECRYL 8405	20 HDDA	4000 (60°C)	2 G	2700	4	3900 / 27	25	Good exterior durability and reactivity.	●●●	●●●	●●●	●●●	●●●	✓		✓
EBECRYL 8413	33 IBOA	35000 (60°C)	-	-	2	2200 / 15	550	Extremely flexible, good adhesion on plastic and glass substrates.	●●●	●	●●●●●	●●	●●●●	✓	✓	✓
EBECRYL 8415 	-	1500 (60°C)	< 1 G	-	10	2100 / 15	0,8	10-functional oligomer with high hardness, excellent steel wool resistance.	●●●●●	●●●●●	●	●●●●●	●	✓	✓	✓
EBECRYL 8465	-	21000 (60°C)	2 G	1400	3	3726 / 26	50	Excellent exterior durability and high flexibility, excellent chemical and high scratch resistance.	●●●	●	●●●	●●●●	●●	✓	✓	✓
EBECRYL 8602 	-	3000 (60°C)	100 A	-	9	5000 / 34	1	9-functional urethane acrylate with high hardness, low shrinkage, outstanding combination of abrasion resistance and flexibility.	●●●●●	●●●●●	●●	●●●●●	●●	✓	✓	✓
EBECRYL® 204	25 HDDA	17000 (25°C)	2 G	2000	3	-	8	Good abrasion and scratch resistance, recommended for vacuum metallization basecoat.	●●●	●●●	●●	●●●	●●●	✓	✓	
EBECRYL 206	30 TMPTA	3200 (60°C)	< 2 G	-	3	-	-	Fast curing speed, good metallization acceptance, recommended for vacuum metallization basecoat.	●●●	●●●	●	●●●	●●	✓	✓	
EBECRYL 4501	-	6000 (25°C)	< 300 A	-	3,9	870 / 6	15	High abrasion and scratch resistance, especially for resilient flooring.	●●●●●	●●	●●	●●●	●●●	✓	✓	✓

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 Sn-free

Epoxy Acrylates

Products	Dilution	Viscosity (mPa.s)	Color	Molecular weight	Functionality	Tensile Strength psi/MPa	Elongation at break (%)	Characteristics	Reactivity	Hardness	Flexibility	Chemical resistance	Adhesion	Available Region*		
														AP	EMEA	Americas
EBECRYL® 3416	30 DPGDA	16500 (25°C)	2 G	1800	2	1800 / 12	2	Good adhesion on metals, good flexibility and good chemical resistance.	●●●●●	●●●●●	●	●●●●●	●●●		✓	✓
EBECRYL 3708	-	3500 (60°C)	4 G	1500	2	3723 / 26	112	Good flexibility, high reactivity and good adhesion to plastics.	●●●	●●	●●●●●	●●●	●●●●●	✓	✓	✓
EBECRYL 3730 / TM20	20 TPGDA	35500 (25°C)	1,2 G	-	2	9800 / 68	3	Modified epoxy acrylate with good wetting of pigments and matting agents with good water resistance properties.	●●●	●●●	●●	●●●	●●			✓

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Polyester (Meth)acrylates

Products	Dilution	Viscosity (mPa.s)	Color	Molecular weight	Functionality	Tensile Strength psi/MPa	Elongation at break (%)	Characteristics	Reactivity	Hardness	Flexibility	Chemical resistance	Adhesion	Available Region*		
														AP	EMEA	Americas
EBECRYL® 154	-	2800 (25°C)	≤ 2 G	-	3	4000 / 28	1.0	Good compatibility and stability, low viscosity, excellent reactivity, outstanding hardness and low haze development after abrasion.	●●●	●●●●●	●●	●●●●●	●●	✓	✓	✓
EBECRYL438	40 OTA 480	1500 (60°C)	5 G	-	-	-	-	Chlorinated polyester resin, primer for metal and plastic.	●●	●	●●	●	●●●●	✓	✓	✓
EBECRYL 524	30 HDDA	60000 (25°C)	250 A	1000	2	1000 / 7	30	Used as primer or tie-coat for difficult to adhere to plastics.	●	●	●●	●	●●●●	✓	✓	✓
EBECRYL 546	-	350000 (25°C)	1.5 G	-	3	-	-	Excellent adhesion and pigment wetting.	●●●	●●●	●●	●●●	●●●●●	✓	✓	
EBECRYL 800	-	14000 (25°C)	2 G	780	4	-	-	General purpose, low viscosity polyester acrylate.	●●	●●●	●●	●●●●●	●●●	✓	✓	✓
EBECRYL 884	-	25000 (25°C)	5 G	3000	3	-	-	Excellent flexibility and abrasion resistance.	●●●	●●●	●●●	●●●	●●	✓	✓	
EBECRYL 4764	-	4000 (25°C)	400 A	800	2	-	-	OH functional oligomer for dual-cure formulations.	●	●●●	●●	●●●●	●●	✓	✓	
EBECRYL 5781	-	450 (25°C)	< 4 G	-	2	1740 / 12	0,8	BPA-free low viscosity bio-based diacrylate for hardcoat applications, high renewable content (57%).	●●●●	●●●●	●	●●●●	●	✓		✓
EBECRYL 5849	-	5000 (25°C)	< 4 G	-	2	-	-	BPA-free medium viscosity bio-based diacrylate with high reactivity, high renewable content (56%).	●●●●	●●●	●	●●●●	●●	✓	✓	✓

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Acrylic Acrylates

Products	Dilution	Viscosity (mPa.s@25°C)	Color	Molecular weight	Functionality	Tensile Strength psi/MPa	Elongation at break (%)	Characteristics	Reactivity	Hardness	Flexibility	Chemical resistance	Adhesion	Available Region*		
														AP	EMEA	Americas
EBECRYL® 745	25 TPGDA, 25 HDDA	20000	3 G	-	-	1900 / 13	52	Excellent primer for difficult substrates, good pigment wetting & high flexibility.	●●●	●●●	●●●●	●●	●●●●●	✓	✓	✓
EBECRYL 767	30 IBOA	8500 (60°C)	3 G	-	-	-	-	Excellent primer for difficult substrates.	●	●	●●●●	●	●●●●		✓	
EBECRYL 1200	45 BuAc	3000 (60°C)	5 G	> 10000	10	-	10	Physically drying, OH functional oligomer, suitable for dual-cure, exterior applications and hard coatings.	●●●●●	●●●●	●	●●●●●	●	✓	✓	✓

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Additives

Products	Product description	Viscosity mPa.s@25°C	Density g/cm³	Acid Value mg KOH/g	Color Gardner	Addition level	Characteristics	Available Region*		
								AP	EMEA	Americas
EBECRYL® 168	Methacrylated acidic compound	1350	1,28	290	3	1-5	Methacrylated adhesion promotor .	✓	✓	✓
EBECRYL 170	Acrylated acidic compound	3000	1,33	300	6	5-8	Acrylated adhesion promotor .		✓	✓
EBECRYL 350	Silicone diacrylate	350	1,05	7	10	0.5-2	Copolymerisable, substrate wetting and slip additive.	✓	✓	✓
EBECRYL 1360	Silicone hexa-acrylate	2100	1,11	25	10	0.5-2	Copolymerisable, substrate wetting and slip additive, high compatibility with acrylate resins.	✓	✓	✓

* for equivalent grades in other zones than indicated in the table, please contact your allnex sales and technical representatives

Diluting Acrylates

Products	Description	Viscosity mPa.s@25°C	Color	Density	Acid Value	Characteristics	Reactivity	Hardness	Flexibility	Chemical resistance	Adhesion	Available Region*			
												AP	EMEA	Americas	
Monofunctional															
EBECRYL® 114	Phenoxyethyl acrylate	10	200 A	1,1	1	Excellent adhesion to plastics and metal	●	●●	●●●●	●●	●●●●	✓	✓	✓	
ODA	Octyl/decyl acrylate	3	3 G	0,88	1	Good adhesion on non-polar substrates	●	●	●●●●	●	●●●●	✓	✓	✓	
Difunctional															
EBECRYL 109	Acrylate / methacrylate diluent	12	50 A	1,08	-	Improved chemical and thermal resistance	●●	●●	●●	●●●	●●●		✓		
EBECRYL 130	Tricyclodecanediol diacrylate	160	4 G	1,01	-	High reactive diluting oligomer characterised by high Tg and low shrinkage	●●	●●●	●●	●●●	●●●●	✓	✓	✓	
EBECRYL 145	Propoxylated neopentyl glycol diacrylate	20	2 G	1,01	-	Aliphatic di-functional acrylate of low surface tension	●●	●●	●●●	●●	●●●	✓	✓	✓	
DPGDA	Dipropylene glycol diacrylate	10	150 A	1,06	1	Good cure speed and flexibility	●●	●●	●●	●●	●●●	✓	✓	✓	
HDDA	1,6-Hexanediol diacrylate	10	40 A	1,03	1	High diluting power, good weathering properties	●●	●●	●●	●●●	●●●	✓	✓	✓	
TPGDA	Tripropylene glycol diacrylate	15	50 A	1,05	1	Good cure speed and flexibility	●●	●●	●●	●●	●●●	✓	✓	✓	
Trifunctional															
TMPTA	Trimethylolpropane triacrylate	115	50 A	1,11	1	Good surface cure and scratch resistance	●●●●	●●●●	●	●●●●	●	✓	✓	✓	

* for equivalent grades in other zones than indicated in the table, please contact your allnex sales and technical representatives

UV Curable Water borne Resins

Products	Description	Solid content mPa.s@25°C	Viscosity	pH	Max. average particle size	Min. film formation temperature	Tack-free before cure	Molecular weight	Cosolvent	Characteristics	Available Region*		
											AP	EMEA	Americas
UCECOAT® 7200	Water borne urethane acrylate for hardcoat applications	65	500	3,0-5,0	500	-	N	1000	None	High solid content, high gloss and mirror effect, high hardness and scratch resistance equal to high performance solventborne UV hardcoat oligomers	✓	✓	✓
UCECOAT 7210	Acrylate for hardcoat applications	65	700	2,0-5,0	<1000	-	N	-	None	Recommended as flexibilizing partner for UCECOAT 7200	✓	✓	✓
UCECOAT 7655	Aliphatic polyurethane dispersion	35	<200	7,5-8,5	<150	<0	Y	10000	None	High scratch and excellent reactivity in white pigmented and clear system	✓	✓	✓
UCECOAT 7733	Aliphatic acrylated polyurethane dispersion, anionic stabilized	38	<200	7,0-8,5	<150	<0	Y	-	None	Outstanding stain resistance both in clear and white pigmented coatings, good balance for flexibility and hardness	✓	✓	✓
UCECOAT 7770	Aliphatic polyurethane acrylate dispersion	35	<250	7,0-8,5	<150	<0	Y	10000	None	Recommended for PVC resilient flooring, good stain resistance and hardness	✓	✓	
UCECOAT 7773	Aliphatic polyurethane acrylate dispersion	39	<250	7,0-8,5	<150	<0	Y	10000	None	Recommended for PVC resilient flooring, high stain resistance and hardness	✓	✓	
UCECOAT 7788	Aliphatic polyurethane dispersion	40	<200	7,0-8,5	<150	<0	Y	20000	None	Good all-round performing resin, very wide compatibility with other resins	✓	✓	✓

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