ARKEMA COATING RESINS

Polymer Selection Guide for Liquid Resins

NORTH AMERICA

Delivering more choices in polymers for

- Architectural Coatings
- Industrial Coatings
- Specialty Coatings
- Traffic Paints
- Pressure Sensitive Adhesives
- Sealants and Construction Products
- Opaque Polymers
- Floor Care
- Soil Stabilization and Dust Control
- Graphic Arts

Featuring EnVia® Certified Products for Sustainable Formulations

ARKEMA
INNOVATIVE CHEMISTRY

You can expect more choices from Arkema Coating Resins. And we deliver.

When you evaluate the raw materials for your formulated products, Arkema Coating Resins offers the widest range of technology platforms to choose from to meet your exact requirements. Our goal is to help you identify a product from our line that enables you to formulate a competitive advantage into every product in your line.

The information presented in this Polymer Selection Guide will serve as a starting point in your evaluation process. Additional information is available from your Arkema representative. You can also visit our web site (www.arkemacoatingresins.com) for technical data sheets and starting point formulations for many of the products listed in this guide.

Additional information is also available in North America from our Customer Service Center – call 1-866-837-5532.

For information on latex storage and handling please request bulletin 309-00608 Rev.12-15 – Storage and Handling of Latexes.

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Our wide range of choices helps you optimize performance and value in your formulated products.

There is no universal technology platform that is right for every application. Our investments in manufacturing, technology development and ongoing customer support mean that you can always expect an objective recommendation driven by our goal of delivering the best combination of performance and value to meet your requirements.

EnVia® Certified Latexes – these products have been certified by Arkema Coating Resins to help formulators meet sustainability and regulatory goals in their finished products. A description of the EnVia® certification program is available at www.arkemacoatingresins.com.

ENCOR® All-Acrylic Latexes – Arkema produces a wide range of ENCOR® all-acrylic latexes for use in applications such as interior or exterior paints, high PVC paints, semi-gloss architectural coatings, quality topcoats, sports surface coatings, and elastomeric coatings.

ENCOR® Vinyl Latexes – our line of vinyl acrylic and VAE latexes are dependable vehicles for a wide range of architectural coatings. ENCOR® vinyl latexes are an excellent choice for low odor, low VOC systems offering customers a range of options to match their preferred formulating approach.

ENCOR® Styrene Acrylic Latexes – ENCOR® styrene acrylic latexes provide excellent adhesion, water resistance and gloss development in applications such as porch and deck enamels, interior/exterior high-gloss enamels, and traffic paints.

ENCOR® FLEX Latexes – this line of products enables improved dirt pickup resistance, weatherability and elongation in low VOC elastomeric coatings. ENCOR® FLEX latexes are also components in the Arkema AC Systems for cool roof coatings.

NEOCAR® Vinyl Versatate Modified Latexes – NEOCAR® acrylics and NEOCAR® latexes are branched vinyl ester latexes that provide enhanced properties such as good wet adhesion, grain-cracking resistance and superior performance for a variety of exterior applications, such as coating masonry or wood. NEOCAR® Acrylic latexes feature outstanding hydrophobicity and resistance to water whitening.

SNAP® Structured Nano-acrylic Polymers – this unique technology platform includes acrylic latexes that offer exceptional performance in architectural coatings at zero or very low VOC levels, including outstanding gloss and excellent block resistance.

CELOCOR® Opaque Polymers – CELOCOR® Opaque Polymers are voided latex materials that impart hiding and function as a partial replacement for titanium dioxide.

SYNAQUA® Alkyd Emulsion Binders – acrylic-modified, high performance waterborne alkyd dispersions for direct-to-metal, fast air-dry or force-dry industrial and architectural coatings, wood and wood stain applications.

CHEMPOL® Polyester, Alkyd and Acrylic Polymers – versatile CHEMPOL® binders are excellent choices for a wide range of industrial applications, including coil, appliance, metal office furniture, maintenance, marine and transportation coatings.

Note: Products from Arkema Coating Resins that display the EnVia® trade name have passed our rigorous certification program. EnVia® certified products may assist formulators in meeting their sustainability and regulatory goals in their finished products.

ENVIA® BY ARKEMA

ENCOR® BY ARKEMA

ENCOR® FLEX BY ARKEMA

NEOCAR® BY ARKEMA

SNAP® BY ARKEMA

CELOCOR® BY ARKEMA

SYNAQUA® BY ARKEMA

CHEMPOL® BY ARKEMA

ARKEMA INNOVATIVE CHEMISTRY

Waterborne Binders – Architectural Coatings

Product	Chemistry	Solids (%)	pH Value	Weight per Gallon (lb)	Particle Size, (Micron)	Viscosity (cP)	Minimum Filming Temperature (°C)	Glass Transition Temperature (°C)
ENCOR® 626	Acrylic	50	9	8.6	0.2	300	20	29
ENCOR® 627	Acrylic	43.5	9.8	8.8	0.1	550	9	15
ENCOR® 631	Acrylic	50	9	8.9	0.15	<500	0	<4
ENCOR® 657	Acrylic	58	9	8.9	0.3	500	16	14
ENCOR® 662	Acrylic	50	8.5	8.8	0.2	<500	14	14
ENCOR® Flex 187	Acrylic	60	8	8.9	0.45	150	0	-18
SYNAQUA® 4804	Alkyd Emulsion	50	7	8.9	—	300	0	NA
SYNAQUA® 821-1377	Alkyd Dispersion, Acrylic-Modified	40	8	8.8	—	1000	0	NA
SYNAQUA® 821-2241	Alkyd Dispersion, Acrylic-Modified	37	8	8.6	—	1500	0	NA
NEOCAR® Acrylic 820	NEOCAR® Acrylic	45	8.5	8.5	0.07	150	17	20
NEOCAR® Acrylic 850	NEOCAR® Acrylic	45	8.5	8.7	0.07	150	45	50
NEOCAR® Latex 2300	NEOCAR® Latex	55	4	9.1	0.3	50	2	5
NEOCAR® Latex 2535	NEOCAR® Latex	53.5	6.5	8.8	0.3	500	8	10
SNAP® 720	Structured Nanoparticle Acrylic Polymer	49	7	8.9	0.08	<500	0	NA
ENCOR® 123	Styrene Acrylic	60	8.5	8.9	0.5	150	0	-17
ENCOR® 3176A	Styrene Acrylic	50	8	8.9	0.2	300	0	-7
ENCOR® 461	Styrene Acrylic	47	9.5	8.6	0.08	1000	<0	-3
ENCOR® 471	Styrene Acrylic	48	9.5	8.7	0.08	400	22	44
ENCOR® 481	Styrene Acrylic	48	9.5	8.7	0.08	400	0	-3
ENCOR® CL 36	Styrene Acrylic	49	8.8	8.7	0.15	200	18	20
ENCOR® Flex 192	Styrene Acrylic	60	8	8.7	0.35	500	0	-21
ENCOR® Flex 3186	Styrene Acrylic	50	8	8.8	0.2	300	0	-7
ENCOR® 282	Vinyl Acetate-Ethylene	56	<5	8.8	0.4	500	0	11
ENCOR® 309	Vinyl Acrylic	55	5	9	0.3	<500	12	<19
ENCOR® 310	Vinyl Acrylic	55	5	8.9	0.3	200	<4	<5
ENCOR® 357	Vinyl Acrylic	56.5	5	9.1	0.3	275	12	23
ENCOR® 367	Vinyl Acrylic	55	5	9	0.4	550	10	19
ENCOR® 379G	Vinyl Acrylic	55	5	9	0.3	500	12	19

The product data provided in this document are typical values, intended only as guides, and should not be construed as sales specifications.

VOC Potential (g/L)	Description
150	ENCOR® 626 offers excellent gloss development, adhesion on both wet and dry substrates, and grain crack resistance.
50	ENCOR® 627 effectively blocks stains from substrates that tend to exude tannins. ENCOR® 627 is designed for use in stain-blocking primers, masonry primers and wood stains.
0	ENCOR® 631 is an APE-free high performance latex that can be formulated from flat to high gloss coatings for both interior and exterior applications.
50	ENCOR® 657 is an APE-free high solids binder that balances cost and performance and can be formulated into coatings for masonry, interior wall paints, and exterior architectural coatings.
0	ENCOR® 662 is an APE-free binder designed to provide excellent scrub performance, stain resistance, washability and block resistance in zero to low VOC interior architectural coatings.
<50	ENCOR® Flex 187 is a high solids binder designed for elastomeric roof and wall coatings with excellent dirt pick up resistance.
25	SYNAQUA® 4804 is an APEO and ammonia-free short oil alkyd emulsion designed for use in high performance decorative paints, such as trim paints, wall paints, and exterior wood and metal primers.
100	SYNAQUA® 821-1377 is a fast dry short oil chain stopped acrylic modified alkyd dispersion designed for low VOC architectural and industrial applications. Contains no surfactants or plasticizers.
25	SYNAQUA® 821-2241 is a medium oil acrylic modified alkyd dispersion designed for low VOC air dry architectural applications. SYNAQUA® 821-2241 is suitable for applications where penetration into porous substrates is critical for durability and moisture resistance; may be used for applications on wood or concrete.
50	NEOCAR® Acrylic 820 is an ultra-small particle size, hydrophobic latex designed for use in a variety of applications including clear sealers and stains.
100	NEOCAR® Acrylic 850 is an ultra-small particle size, hydrophobic latex with excellent film hardness and ambient self-crosslinking.
100	NEOCAR® Latex 2300 is most noted for its hydrolytic stability, water resistance, and increased binding efficiency.
50	NEOCAR® Latex 2535 is a general-purpose exterior polymer based on branched monomer technology. Used in exterior flat housepaints.
5	SNAP® 720 is an APE-free structured, nano-acrylic polymer which offers outstanding block resistance in low or zero VOC high-gloss coatings. With an ammonia-free composition, SNAP® 720 is an excellent choice for low odor systems.
<50	ENCOR® 123 is a high-solids elastomeric binder that combines high adhesion with very good resistance to water and alkali.
<50	ENCOR® 3176A is specifically developed for use as a cost-effective binder for elastomeric coatings.
100	ENCOR® 461 is a styrene acrylic latex with alkyd-like rheology and gloss properties, making it an excellent choice for a variety of architectural applications.
250	ENCOR® 471 is a styrene acrylic latex with alkyd-like rheology and gloss properties.
100	ENCOR® 481 is a styrene acrylic latex with alkyd-like rheology and gloss properties.
100	ENCOR® CL 36 is designed to be formulated for a wide variety of end use applications from primers to topcoats. It is ideally suited for masonry coatings due to its superior efflorescence resistance.
	ENCOR® Flex 192 is an ambient crosslinking, modified acrylic latex designed for use in elastomeric coatings requiring adhesion to difficult substrates and excellent tensile strength.
<50	ENCOR® Flex 3186 is designed for cost-effective elastomeric roof and wall coatings with enhanced dirt pick up resistance.
0	ENCOR® 282 is an APE-free high performance general purpose vinyl acetate/ethylene (VAE) binder for architectural coatings.
<50	ENCOR® 309 is an APE-free structured, high molecular weight vinyl-acrylic latex designed for architectural coatings where high scrub resistance and exterior durability are of primary importance.
0	ENCOR® 310 is an APE-free vinyl acrylic polymer with excellent touch-up and scrub resistance in low VOC architectural coatings from flat to semigloss
100	ENCOR® 357 is an APE-free general-purpose binder that offers broad formulating latitude and improved block resistance compared to standard vinyl-based latexes.
100	ENCOR® 367 is a general-purpose binder that offers excellent versatility and stability, including the capability of making stable, one-package intumescent paints.
50	ENCOR® 379G is a high molecular weight polymer that delivers very high scrub resistance and durability in both interior and exterior architectural coatings.

Waterborne Binders – Industrial Coatings

Product	Chemistry	Solids (%)	pH Value	Weight per Gallon (lb)	Particle Size, (Micron)	Viscosity (cP)	Minimum Filming Temperature (°C)	Glass Transition Temperature (°C)
ENCOR® 2722	Acrylic	42	8.7	8.7	0.09	500	<5	10
SYNAQUA® 4804	Alkyd Emulsion	50	7	8.9	—	300	0	NA
SYNAQUA® 821-1377	Alkyd Dispersion, Acrylic-Modified	40	8	8.8	—	1000	0	NA
NEOCAR® Acrylic 820	NEOCAR® Acrylic	45	8.5	8.5	0.07	150	17	20
NEOCAR® Acrylic 850	NEOCAR® Acrylic	45	8.5	8.7	0.07	150	45	50
ENCOR® 2721	Styrene Acrylic	43	7.5	8.7	0.08	100	<5	99
ENCOR® DM 99	Styrene Acrylic	42	7.5	8.6	0.1	600	31	46
ENCOR® DM 109	Styrene Acrylic	47	8	8.6	0.13	600	30	40
ENCOR® DM 166	Styrene Acrylic	41	7.5	8.6	0.09	250	27	37
ENCOR® DL 215	Styrene Butadiene	49	7.8	8.6	0.1	200	35	39
ENCOR® DL 313	Styrene Butadiene	49	8.5	8.6	0.1	300	0	-1

Waterborne Binders – Specialty Coatings

Product	Chemistry	Solids (%)	pH Value	Weight per Gallon (lb)	Particle Size, (Micron)	Viscosity (cP)	Minimum Filming Temperature (°C)	Glass Transition Temperature (°C)
ENCOR® 627	Acrylic	43.5	9.8	8.8	0.1	550	9	15
ENCOR® 651	Acrylic	65	9.1	8.65	0.35	500	9	12
ENCOR® Flex 187	Acrylic	60	8	8.9	0.45	150	0	-18
SYNAQUA® 4804	Alkyd Emulsion	50	7	8.9	—	300	0	NA
SYNAQUA® 821-1377	Alkyd Dispersion, Acrylic-Modified	40	8	8.8	—	1000	0	NA
NEOCAR® Acrylic 820	NEOCAR® Acrylic	45	8.5	8.5	0.07	150	17	20
NEOCAR® Acrylic 850	NEOCAR® Acrylic	45	8.5	8.7	0.07	150	45	50
ENCOR® 123	Styrene Acrylic	60	8.5	8.9	0.25	150	0	-17
ENCOR® 3176A	Styrene Acrylic	50	8	8.9	0.2	300	0	-7
ENCOR® 9176	Styrene Acrylic	61	8	8.65	0.35	500	0	-21
ENCOR® Flex 192	Styrene Acrylic	60	8	8.7	0.35	500	0	-21
ENCOR® Flex 3186	Styrene Acrylic	50	8	8.8	0.2	300	0	-7
ENCOR® DL 215	Styrene Butadiene	49	7.8	8.6	0.1	200	35	39
ENCOR® DL 313	Styrene Butadiene	49	8.5	8.6	0.1	300	0	-1
ENCOR® 449	Vinyl Acrylic	55	5.5	9.1	0.4	100	11	22

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Description
ENCOR® 2722 is an APE-free acrylic polymer designed to exhibit tannin blocking properties without zinc oxide. ENCOR® 2722 exhibits good sandability.
SYNAQUA® 4804 is an APEO and ammonia-free short oil alkyd emulsion for use in trim and wall paints, and exterior wood and metal primers.
SYNAQUA® 821-1377 is a fast dry short oil chain stopped acrylic modified alkyd dispersion for low VOC architectural and industrial applications. No surfactants or plasticizers.
NEOCAR® Acrylic 820 is an ultra-small particle size, hydrophobic latex designed for use in a variety of applications. It offers excellent chemical resistance and high block resistance.
NEOCAR® Acrylic 850 is an ultra-small particle size, hydrophobic latex with ambient self-crosslinking. It is designed for use in applications where outstanding durability is required and contributes outstanding chemical, hot tire pickup and blush resistance.
ENCOR® 2721 is a self-crosslinking emulsion designed for industrial woodfinishing applications where improved productivity is required. ENCOR® 2721 exhibits excellent sandability, excellent alkali and chemical resistance.
ENCOR® DM 99 is recommended for general purpose primer and topcoat metal coatings as well as direct-to-metal (DTM) applications. It shows excellent gloss development and block resistance characteristics and exhibits excellent water resistance.
ENCOR® DM 109 is a unique styrene-acrylic emulsion for direct-to-metal (DTM) gloss maintenance and general metal applications. Its properties allow for a wide temperature and humidity application window, while maintaining early water resistance and flash rust resistance. This latex offers the most advanced coating performance of the ENCOR® DM series.
ENCOR® DM 166 is a styrene-acrylic binder for maintenance and general metal applications. It can be formulated into economical gloss topcoats and provides excellent flow and leveling characteristics.
ENCOR® DL 215 latex is a modified styrene butadiene polymer uniquely suited for use in primer sealer formulations.
ENCOR® DL 313 latex is a modified styrene butadiene polymer uniquely suited for use in primer sealer formulations for applications that require moisture vapor barrier properties, alkali resistance and adhesion to galvanized metals.

VOC Potential (g/L)	Description
50	ENCOR® 627 effectively blocks stains from substrates that tend to exude tannins.
<100	ENCOR® 651 offers excellent overall performance and durability in athletic surface coatings.
<50	ENCOR® Flex 187 is a high solids, all-acrylic binder designed for elastomeric roof and wall coatings, which offers outstanding dirt pickup resistance and can be formulated to meet requirements set forth in ASTM D-6083.
25	SYNAQUA® 4804 is an APEO and ammonia-free short oil alkyd emulsion for use in trim and wall paints, and exterior wood and metal primers.
100	SYNAQUA® 821-1377 is a fast dry short oil chain stopped acrylic modified alkyd dispersion for low VOC architectural and industrial applications. No surfactants or plasticizers.
50	NEOCAR® Acrylic 820 is an ultra-small particle size, hydrophobic latex designed for use in a variety of applications. It offers excellent chemical resistance and high block resistance.
100	NEOCAR® Acrylic 850 is an ultra-small particle size, hydrophobic latex with ambient self-crosslinking. It is designed for use in applications where outstanding durability is required and contributes outstanding chemical, hot tire pickup and blush resistance.
<50	ENCOR® 123 is a high-solids elastomeric binder that combines high adhesion with very good resistance to water and alkali.
<50	ENCOR® 3176A is a modified acrylic polymer specifically developed for use as a cost-effective binder for elastomeric coatings.
<50	ENCOR® 9176 is an ambient temperature crosslinking latex for sealants and elastomeric coatings requiring a strong, flexible binder.
<50	ENCOR® Flex 192 is an ambient crosslinking, modified acrylic latex designed for use in elastomeric coatings requiring adhesion to difficult substrates and excellent tensile strength.
<50	ENCOR® Flex 3186 is designed for cost-effective elastomeric roof and wall coatings, offering a good balance of properties such as weatherability, elongation, water resistance, caustic resistance and dirt pick up resistance.
<150	ENCOR® DL 215 is a modified styrene butadiene polymer uniquely suited for use in primer sealer formulations.
<50	ENCOR® DL 313 is a modified styrene butadiene polymer uniquely suited for use in primer sealer formulations for applications that require moisture vapor barrier properties, alkali resistance and adhesion to galvanized metals.
—	ENCOR® 449 can be used to formulate temporary strippable coatings which afford protection to a range of substrates.

Waterborne Binders – Traffic Paints

Product	Chemistry	Solids (%)	pH Value	Weight per Gallon (lb)	Particle Size, (Micron)	Viscosity (cP)	Minimum Filming Temperature (°C)	Glass Transition Temperature (°C)
ENCOR® DT 100	Acrylic	60	8.5	8.8	0.23	700	19	20
ENCOR® DT 211	Acrylic	50.5	10.4	8.7	0.2	300	18	20

Waterborne Binders – Pressure Sensitive Adhesives

Product	Chemistry	Solids (%)	pH Value	Viscosity (cP)	Glass Transition Temperature (°C)	180° Peel, 30 minute dwell, (pli)
ENCOR® 4152	Acrylic	50	7	400	-38	0.5
ENCOR® 4525	Acrylic	50	6.5	250	-42	1.5
ENCOR® 4550	Acrylic	50	5	250	-51	<0.5
ENCOR® 9144	Acrylic	50	8	100	-38	4.5
ENCOR® 9165	Acrylic	52	9	300	-34	4
ENCOR® 9189	Acrylic	52.5	8.5	325	-35	3.0
ENCOR® 9290	Acrylic	50	8	100	-42	4
ENCOR® 9291	Acrylic	54	5	50	-42	4.5
ENCOR® 9466	Acrylic	63	5.5	200	-40	3
ENCOR® 9569	Acrylic	57.5	6.5	900	-53	3.7
ENCOR® 9801	Acrylic	55	8.8	250	-42	3
ENCOR® 9808	Acrylic	55	8.5	100	-42	2.5
ENCOR® 9285	Styrene Acrylic	50	8	280	-38	3.5

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Description
ENCOR® DT 100 is an acrylic latex binder designed for use in general purpose traffic paint formulations requiring standard-dry performance.
ENCOR® DT 211 is a 100% acrylic fast-dry latex binder for traffic markings applied at standard line thickness of 15 mils wet.

1/2" x 1/2" x 500g Shear resistance on stainless steel (hours)	Description
>100	ENCOR® 4152 is a removable adhesive suitable for plasticized PVC films.
>200	ENCOR® 4525 is designed for the production of removable plastic packaging tapes and labels.
>200	ENCOR® 4550 is a protective mask with ultra low adhesion.
5	ENCOR® 9144 is a tackified PSA for difficult to adhere to low surface energy substrates. It offers excellent clarity and water whiteness, is easily applied by reverse gravure or Mayer Rod coaters and has high line speed capability.
24	ENCOR® 9165 is a base latex for general purpose filmic labels with good balance of peel tack and shear. It has good clarity on clear face stocks.
10	ENCOR® 9189 is a coater-ready general purpose filmic labels with good balance of peel tack and shear.
5	ENCOR® 9290 is a coater-ready general purpose PSA with excellent peel and tack adhesion. It is easily applied by reverse gravure or Mayer Rod coaters and has high line speed capability.
10	ENCOR® 9291 is a pressure-sensitive acrylic emulsion designed for high speed gravure direct coating of treated films. It offers outstanding clarity for clear film applications and has a high rate of drying in most dryers.
>200	ENCOR® 9466 is a high solids, coater-ready excellent peel and tack with exceptional cohesive strength. Easily formulated with tackifier for specialty applications.
0.75	ENCOR® 9569 is an excellent choice for labels and tapes for difficult surfaces such as polyolefins. Can be used for a wide range of applications ranging from sub-freezing to ambient temperatures.
>24	ENCOR® 9801 is a pressure-sensitive acrylic emulsion designed for packaging tape applications.
>24	ENCOR® 9808 is designed for packaging tape applications requiring more aggressive tack.
24	ENCOR® 9285 is a coater-ready adhesive for clear, water resistant labels. It forms clear, water white films that are highly resistant to blushing when exposed to water and can be used for personal care, beverage bottle and other packaging applications.

Waterborne Binders – Sealants and Construction

Product	Chemistry	Solids (%)	pH Value	Weight per Gallon (lb)	Particle Size, (Micron)	Viscosity (cP)	Minimum Filming Temperature (°C)	Glass Transition Temperature (°C)
ENCOR® 154S	Acrylic	60	4.5	9	0.4	350	<0	-4
ENCOR® 163S	Acrylic	58	4.3	8.6	0.2	300	<0	-11
ENCOR® 412	Acrylic	47	7.5	8.8	NA	50	13	13
ENCOR® 413	Acrylic	47	9.25	8.8	0.2	50	13	13
ENCOR® 490	Acrylic	47	6	8.8	0.2	50	11	13
ENCOR® 9192	Acrylic	66	4	8.9	Bimodal	600	0	0
NEOCAR® Acrylic 820	NEOCAR® Acrylic	47	8.5	8.5	0.07	150	17	20
NEOCAR® Latex 493	NEOCAR® Latex	55	4	9.1	0.3	50	2	5
ENCOR® 145	Styrene Acrylic	48	8	8.7	0.15	120	29	32
ENCOR® 169S	Styrene Acrylic	62.5	6	8.6	0.3	500	<0	-22
ENCOR® 446	Styrene Acrylic	62	6	8.8	0.3	550	6	12
ENCOR® 496	Styrene Acrylic	50	8	8.8	0.2	300	0	-7
ENCOR® 9176	Styrene Acrylic	61	8	8.65	0.35	500	<0	-21
ENCOR® 162	Vinyl Acrylic	55	4.5	9.1	0.3	200	4	12
ENCOR® 3560	Vinyl Acrylic	60	4.7	9.2	0.25	500	11	22
ENCOR® 182	Vinyl Acetate-Ethylene	56	4.8	8.8	0.42	90	0	5

Waterborne – Opaque Polymers

Product	Chemistry	Solids (%)	pH Value	Weight per Gallon (lb)	Viscosity (cP)	Minimum Filming Temperature (°C)	Glass Transition Temperature (°C)	VOC Potential (g/L)
CELOCOR® AF	Opaque Polymer	30	8.25	8.6	100	NA	NA	NA
CELOCOR® Opaque Polymer	Opaque Polymer	30.5	8.25	8.6	100	NA	NA	NA

The product data provided in this document are typical values, intended only as guides, and should not be construed as sales specifications.

Description

ENCOR® 154S is a versatile binder for a wide range of adhesive and sealant applications.

ENCOR® 163S is a high solids binder for high-performance caulks, sealants, and elastomeric coatings. ENCOR® 163S combines excellent adhesion properties, high pigment binding capacity, and excellent exterior durability. Properly formulated sealants based on ENCOR® 163S are capable of passing the requirements of ASTM C-920.

ENCOR® 412 is an ammonia-free emulsion polymer specifically developed for use in the polymer modification of Portland cement and other hydraulic cement compositions.

ENCOR® 413 is an emulsion polymer specifically developed for use in the polymer modification of Portland cement and other hydraulic cement compositions.

ENCOR® 490 is an ammonia-free emulsion polymer specifically developed for use in the polymer modification of Portland cement and other hydraulic cement compositions. Passes relevant performance requirements of ANSI/EIMA 99A-2001. Can also be formulated into finish coats with enhanced dirt pick up resistance.

ENCOR® 9192 is a high solids binder for "true clear" sealant applications which offers excellent clarity and resistance to yellowing upon aging.

NEOCAR® Acrylic 820 is an ultra-small particle size, hydrophobic modified acrylic latex.

NEOCAR® 493 balances cost and performance and passes relevant performance requirements of ANSI/EIMA 99A-2001.

ENCOR® 145 is a styrene-acrylic emulsion polymer, whose combination of high molecular weight and hydrophobic nature provides an economical vehicle for such diverse applications as spackling compounds, tile adhesives and exterior insulation adhesives. Its small particle size and carboxyl functionality provides excellent stability and pigment wetting. ENCOR® 145 can be formulated into a ceramic tile adhesive that passes ANSI A136.1 (Type 1) specifications.

ENCOR® 169S is a binder for high-performance clear and pigmented sealants. It combines exceptional stress-strain properties with a low Tg to provide the elasticity required to meet the performance standards of ASTM C 920 when properly formulated. The high latex solids provide wide formulation latitude and low sealant shrinkage, which can reduce the cracking tendency of paint applied over fresh sealant.

ENCOR® 446 is a very low surfactant styrene acrylic latex that is cement compatible and designed for use in various construction and adhesive applications.

ENCOR® 496 is designed for use as a binder for air-moisture barriers and as a cement modifier in adhesive/base coats and dirt resistance finish coats. It is an excellent choice for use in exterior insulation and finish systems (EIFS) with drainage systems due to its excellent resistance to bulk water intrusion while allowing the passage of water vapor, and for its adhesion to a variety of construction substrates. It also offers distinct early grab or "green strength", which allows expanded polystyrene adhered with an adhesive coat based on ENCOR® 496 to be rasped in a few hours, depending on ambient conditions and provides excellent dirt pickup resistance, good high temperature pot life and good flexibility.

ENCOR® 9176 is an ambient temperature crosslinking, styrene acrylic latex for sealants and other applications requiring a strong, flexible binder.

ENCOR® 162 is a high-acrylate, vinyl acrylic copolymer that can be formulated into caulks that are not required to pass the performance standards of ASTM C-834 or ASTM C-920. This performance level is typical of interior grade caulks designed for use by the paint contractor and DIY consumer.

ENCOR® 3560 is a high-solids vinyl acrylic latex designed for patch and repair applications as well as tape joint compounds.

ENCOR® 182 is a vinyl acetate-ethylene latex that can be formulated into caulks that pass the low temperature flexibility standard of ASTM C-834/0ºC specification.

Description

CELOCOR® AF opaque polymer is an ammonia-free voided latex material with increased hiding efficiency which functions as a partial replacement for titanium dioxide. It has a low odor profile and enables paint manufacturers to realize formulation cost savings while maintaining equal hiding levels.

CELOCOR® opaque polymer is a voided latex material that imparts hiding and functions as a partial replacement for titanium dioxide. CELOCOR® provides a cost effective way to improve hiding while reducing raw material costs.

Waterborne Binders – Floor Care

Product	Chemistry	Solids (%)	pH Value	Weight per Gallon (lb)	Particle Size, (Micron)	Viscosity (cP)	Minimum Filming Temperature (°C)
ENCOR® 2721	Styrene Acrylic	43	7.5	8.7	0.09	<100	<5
ENCOR® 7009	Styrene Acrylic	32	9	8.72	NA	50	NA
ENCOR® 7074	Styrene Acrylic	36	8.5	8.65	NA	<150	NA
ENCOR® 7247	Styrene Acrylic	40	8.6	8.68	0.06	50	63
ENCOR® 7264	Styrene Acrylic	42	9	8.86	0.07	<300	>68
ENCOR® 7311	Styrene Acrylic	39	7	8.7	0.30	<1000	NA
ENCOR® 7325	Styrene Acrylic	46	8.5	8.8	0.11	100	45
ENCOR® 7542	Styrene Acrylic	44	4.4	8.7	0.12	<100	NA
ENCOR® RAIN	Styrene Acrylic	42	7.5	8.8	0.09	<150	85
ENCOR® RESPOND	Styrene Acrylic	38	9	8.5	0.06	50	83
ENCOR® SHIELD	Styrene Acrylic	38	9	8.8	0.09	50	78

Waterborne Binders – Soil Stabilization and Dust Control

Product	Chemistry	Solids (%)	pH Value	Density	Particle Size, (Micron)	Viscosity (cP)	Minimum Filming Temperature (°C)
ENCOR® DC 3879	Vinyl Acrylic	56.5	5	9.1	0.30	500	12
ENCOR® DC 3881	Acrylic	49	7	8.9	0.08	500	0

The product data provided in this document are typical values, intended only as guides, and should not be construed as sales specifications.

Description
ENCOR® 2721 is styrene acrylic self-crosslinking emulsion polymer. It can be used to improve the hardness and durability of the floor polish.
ENCOR® 7009 is an APE-free, metal crosslinked floor finish concentrate designed for low to medium maintenance practice. ENCOR® 7009 is designed to exhibit highest initial gloss, good durability and good buff response. In addition, ENCOR® 7009 is designed to meet CARB 2011 VOC requirements.
ENCOR® 7074 is an APE-free, metal crosslinked floor finish concentrate exhibiting excellent leveling, high initial gloss, great clarity, and superior durability to handle daily high speed burnishing with excellent response and good black-heel markings and scuff resistance.
ENCOR® 7247 is metal crosslinked styrene acrylic emulsion polymer designed for medium to high maintenance practice. ENCOR® 7247 is designed to exhibit high gloss floor finish with good buff response and water/detergent resistance characteristics. In addition, ENCOR® 7247 requires lower level of plasticizer / cosolvents for film formation, thereby keeping the formulation cost low.
ENCOR® 7264 is an APE-free, metal crosslinked styrene acrylic emulsion polymer designed for high maintenance practice. ENCOR® 7264 is designed to exhibit outstanding initial gloss, outstanding durability, excellent recoat properties and excellent burnish response. Polishes based on ENCOR® 7264 can be burnished using high speed machines such as propane burnisher.
ENCOR® 7311 is a styrene acrylic emulsion polymer designed for use as an opacifier for light duty liquid detergent formulations. ENCOR® 7311 is recommended for alkaline systems only.
ENCOR® 7325 is a styrene acrylic emulsion polymer designed for use in interior and exterior concrete sealer applications. ENCOR® 7325 exhibits outstanding water resistance and excellent sealing characteristics. ENCOR® 7325 can be formulated to meet ASTM C-309 and C-1315 requirements.
ENCOR® 7542 is an APE-free, styrene acrylic emulsion polymer typically used in floor finishes to improve the leveling characteristics. Due to improved leveling, floor finishes containing ENCOR® 7542 will exhibit enhanced gloss and significantly better water / detergent resistance properties compared to the standard styrene acrylic resin solutions.
ENCOR® RAIN is an APE-free, ammonia-free and metal-free styrene acrylic emulsion polymer which provides formulators the ability to develop a “green” floor polish and, at the same time, maintain performance close to metal-containing polymers. ENCOR® RAIN exhibits outstanding durability, high off-the-mop gloss, excellent leveling and low odor. ENCOR® RAIN can be formulated to comply with leading environmental regulations such as DfE and CARB 2011 VOC requirements.
ENCOR® RESPOND is a metal crosslinked, high acrylic containing polymer for use in low maintenance practice. ENCOR® RESPOND exhibits excellent durability and good initial gloss.
ENCOR® SHIELD is an APE-free, metal crosslinked styrene acrylic emulsion polymer designed for use in low to medium maintenance practice. ENCOR® SHIELD exhibits outstanding off-the-mop gloss, good buff response and good durability.

Glass Transition Temperature (°C)	Description
23	ENCOR® DC 3879 is recommended for dust control applications.
NA	ENCOR® DC 3881 is recommended for dust control and soil stabilization applications.

Waterborne Binders – Graphic Arts

Product	Chemistry	Solids (%)	pH Value	Weight per Gallon (lb)	Acid Value (on Solids)	Viscosity (cP)	Minimum Filming Temperature (°C)
ENCOR® 8002	Styrene Acrylic	11	7.5	8.5	NA	3500	NA
ENCOR® 8135	Styrene Acrylic	46	8.7	8.7	48	300	37
ENCOR® 8146	Styrene Acrylic	47	8.5	8.7	53	1000	90
ENCOR® 8155	Styrene Acrylic	47	8.1	8.7	48	900	<0
ENCOR® 8180	Styrene Acrylic	38	8.8	8.7	151	150	-5
ENCOR® 8440	Styrene Acrylic	46	8.4	8.7	55	600	25
ENCOR® 8450	Styrene Acrylic	99.5	NA	NA	205	NA	NA
ENCOR® 8460	Styrene Acrylic	99	NA	NA	210	NA	NA
ENCOR® 8569	Styrene Acrylic	40	6	8.8	NA	<50	15
ENCOR® 8634	Styrene Acrylic	32	9	8.7	210	2500	NA
ENCOR® 8635	Styrene Acrylic	34	8.7	8.7	210	5000	NA

Glass Transition Temperature (°C)	Description
NA	ENCOR® 8002 is a high efficiency transfer additive for water-based flexographic inks. ENCOR® 8002 will increase the transfer and color strength of water-based flexographic inks when used around 1%.
35	ENCOR® 8135 is a styrene acrylic emulsion polymer designed to exhibit good alkali / cleaners resistance properties in inks and overprint varnishes while maintaining resolubility.
91	ENCOR® 8146 is a very high Tg, high styrene containing emulsion polymer that is widely used in water-based inks and overprint varnishes. It is designed to exhibit fast dry, high gloss, good block resistance and good resolubility characteristics. ENCOR® 8146 is a non-film former and so it is either coalesced or combined with a low Tg emulsion, such as ENCOR® 8440 or ENCOR® 8155, to achieve film formation.
-37	ENCOR® 8155 is a very low Tg, high acrylic containing emulsion polymer designed for formulating water-based inks for films (such as PE). It exhibits good early water resistance, good clarity and adhesion to corona treated films. ENCOR® 8155 can also be used in combination with ENCOR® 8146 to develop standard overprint varnishes.
-6	ENCOR® 8180 is a zinc free, styrene acrylic emulsion polymer designed for pre-print overprint varnishes. ENCOR® 8180 exhibits good high temperature non-blocking properties (425 F, 60 psi, 2 secs dwell time), good scuff resistance and excellent gloss. ENCOR® 8180 can also be used to develop high temperature resistance inks. Due to its low Tg, ENCOR® 8180 exhibits good adhesion to standard range of substrates.
15	ENCOR® 8440 is a film forming, styrene acrylic emulsion polymer that is widely used in water-based inks and overprint varnishes. It is designed to exhibit very high gloss, good water resistance and oil resistance characteristics. It is typically used in combination with ENCOR® 8146 to achieve the desired performance.
95	ENCOR® 8450 is a styrene acrylic hard resin designed for high gloss water-based inks and overprint varnishes. The difference between ENCOR® 8450 and 8460 grades is the molecular weight. ENCOR® 8450 has a molecular weight around 6000, whereas ENCOR® 8460 has molecular weight around 8500.
105	ENCOR® 8460 is a medium molecular weight (8500) styrene acrylic hard resin designed for high gloss water-based inks and overprint varnishes. Once neutralized with water and ammonia, ENCOR® 8460 is typically used to disperse pigments to produce very high gloss pigment dispersions and inks. The neutralized version of ENCOR® 8460 is also used in overprint varnishes to exhibit outstanding resolubility and improve gloss.
27	ENCOR® 8569 is an alkali soluble emulsion polymer designed for making economical flexographic inks for corrugated substrates. Once neutralized with water and base (typically MEA), ENCOR® 8569 gives the formulator ability to develop inks to meet GCMI standard (such as GCMI 90 black). In addition, ENCOR® 8569 can be used as a thickener in water-based overprint varnishes.
105	ENCOR® 8634 is a neutralized version of ENCOR® 8460 hard resin in water and ammonia. Recommended use and characteristics are same as with ENCOR® 8460.
105	ENCOR® 8635 is a high efficiency pigment grinding resin solution. ENCOR® 8635 can be used to achieve higher pigment loading during the pigment grinding stage thereby improving productivity. Also, ENCOR® 8635 exhibits good stability with difficult to stabilize pigments.

Solventborne Binders – Industrial Coatings

Product	Chemistry	Solids (%)	Viscosity GH, As Supplied **Viscosity CPS as Supplied**	Reduced Properties			Weight/ Gallon (lbs)	Acid Value (max), on Solids
				Viscosity (cP)	% NV	Reducer		
THERMOSET AND THERMOPLASTIC ACRYLICS								
CHEMPOL® 317-0250	Acrylic	50	Z-Z2	H-K	35	A100	8.0	4
CHEMPOL® 317-4013	Acrylic	55	W-Z	D-G	40	A100	8.0	2
CHEMPOL® 317-4025	Acrylic	65	Z5-Z7	T-V	50	A100	8.2	2
CHEMPOL® 317-4187	Acrylic	51	Z3-Z5	NA	NA	NA	8.2	5
CHEMPOL® 317-8013	Acrylic	55	W-Z	NA	NA	NA	8.0	2
CHEMPOL® 317-9013	Acrylic	55	W-Y	NA	NA	NA	8.3	2
HYDROXYL FUNCTIONAL ACRYLICS								
CHEMPOL® 317-0069	Acrylic	50	Y-Z1	H-K	35	A150	8.3	11
CHEMPOL® 317-2500	Acrylic	60	Z1-Z3	NA	NA	NA	8.6	12
CHEMPOL® 317-3867	Acrylic	80	Z3-Z5	C-E	60	MAK	8.7	6
CHEMPOL® 317-7168	Acrylic	80	Z4-Z6	E-G	60	n-Butyl Acetate	8.7	10
SYNOCURE® 854 BA80	Acrylic	80	7500	NA	NA	NA	8.8	10
NISO COATING RESINS								
CHEMPOL® 317-0884	Acrylic	60	Z2-Z4	F-I	40	Xylene	8.4	31
CHEMPOL® 317-0885	Acrylic	70	Z3-Z5	F-I	50	Xylene	8.5	18
FLOW AND LEVELING ADDITIVES								
CRAYVALLAC® A-2201-M	Acrylic	70	D-E	NA	NA	NA	7.8	1.5
CRAYVALLAC® A-2678-M	Acrylic	50	W-Y	NA	NA	NA	8.8	115
CRAYVALLAC® A-620-A2	Acrylic	60	17-23 secs #4 Ford Cup	NA	NA	NA	8.0	2
CRAYVALLAC® A-7091	Acrylic	60	17-23 secs #4 Ford Cup	NA	NA	NA	8.0	1
CRAYVALLAC® A-72-A260	Acrylic	60	B-C	NA	NA	NA	8.0	1

The product data provided in this document are typical values, intended only as guides, and should not be construed as sales specifications.

GH Color (max)	Color (max), APHA	Solvent	OH Equivalent Wt. on Solids	Description
NA	60	A100	NA	CHEMPOL® 317-0250 is a thermoset acrylic copolymer.
NA	60	A100	NA	CHEMPOL® 317-4013 is a thermoplastic styrene acrylic copolymer for concrete sealer and cure and seal applications.
NA	60	A100	NA	CHEMPOL® 317-4025 is a higher solid version of CHEMPOL® 317-4013.
1	60	A100	NA	CHEMPOL® 317-4187 is a thermoplastic acrylic resin solution for concrete application.
NA	60	A100/t-Butyl Acetate 62/38	NA	CHEMPOL® 317-8013 is a t-Butyl acetate version of CHEMPOL® 317-4013.
NA	60	A100/DMC 62/38	NA	CHEMPOL® 317-9013 is a dimethyl carbonate version of CHEMPOL® 317-8013.
2	NA	A150/Xylene/ EGMPE Ether	1335	CHEMPOL® 317-0069 is an economical coil vehicle with excellent flexibility, durability and adhesion. Good compatibility with acrylic, vinyl, and other film forming resins.
1	NA	Xylene/PM Acetate 75/25	330	CHEMPOL® 317-2500 is an acrylic polyol designed for either 2K urethane or thermoset applications.
3	NA	MAK Xylene 80/20	590	CHEMPOL® 317-3867 is a high solids acrylic polyol for 2K urethane or thermoset applications.
4	NA	n-Butyl Acetate	800	CHEMPOL® 317-7168 is a hydroxyl functional polymer with low isocyanates demand. Polymer produces excellent gloss retention, long pot life, economical formulations, outstanding adhesion and flexibility and meets 2.8 VOC; use conventional spray equipment.
2	NA	Butyl Acetate	750	SYNOCURE® 854 BA80 offers a low isocyanate requirement for cost effective protective coatings with good durability.
6	NA	Xylene/PGMME 82/18	NA	CHEMPOL® 317-0884 is a carboxyl functional NISO resin. Fast lacquer-like dry, good exterior durability, hardness, solvent resistance, color retention, and adhesion.
6	NA	Xylene/PGMME 80/20	NA	CHEMPOL® 317-0885 is a NISO acrylic copolymer for two component system crosslinking with aliphatic polyepoxides, at ambient cure.
1	NA	Xylene/n-Butanol 56/44	NA	CRAYVALLAC® A-2201-M is a polyacrylate surface tension and air release modifier. It improves air release leveling and gloss, reduces cratering, fish eyes and orange peel in high solids coatings.
4 (Haze)	NA	Water/ DPGMME/ DMEA/PGMME	NA	CRAYVALLAC® A-2678-M is a pre-neutralized flow and leveling agent for water borne coatings. It improves wetting and gloss, reduces cratering, fish eyes and orange peel, post add. Also used to improve pigment wetting.
1	NA	Xylene	NA	CRAYVALLAC® A-620-A2 is a polyacrylate surface tension modifier. Reduces cratering, fish eyes and orange peel; improves gloss; recoatable.
1	NA	MAK/ n-Butyl Acetate	NA	CRAYVALLAC® A-7091 is a HAPS free version of CRAYVALLAC® A-620-A2.
1	NA	Xylene	NA	CRAYVALLAC® A-72-A260 is a higher molecular weight version of A-620-A2.

Solventborne Binders – Industrial Coatings (continued)

Product	Chemistry	Solids (%)	Viscosity GH As Supplied	Reduced Properties			Weight/ Gallon (lbs)	Acid Value (max), on Solids
				Viscosity (cP)	% NV	Reducer		
ALKYDS								
CHEMPOL® 802-0106	Alkyd	50	Z3-Z5	V-X	40	Mineral Spirits	7.8	12
CHEMPOL® 802-1005	Alkyd	50	Z-Z2	J-M	40	Mineral Spirits	7.6	10
CHEMPOL® 802-3515	Alkyd	50	Z1-Z3	E-H	40	VM&P naphtha	7.4	12
CHEMPOL® 803-1010	Alkyd	50	Z1-Z3	L-P	50	Xylene	8.2	24
CHEMPOL® 803-4084	Alkyd	90	Z4-Z6	D-G	70	n-Butyl Acetate	9.2	15
CHEMPOL® 804-4055	Alkyd	60	V-X	G-H	50	Toluene	8.4	8
CHEMPOL® 809-2711	Alkyd	50	Z2-Z5	S-V	35	Mineral Spirits	7.8	12
CHEMPOL® 809-2837	Alkyd	75	Z2-Z4	F-I	60	Butyl Acetate	8.9	16
CHEMPOL® 809-2932	Alkyd	50	V-X	E-G	40	Xylene	8.3	12
CHEMPOL® 809-3068	Alkyd	50	T-W	B-D	40	Xylene	8.3	24
CHEMPOL® 809-3132	Alkyd	75	Z3-Z5	J-L	60	Xylene	8.8	13
CHEMPOL® 809-3145	Alkyd	75	Y-Z1	D-F	60	MAK	8.7	16
CHEMPOL® 809-3351	Alkyd	80	Z4-Z6	D-F	60	n-Butyl Acetate	8.9	13
CHEMPOL® 809-3830	Alkyd	50	X-Z	F-I	40	Xylene	8.3	10
CHEMPOL® 809-5185	Alkyd	80	Z4-Z6	NA	NA	NA	8.8	12
CHEMPOL® 809-5872	Alkyd	58	A-Y	D-G	45	n-Butyl Acetate	8.5	12
CHEMPOL® 809-6886	Alkyd	50	Y-Z1	F-I	40	Xylene	8.3	16
CHEMPOL® 809-8068	Alkyd	60	Z1-Z3	A-C	40	Butyl Acetate	8.6	12

GH Color (max)	Solvent	OH Equivalent Wt. on Solids	Description
7	Xylene/Aromatic 100/MS	750	CHEMPOL® 802-0106 is a fast dry medium oil alkyd for air dry or force cure. Can also be used for traffic paints.
6	Mineral Spirits	1039	CHEMPOL® 802-1005 is a medium oil soya alkyd. Excellent gloss, drying, workability and color retention.
7	VM&P naphtha	877	CHEMPOL® 802-3515 meets federal specifications TT-D-115c, Type 1.
5	Xylene	398	CHEMPOL® 803-1010 is a fast air dry or bake lacquer plasticizer.
10	Xylene	NA	CHEMPOL® 803-4084 is a high solids baking alkyd with rapid viscosity reduction, high hardness and good low temperature cure.
5	Toluene	597	CHEMPOL® 804-4055 is a non-oxidizing paper coating resin.
8	Blend	1020	CHEMPOL® 809-2711 is a chain stopped soya alkyd. Excellent weatherability, outstanding compatibility and aliphatic solvent tolerance.
12	Butyl Acetate	645	CHEMPOL® 809-2837 is an air dry/force dry chain stopped TOFA alkyd. Fast tack free time. Good exterior durability and toughness. Useful in agricultural and heavy duty equipment coatings and auto refinish.
8	Xylene	738	CHEMPOL® 809-2932 is a chain stopped soya alkyd. Fast dry, durable, compatible with medium oil alkyds, can be cross-linked with melamine or urea resins.
8	Xylene	480	CHEMPOL® 809-3068 is suitable for rapid air dry or low temperature force cure applications. High gloss. Excellent gloss retention, good salt spray resistance.
8	Xylene	876	CHEMPOL® 809-3132 is a Soya/DCO-based high solids chain stopped short oil alkyd.
8	MAK	876	CHEMPOL® 809-3145 is a HAPS free version of CHEMPOL® 809-3132.
8	Xylene/Butyl Acetate 85/15	534	CHEMPOL® 809-3351 is a HAPS-free, Soya/DCO-based high solids, chain stopped medium oil alkyd. Low reduced viscosity, good flexibility.
7	Xylene	NA	CHEMPOL® 809-3830 is a chain stopped tall oil alkyd. Compatible with medium oil alkyds, fast drying, good adhesion and flexibility, good solubility in aliphatic solvents.
8	MPK/n-Butyl Acetate/Xylene	NA	CHEMPOL® 809-5185 is an air dry chain stopped alkyd. Low VOC, general industrial metal coatings and implement enamels.
8	n-Butyl Acetate	738	CHEMPOL® 809-5872 is a HAPS free version of CHEMPOL® 809-2932.
7	Xylene	534	CHEMPOL® 809-6886 is a fast air dry for light industrial maintenance, implement enamels and transportation finishes.
8	t-Butyl Acetate	524	CHEMPOL® 809-8068 is a t-Butyl acetate version of CHEMPOL® 809-3068.

Solventborne Binders – Industrial Coatings (continued)

Product	Chemistry	Solids (%)	Viscosity GH As Supplied	Reduced Properties			Weight/ Gallon (lbs)	Acid Value (max), on Solids
				Viscosity (cP)	% NV	Reducer		
WATER-REDUCIBLES								
CHEMPOL® 810-0091	Alkyd	75	Z5-Z7	M-Q	50	Butoxyethanol/ sec-Butanol 50/50	8.8	39
CHEMPOL® 810-0097	Alkyd	70	Z4-Z6	Q-T	50	Butoxyethanol/ sec-Butanol 50/50	8.7	40
CHEMPOL® 810-0174	Alkyd	70	Z3-Z5	K-N	50	Butoxyethanol/ sec-Butanol 50/50	8.6	38
CHEMPOL® 210-4517	Polyester	75	Z3-Z4	M-P	60	Butoxyethanol	9.2	76
CHEMPOL® 310-1744	Acrylic	75	Z5-Z6	J-M	50	n-Butanol	8.4	102
CHEMPOL® 910-0453	Epoxy Ester	70	Z5-Z6+	T-V	50	Butoxyethanol	8.4	67
SILICONE-MODIFIED								
CHEMPOL® 806-5080	Alkyd	80	Z3-Z5	E-H	60	Xylene	8.8	10
CHEMPOL® 806-5138	Alkyd	75	Z1-Z3	NA	NA	NA	8.8	20
EPOXY ESTERS								
CHEMPOL® 816-0136	Epoxy Ester	75	Z1-Z3	J-L	60	n-Butyl Acetate	8.7	10
CHEMPOL® 816-1486	Epoxy Ester	50	W-Y	D-G	40	n-Butyl Acetate	8.0	6
CHEMPOL® 816-1833	Epoxy Ester	55	T-V	F-I	45.3	Mineral Spirits	7.8	6
CHEMPOL® 816-2680	Epoxy Ester	52	T-V	NA	NA	NA	7.7	6

GH Color (max)	Solvent	OH Equivalent Wt. on Solids	Description
9	Butoxyethanol/ sec-Butanol	660	CHEMPOL® 810-0091 is a chain stopped short oil soya alkyd for air dry, force cure or bake systems. Hard, water resistant films, good gloss retention and corrosion resistance.
7	Butoxyethanol/ sec-Butanol	620	CHEMPOL® 810-0097 is a chain stopped short oil TOFA alkyd. Economical, good hardness, early water resistance.
8	Butoxyethanol/ sec-Butanol	935	CHEMPOL® 810-0174 is a short oil chain stopped oxidizing alkyd. Air dry, force cure or bake systems. Good corrosion and early water resistance. Good gloss retention.
5	Butoxyethanol	404	CHEMPOL® 210-4517 is a high solids carboxyl functional polyester with excellent pigment wetting, good overbake resistance and gloss retention. Can be cured with Epoxy, Amino, or Urea resins.
1	n-Butanol	NA	CHEMPOL® 310-1744 is a carboxyl functional water-reducible acrylic for thermoset applications.
6	Butoxyethanol	630	CHEMPOL® 910-0453 is a water-reducible, styrene-modified, soya epoxy ester. It has good compatibility with a wide range of resins, including acrylic emulsions, melamine urea/formaldehyde resins and other water-reducible resins. Its very good corrosion resistance and adhesion make it suitable for OEM auto underhood, agricultural equipment and metal primer applications.
6	Aromatic 100	NA	CHEMPOL® 806-5080 is a silicone modified alkyd copolymer. Meets Federal Specification MIL-E-24635. For low VOC maintenance enamels requiring outstanding gloss and durability.
6	MAK	750	CHEMPOL® 806-5138 is a high solids silicone modified alkyd. HAPS Free; excellent weathering and gloss retention. Recommended for high temperature paint applications.
8	n-Butyl Acetate	501	CHEMPOL® 816-0136 is a conjugated fatty acid modified epoxy ester. Air dry or bake primers or enamels with good salt spray and chemical resistance, fast set time, 3.5 VOC possible.
8	A100/n-Butyl Acetate 87/13	428	CHEMPOL® 816-1486 is a TOFA epoxy ester for air dry or baking maintenance and general industrial finishes.
10	Xylene/Mineral Spirits/PM Acetate/A150	1020	CHEMPOL® 816-1833 is a TOFA epoxy ester for air dry or bake industrial applications.
10	Mineral Spirits/ Dipentene/ Xylene	5100	CHEMPOL® 816-2680 is a high performance rosin-modified epoxy ester with very good gloss. Air bake or dry.

Solventborne Binders – Industrial Coatings (continued)

Product	Chemistry	Solids (%)	Viscosity GH As Supplied **Viscosity CPS as Supplied**	Reduced Properties			Weight/ Gallon (lbs)	Acid Value (max), on Solids
				Viscosity (cP)	% NV	Reducer		
MODIFIED ALKYDS / OILS								
CHEMPOL® 812-0173	Alkyd, Rosin Modified	65	X-Z	E-G	50	Butyl Acetate	8.8	15
CHEMPOL® 812-2204	Alkyd, Phenolic Modified	75	Z4-Z6+	N-Q	60	Xylene	8.8	24
CHEMPOL® 812-2218	Alkyd, Phenolic Modified	75	Z-Z2	E-H	60	Xylene	8.8	24
CHEMPOL® 812-4102	Alkyd, Rosin Modified	50	Z-Z2	F-H	40	Xylene	8.0	16
CHEMPOL® 812-5219	Alkyd, Rosin Modified	75	Z4-Z6	J-M	60	Xylene	8.7	26
CHEMPOL® 813-1214	Alkyd, Acrylic Modified	50	T-V	D-F	40	Xylene	8.0	12
CHEMPOL® 813-1428	Alkyd, Styrene Modified	75	Z4-Z6	F-H	50	Xylene	8.4	8
CHEMPOL® 813-1435	Alkyd, Styrene Modified	75	Z3-Z5	N-R	60	n-Butyl Acetate	8.4	8
CHEMPOL® 813-2028	Alkyd, Acrylic Modified	75	Z2-Z4	E-G	55	Xylene	8.8	12
CHEMPOL® 813-2444	Alkyd, VT Modified	50	Z1-Z3	V-X	40	Mineral Spirits	7.6	10
CHEMPOL® 815-0701	Phenolic Modified Oil	50	F-H	NA	NA	NA	7.9	14
CHEMPOL® 815-3703	Phenolic Modified Oil	54	G-I	NA	NA	NA	7.4	NA
CHEMPOL® 818-0237	Urethane Modified Oil	80	Z3-Z5	H-J	65	Mineral Spirits	8.0	10
CHEMPOL® 818-0644	Urethane Alkyd	55	Z2-Z4	B-D	40	Mineral Spirits	7.7	10
CHEMPOL® 900-1181	Rosin	65	G-I	NA	NA	NA	8.3	85
POLYESTERS								
CHEMPOL® 211-2219	Polyester	75	Z2-Z4	L-P	60	PM Acetate	9.2	14
CHEMPOL® 211-2224	Polyester	80	2500-3500	NA	NA	NA	9.2	2
CHEMPOL® 211-2244	Polyester	95 min.	Z3-Z5	H-K	80	Xylene	9.6	1
CHEMPOL® 211-2250	Polyester	80	Z6 - Z7	N-R	60	PM Acetate	9.9	13
CHEMPOL® 211-2339	Polyester	94 min.	>Z6	C-E	70	Xylene	9.3	6
CHEMPOL® 211-2940	Polyester	60	Y-Z1	NA	NA	NA	9.0	15
CHEMPOL® 211-3369	Polyester	70	Z3-Z5	J-M	50	Butoxyethanol	9.1	9
CHEMPOL® 211-3376	Polyester	50	X-Z	L-O	40	A150	8.8	3
CHEMPOL® 211-5104	Polyester	85	Z4-Z6	NA	70	A100	8.8	7

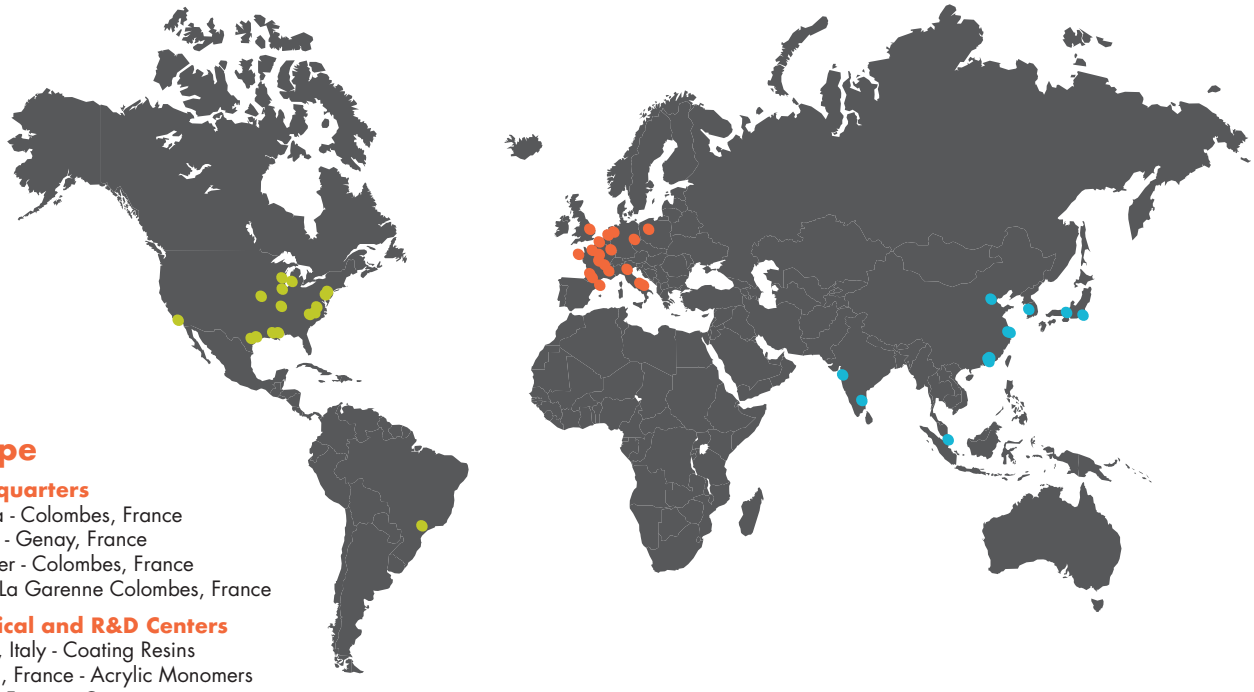
The product data provided in this document are typical values, intended only as guides, and should not be construed as sales specifications.

GH Color (max)	Solvent	OH Equivalent Wt. on Solids	Description
17	Butyl Acetate/Xylene 93/7	NA	CHEMPOL® 812-0173 is a rosin modified linseed alkyd with fast through dry, excellent gasoline resistance and outstanding humidity resistance.
12	Xylene	780	CHEMPOL® 812-2204 is a high solids short oil chain stopped phenolic modified soya alkyd. Good corrosion and humidity resistance, rapid viscosity reduction. Excellent compatibility with chain stopped and monomer modified alkyds.
12	n-Butyl Acetate/ MAK 89/11	780	CHEMPOL® 812-2218 is a HAPS free version of 812-2204.
12	Xylene/VM&P 66/34	710	CHEMPOL® 812-4102 is an air or force dry linseed alkyd. Fast set and dry times. May be recoated in 5 to 10 minutes; excellent salt spray resistance.
14	Xylene	NA	CHEMPOL® 812-5219 is a rosin-modified high solids air dry alkyd. Suitable as a primer vehicle with good adhesion and fast "sand-time."
6	Xylene	1650	CHEMPOL® 813-1214 is an acrylic modified DCO alkyd. Rapid air dry or force cure, excellent adhesion, flexible and color retention. Excellent exterior durability. Compatibility with vinyl acrylic nitrocellulose and chlorinated rubber.
9	Xylene/MPK 50/50	1400	CHEMPOL® 813-1428 is a styrene modified SOYA/DCO alkyd for a broad range of industrial applications. Fast tack free time, fast through dry, very good exterior durability.
9	n-Butyl Acetate/MAK 78/22	1400	CHEMPOL® 813-1435 is the HAPS free version of 813-1428.
8	n-Butyl Acetate/A100 92/8	NA	CHEMPOL® 813-2028 is an acrylic modified fast dry alkyd for ACE market.
8	Mineral Spirits/A100/Xylene	1460	CHEMPOL® 813-2444 is a VT modified SOYA/DCO alkyd. Economical, fast dry. Good toughness.
12	Xylene	NA	CHEMPOL® 815-0701 is a phenolic-modified tung oil varnish with fast set and dry, and hard, chemically resistant films. Modifier for alkyd resins.
7	Mineral Spirits	NA	CHEMPOL® 815-3703 is a phenolic-modified tung oil varnish. Fast dry, good hardness and solvent resistance.
7	Mineral Spirits	5600	CHEMPOL® 818-0237 is a high solids urethane oil with good flow and leveling.
8	Mineral Spirits	1060	CHEMPOL® 818-0644 is a light stable aliphatic urethane alkyd.
11	A100	NA	CHEMPOL® 900-1181 is a limed rosin solution. It may be used as a modifier to increase gloss in long oil varnishes.
4	PM Acetate	380	CHEMPOL® 211-2219 is a branched polyester offering excellent chemical resistance and hardness in 2K urethanes.
4	n-Butyl Acetate	404	CHEMPOL® 211-2224 is a highly linear polyol for low temperature flexibility.
2	none	274	CHEMPOL® 211-2244 is a high solids polyester with no added solvent, excellent flexibility, and very good exterior durability. It may be used as a modifier to achieve low VOC and demonstrates excellent compatibility with acrylic and polyester polyols.
5	PM Acetate	200	CHEMPOL® 211-2250 is a multifunctional polyester polyol with superior chemical resistance and outstanding hardness, making it suitable for high performance applications such as military, aerospace, and anti-graffiti coatings.
2	None	234	CHEMPOL® 211-2339 is a high solids polyester. No solvent or reactive diluents. Compatible with gloss thermoset resins, very low VOC's, superior color retention.
12	A150/Butoxyethanol 67/33	535	CHEMPOL® 211-2940 is a coil backer polyester.
4	A150/Butoxyethanol/Xylene	1600	CHEMPOL® 211-3369 is an economical coil polyester for exterior use. Excellent chemical resistance and good hardness.
5	A150/PM Acetate 84/16	1870	CHEMPOL® 211-3376 is a Zero T Bend coil resin with good hardness, flexibility, and cure response at low temperatures.
4	A100	362	CHEMPOL® 211-5104 is a coil polyester for appliances with good flexibility.

Solventborne Binders – Architectural Coatings

Product	Chemistry	Solids (%)	Viscosity GH As Supplied	Reduced Properties			Weight/ Gallon (lbs)	Acid Value (max), on Solids
				Viscosity (cP)	%NV	Reducer		
CHEMPOL® 801-0066	Alkyd	99 Min.	Z1-Z3	V-X	85	Texanol	8.5	10
CHEMPOL® 801-2164	Alkyd	100	Z3-Z5	NA	NA	NA	8.5	10
CHEMPOL® 801-2426	Alkyd	70	Z1-Z3	D-F	50	Mineral Spirits	7.9	6
CHEMPOL® 801-7961	Alkyd	70	Z1-Z3	C-F	50	Mineral Spirits	8	10
CHEMPOL® 815-3703	Phenolic Modified Oil	54	G-I	NA	NA	NA	7.4	NA
CHEMPOL® 818-0237	Urethane Modified Oil	80	Z3-Z5	H-J	65	Mineral Spirits	8	10
CHEMPOL® 818-0644	Urethane Alkyd	55	Z2-Z4	B-D	40	Mineral Spirits	7.7	10

GH Color (max)	Solvent	OH Equivalent Wt. on Solids	Description
7	None	722	CHEMPOL® 801-0066 is a very long oil SOYA alkyd for high solids formulations.
9	None	1560	CHEMPOL® 801-2164 is a Linseed alkyd modifier for high solids alkyd formulations or to improve adhesion and durability of waterborne latex finishes over chalky surfaces.
8	Mineral Spirits/ A100 92/8	1122	CHEMPOL® 801-2426 is a conventional long oil SOYA alkyd.
7	MS/A100/Xylene	NA	CHEMPOL® 801-7961 is a workhorse long oil alkyd for exterior porch and deck stains.
7	Mineral Spirits	NA	CHEMPOL® 815-3703 is a phenolic-modified tung oil varnish. Fast dry, good hardness and solvent resistance.
NA	Mineral Spirits	5600	CHEMPOL® 818-0237 is a high solids urethane oil with good flow and leveling.
8	Mineral Spirits	1058	CHEMPOL® 818-0644 is a light stable aliphatic urethane alkyd.



Europe

• Headquarters
- Arkema - Colombes, France
- Coatex - Genay, France
- Sartomer - Colombes, France
- Ceca - La Garenne Colombes, France

• Technical and R&D Centers
- Boretto, Italy - Coating Resins
- Carling, France - Acrylic Monomers
- Genay, France - Coatex
- Lacq, GRL, France - Nanostrength - BlocBuilder - Ceca - MSA
- Parentis, France - Ceca
- Pierre-Bénite, CRRA, France - Kynar - Ceca
- Serquigny, Cerdato, France - Kynar - Rilsan - Orgasol - Oleris
- Sant Celoni, Spain - Coating Resins
- Verneuil, France - Coating Resins - Sartomer

• Manufacturing Facilities
- Antwerp, Belgium - Ceca
- Boretto, Italy - Coating Resins
- Brummen, The Netherlands - Coating Resins
- Carling, France - Acrylic monomers
- Chateauroux, France - Ceca
- Drocourt, France - Coating Resins
- Feuchy, France - Ceca
- Foggia, Italy - Ceca
- Gissi, Italy - Coating Resins
- Genay, France - Coatex
- Inowroclaw, Poland - Ceca
- La Chambre, France - Amines - Oxygenated solvents
- Lacq , France - DMSO - BlocBuilder - MSA
- Moerdijk, The Netherlands - Coatex
- Mollet, Spain - Coating Resins
- Mont, France - Orgasol - Nanostrength
- Pierre-Bénite, France - Kynar
- Riom es Montagne, France - Ceca
- Saint Bauzile, France - Ceca
- Sant Celoni, Spain - Coating Resins
- Serquigny, France - Rilsan
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- Villers St-Paul, France - Sartomer
- Vlissingen, The Netherlands - Coating Resins
- Zwickau, Germany - Coating Resins

Americas

• Headquarters
- Arkema Coating Resins - Cary, NC
- Arkema Inc. - King of Prussia, PA
- Sartomer - Exton, PA

• Technical and R&D Centers
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- Cary, NC, Coating Resins
- Chester, SC, Coatex
- Exton, PA - Sartomer
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- North Kansas City, MO, Coating Resins

• Manufacturing Facilities
- Alsip, IL - Coating Resins
- Araçariguama, Brazil - Coating Resins
- Bayport, TX - Acrylics
- Birdsboro, PA - Orgasol - Rilsan
- Calvert City, KY - Kynar
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- Grand Rapids, MI - Coating Resins
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- Saint Charles, LA - Coating Resins
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- West Chester - PA, Sartomer

Asia

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- Arkema Greater China - Shanghai, China
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- Arkema - Seoul, Korea - Kynar
- Arkema - Singapore - Kynar
- Sartomer - Hong Kong, China

• Technical and R&D Centers
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- Kyoto Technical Center, Japan
- Navi Mumbai, India - Coating Resins
- Pasir Gudang, Malaysia - Coating Resins
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• Manufacturing Facilities
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- Cuddalore, India - Blocbuilder
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- Kunsan, Korea - Coatex
- Nansha, China - Sartomer
- Navi Mumbai, India - Coating Resins
- Pasir Gudang, Malaysia - Coating Resins
- Taixing*, China - Acrylic monomers

*manufacturing JV Arkema/Jurong Chemical

Websites

www.arkema.com
www.arkemacoatingresins.com
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www.blocbuilder.com

Email or phone

info.web@arkema.com
resins response line: 1 866 837 5532
contact@coatex.com
sartomer.information@sartomereurope.com
contact@sartomer.com (USA)
general.info@sartomerasia.com
info.rfp@arkema.com
info.orgasol@arkema.com
info.amines@arkema.com
info.oxygenatedsolvents@arkema.com
info.nanostrength@arkema.com
info.blocbuilder@arkema.com

CONTACT US

Arkema Coating Resins Customer Service
1.877.331.6696

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Headquarters: Arkema Coating Resins
410 Gregson Drive
Cary, NC 27511
Tel.: 919-469-6700
Toll Free: 1-800-777-8227
arkemacoatingresins.com

Headquarters: Arkema France
420, rue d'Estienne d'Orves
92705 Colombes Cedex – France
Tel.: 33 (0)1 49 00 80 80
Fax: 33 (0)1 49 00 83 96
arkema.com