

ARKEMA COATING RESINS

Additives for Coatings, Adhesives & Sealants

Featuring:
CRAYVALLAC® Additives



ARKEMA
INNOVATIVE CHEMISTRY

HELPING YOU ACHIEVE PERFORMANCE, VALUE AND SUSTAINABILITY IN YOUR COATINGS FORMULATION

Arkema is one of the leading suppliers of raw materials for coatings. Our objective is simple — help all of our coatings customers grow by meeting their needs, on every continent, for:

- Enhanced performance through innovative product technology that includes waterborne, solventborne, photocure, high solids, and powder coating resins; additives and rheology modifiers; and a wide range of specialty materials.
- Enhanced value by offering choices that help you find the best balance of performance and cost.
- Enhanced sustainability by providing products and technology that help you meet specific environmental regulations as well as your own sustainability goals.

Arkema Coating Resins is the manufacturer and supplier of the CRAYVALLAC® range of additives, used in the coating industry since the 1960's. We are very proud of the reputation and trust that we have developed with our customers around the world — as a leading and serious provider of rheological, flow and levelling, matting, dispersing, texturing, slip and rub solutions.

Our strategic direction to bring continuous new product development and innovation is led from our central R&D facility in France, which is supported by our regional application laboratories around the world, including Brazil, China, France, Malaysia, Spain and the USA.

Our Regulatory Affairs team ensures our products comply with the ever demanding and growing regulations around the world. Sustainability,

and being a socially responsible partner with our customers, employees and the communities where we operate, continues to be a focus of our business.

Our product range is stocked and sold in over 100 countries, and locally supported by our dedicated team of experts.

For more information please visit our website at

www.arkemacoatingresins.com
or www.crayvallac.com

Table of Contents

Additives for:

Protective Coatings & Marine Paints.....	2
<i>(Including heavy duty coatings and agricultural, construction and earthmoving coatings)</i>	
Industrial Wood Coatings.....	4
Powder Coatings.....	6
Automotive Coatings	8
Can & Coil Coatings	10
Architectural Coatings	12
<i>(Including wood stains and architectural wood coatings)</i>	
General Industry Coatings	14
Adhesives & Sealants	16

A wide range of products to meet your application needs

Arkema Coating Resins' range of CRAYVALLAC® coating modifiers have been developed to help formulators improve the performance of solvent-free, solvent-based and water-borne coatings. These modifiers are divided into four categories:

- Rheology Modifiers for the control of sedimentation and sag resistance
- Surface Modifiers, based on polyethylene, polypropylene and PTFE, for the control of surface lubricity and appearance
- Flow & Levelling agents for the enhancement of surface aspect
- Dispersants for easier processing conditions, better paint stability and improved film aspects.

Rheology Modifiers

For rheology control, Arkema offers the formulator a wide range of products based on a variety of chemistries such as Castor derivative, Amide, Urethane, Oxidised polyethylene, to achieve the following performances:

- Sag control
- Anti-settling
- Low thickening at high shear
- Good levelling
- Recoatability
- Transparency.

Surface Modifiers

Arkema's CRAYVALLAC® range of surface modifiers are mainly based on polyethylene, polypropylene and PTFE. These products are available as micronised powders or dispersions of micronised powder in water or solvent. These high performance products enable the formulator to control both the lubricity and appearance of coatings. The following performance enhancements are to be obtained by using these products:

- Gloss and matt control
- Slip and scratch
- Mar, rub and abrasion
- Sanding aids
- Solvent resistance and water repellency
- Blocking resistance
- Texturing
- Stain resistance.

Flow and Levelling Agents

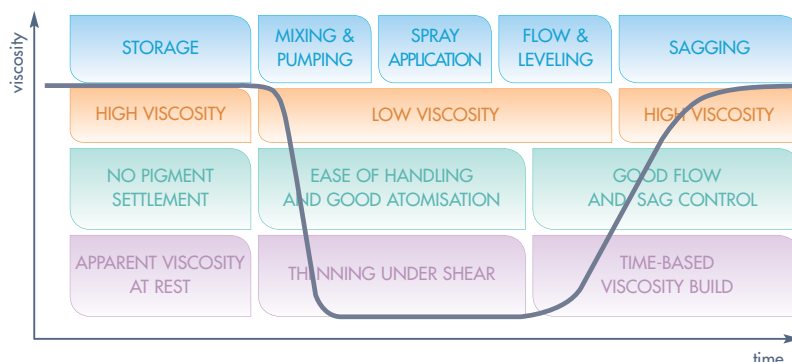
CRAYVALLAC® additives are high performance flow and levelling agents for the control of coating surface properties. Based on polyester and acrylic chemistries, they have been developed to provide the following benefits:

- Eliminate film surface defects
- Improve substrate wetting
- Air release properties
- Defoaming properties.

Dispersing Agents

CRAYVALLAC® dispersants are innovative and efficient products to improve the following aspects:

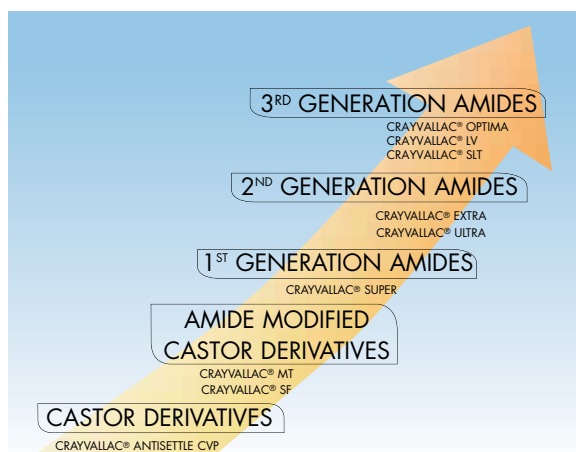
- Pigments and fillers dispersion
- Pigments and fillers loading
- Colour strength and development
- Storage stability
- Deflocculation.



CRAYVALLAC® rheology modifiers provide coatings with a high viscosity under the low shear conditions which are typical of storage, resulting in excellent anti-sedimentation characteristics in pigmented systems thus maintaining a good dispersion and preventing hard settling.

In addition, the excellent shear thinning behaviour of the CRAYVALLAC® rheological additives ensures that coatings are easily applied under the high shear conditions of application by either brush, roller or spray.

Following application, the thixotropic nature of the CRAYVALLAC® rheology modifiers, or time dependent viscosity recovery, provides sufficient time for good flow and levelling, yet enables sufficient viscosity build up to prevent sag.



INNOVATING CONTINUOUSLY

ARKEMA
INNOVATIVE CHEMISTRY

PROTECTIVE COATINGS & MARINE PAINTS

Rheology Modifiers

CRAYVALLAC®	Product Form	Addition level (wt %)	Incorporation	Features
MT	Powder	0.2 – 2.0	High speed dispersion during millbase grind: <ul style="list-style-type: none"> • 35-75°C (95-165°F) in aliphatic hydrocarbon solvents • 30-50°C (85-120°F) in aromatic hydrocarbons solvents 	Mainly recommended in alkyds and acrylics. Can also be used in epoxy and PU coatings
Super	Powder	0.5 – 2.0	High speed dispersion during millbase grind: <ul style="list-style-type: none"> • 50-75°C (120-165°F) in aliphatic hydrocarbon solvents • 40-50°C (100-120°F) in aromatic hydrocarbons solvents, esters, ketones, alcohols and blends of strong solvents 	Recommended in top-coats (PU, polyester, alkyd, acrylic). Excellent sag control with low thickening
Ultra	Powder	0.5 – 1.5	High speed dispersion during millbase grind at 45-65°C (113-150°F) in aromatic hydrocarbon: alcohol blends.	Mainly recommended in epoxy, NISO, silicate and polyaspartic coatings. Allows excellent recoatability and sag control
Extra	Powder	0.5 – 1.5		
Optima	Powder	0.2 – 1.5	High speed dispersion during millbase grind at 45-65°C (113-150°F) in very high-solids systems (>80%)	Provides ease of activation and high sag resistance in very high solids systems and solvent-free systems. Especially recommended for epoxy primers
LV	Powder	0.5 – 2.0	High speed dispersion between 45°C and 65°C in solvent-free systems	For solvent-free epoxy and PU coatings
60P	Powder	0.3 – 5.0	High speed dispersion during millbase grind at 50°C minimum	For anti-settling properties in high solids and solvent-free epoxy coatings (solvent-free alternative to 60X type)
60X	Paste	0.5 – 1.5	Incorporation under medium or moderate speed dispersion	Prevents from settling without significant increase in viscosity
PA3 X 20	Paste	0.5 – 5.0		Mainly used in epoxy and PSO coatings, providing excellent sag control and anti-settling
PA4 X 20	Paste	0.5 – 5.0		Provides excellent transparency on top of sag control and anti-settling. Mainly used in PU and Acrylics
PA3 BA 20	Paste	0.5 – 5.0		HAP's free paste for sag control and anti-settling, with better transparency for the PA4 grade
PA4 BA 20	Paste	0.5 – 5.0		
LA-150	Liquid	0.1 – 1.0	Pourable liquid with simple stir-in incorporation, under medium shear. Suitable for post-addition	Thixotropic behaviour for PU, NISO and epoxy coatings. Excellent for anti-settling and viscosity adjustments
LA-350	Liquid	0.1 – 2.0		Provides anti-settling properties in water-based acrylic and epoxy coating
LA-375	Liquid	0.1 – 2.0	Pourable liquid with simple stir in incorporation, under medium to high shear	Especially recommended for water-borne epoxy systems in order to achieve a very good sag resistance and sprayability.
LA-380	Liquid	0.1 – 2.0	Pourable liquid with simple stir in incorporation, under medium to high shear	Especially recommended for water-borne PU systems in order to achieve a very good sag resistance and sprayability. Not recommended for epoxies.

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

Flow and Levelling Additives

CRAYVALLAC®	Addition level (wt %)	Technology	Features
Flow-100	0.2 – 2.0	Polyacrylate (solvent free)	Improves surface aspect in solventborne acrylic, PU and epoxy coatings
Flow-200	0.1 – 2.0	Polyester (solvent free)	Improves substrate wetting and surface aspect in PU and polyester coatings
A-620-A2	0.5 – 1.0	Polyacrylate in solvent	Improves surface aspect in solventborne acrylic and PU coatings
A-2201-M	0.5 – 1.0	Polyacrylate in solvent	Air release properties. Mainly used in solventborne acrylic and PU coatings
A-2678-M	0.5 – 2.0	Polyacrylate in water/glycol	Suitable for water-borne acrylic and epoxy protective coatings, with substrate and pigment wetting properties

Slip and Abrasion Resistance Agents

CRAYVALLAC®	d ₅₀ / d ₁₀₀ (µm)	Dropping point (°C)	Technology	Features
WN-1495	4.5 / 20	112	Polyolefin powder	Economical wax to improve slip, anti-blocking, mar and rub resistance. Fine particle size.
WF-3200	5.0 / 25	112	PTFE-based powder	Versatile wax with high slip and lubricity. Improves anti-blocking, abrasion, mar resistance and surface hardness.
WF-1000	7.5 / 30	325	PTFE powder	Excellent abrasion, mar, rub and temperature resistance. Lowest coefficient of friction.
WW-1077	6.0 / 25	112	PTFE-based aqueous dispersion	Gives exceptional slip, scuff and rub resistance for demanding applications. Wide compatibility and excellent stability in waterbased systems. 50% wax content

Dispersants

CRAYVALLAC®	Solids	Supplied in	Technology	Features
D-801	45%	Xylene/BA/MPA	High molecular weight wetting and dispersing agent	Universal dispersing agent for solventborne coatings, for organic and non organic pigments and fillers. Especially recommended for epoxies and PU systems

INDUSTRIAL WOOD COATINGS

Rheology Modifiers

CRAYVALLAC®	Product Form	Addition level (wt %)	Incorporation	Features
LV	Powder	0.2 – 1.5	High speed dispersion at 30-45°C in solvent-borne coatings and at 35-50°C in solvent-free or high-solids systems. Avoid very high polarity solvents	Cost-effective solution (100% solid) providing a good balance between sag control / anti-settling and levelling
PA4 X 20	Paste	0.5 – 5.0	Incorporation under medium or moderate speed dispersion during 5 to 15 minutes If post-addition, it is recommended to incorporate the paste pre-diluted, at 10% to 30% in solvent	Provides excellent sag control, anti-settling and transparency, with good levelling. Suitable for all solventborne systems
PA4 BA 20	Paste	0.5 – 5.0		Aromatic-free paste for sag control and anti-settling, with good transparency
PA3 X 20	Paste	0.5 – 5.0		Higher sag control and anti-settling properties, for primers and pigmented solventborne systems
PA3 BA 20	Paste	0.5 – 5.0		Aromatic-free version of the PA3 X 20
LA-150	Liquid	0.1 – 1.0	Pourable liquid with simple stir-in incorporation, under medium shear	Anti-settling and sag control additive. Viscosity adjustment and good transparency
LA-350	Liquid	0.1 – 1.0	Pourable liquid with high speed stir-in incorporation in pigment concentrates	Provides anti-settling properties to water-based coating and pigment concentrates
Coatex thickeners are also specially recommended for water-based Industrial Wood Coatings (contact us)				

Additives for stains and architectural wood coatings are mentioned in the Architectural section.

Flow and Levelling Additives

CRAYVALLAC®	Addition level (wt %)	Technology	Features
Flow-100	0.2 – 1.0	Polyacrylate (solvent free)	Improves surface aspect. Mainly used in unsaturated polyesters
Flow-200	0.1 – 1.0	Polyester (solvent free)	Improves substrate wetting and surface aspect in solventborne and solvent-free coatings. Widely used in solvent-free UV coatings
Flow-450	0.5 – 1.5	Polyacrylate in aromatic-free solvent	Excellent levelling with defoaming properties and good compatibility in difficult systems
A-2678-M	0.2 – 1.5	Polyacrylate in water/glycol	Suitable for water-borne sealers, top-coats and pigment concentrates. Provides defoaming properties with substrate and pigment wetting properties

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

Matting Agents (Including micronized powders and aqueous dispersions)

CRAYVALLAC®	d_{50} / d_{100} (μm)	Dropping point ($^{\circ}\text{C}$)	Technology	Features
WN-1135	5.5 / 26	151	Modified polypropylene (Powder)	For satin finish. Excellent dispersability, hydrophobicity, slip and mar resistance
WN-1110	4.5 / 21	151	Modified polypropylene (Powder)	Improved transparency in thin layers while maintaining slip and anti-blocking. Good abrasion resistance
WN-1875	6.0 / 30	>200	Cross-linked polymer (Powder)	Strong matting effect and stain resistance in all liquid coatings, specially indicated for water-based wood coatings and UV curing systems. No chalking and high heat resistance
WW-1001	$d_{50} = 6.0$	112	Polyolefin aqueous dispersion	Excellent stability with high slip, abrasion and rub resistance in water-based coatings. Good compatibility and rapid dispersion. 40% wax content
WW-1074	$d_{50} = 7.0$	125	Polyolefin aqueous dispersion	High slip, abrasion and rub resistance, with water repellent properties. Wide compatibility in water-based coatings. 40% wax content
WW-1077	$d_{50} = 6.0$	112	PTFE-based aqueous dispersion	Gives exceptional slip, scuff and rub resistance for demanding applications. Wide compatibility and excellent stability in water-based systems. 50% wax content
WW-9500	$d_{50} = 6.0$	151	Modified polypropylene wax in aqueous dispersion	Improves mar, rub and water resistance as well as slip and anti-blocking. 35% wax content

Sanding Aids and Abrasion Resistance Agents

CRAYVALLAC®	d_{50} / d_{100} (μm)	Dropping point ($^{\circ}\text{C}$)	Technology	Features
WN-1265	5.5 / 30	146	Modified amide	Improves sandability in solvent and water-based wood finishes. Avoids blooming in acid curing systems. Increases slip and mar resistance
WF-3200	5.0 / 25	112	PTFE-based powder	Reduces dirt pick-up and metal marking. High slip. Improves anti-blocking, abrasion, mar resistance and surface hardness

Dispersants

CRAYVALLAC®	Solids	Supplied in	Technology	Features
D-801	45%	Xylene/ BA/MPA	High molecular weight wetting and dispersing agent	Universal dispersing agent for solvent-borne coatings, for organic and non organic pigments and fillers

POWDER COATINGS

Flow, Levelling and Degassing Additives

Product	Product Form	Melting point or Mw	Technology	Features
CRAYVALLAC® PC	Pure additive	83-88°C	Castor derivative	Highly efficient flow, levelling and degassing additive. Particularly recommended for PRIMID® systems
CRAYVALLAC® MT	Pure additive	130-140°C	Castor derivative	Similar features to CRAYVALLAC® PC
CRAYVALLAC® WN-1265	Pure additive	146°C	Amide	Improves degassing, flow and levelling properties. Recommended for PRIMID® systems
REAFREE® F3300-A15	Master-batch	High Mw (>50.000)	Acrylic	Masterbatch at 15% in hydroxylated polyester. Recommended to improve levelling of pigmented powder coatings
REAFREE® F8585-R10	Master-batch	Low Mw (<15.000)		Masterbatch at 10% in carboxylated polyester. Recommended to improve levelling of PRIMID® based pigmented coatings
REAFREE® F3300-R10	Master-batch			Masterbatch at 10% in hydroxylated polyester. Recommended to improve levelling of pigmented and clear coatings



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

Matting Agents

CRAYVALLAC®	Dropping point (°C)	Technology	Features
WN-1135	151	Modified polypropylene	General matting agent, improving all surface properties, specially degassing, slip and mar resistance
WN-1150	113	Modified polyethylene	Gloss control for Hybrid, TGIC and PRIMID® systems. No negative effects on weatherability and physical properties
WN-1442	112	Polyolefin	Improves also the slip and mar resistance. Degassing aid
EF-30P	125 (Tg)	Polyester	Matting agent for pure epoxy and epoxy/polyester powder coating formulations. Excellent results in combination with REAFREE® 6489. Very good stability

Texturing and Abrasion Resistance Agents

CRAYVALLAC®	Dropping point (°C)	Technology	Features
WF-1039	112	PTFE-based	Fine textured finish effect, with good abrasion, temperature and solvent resistance
WF-3200	112	PTFE-based	Versatile wax providing high slip and anti-blocking. Improves abrasion, mar resistance and surface hardness
WN-1875	>200	Polymeric	Increases surface hardness and scratch resistance. Advised for UV powder coatings. Reduces pill flow

AUTOMOTIVE COATINGS & VEHICLE REFINISHES

Rheology Modifiers

CRAYVALLAC®	Product Form	Addition level (wt %)	Incorporation	Features
Antisettle CVP	Powder	0.2 – 1.5	High speed dispersion at 30 to 55°C (85-130°F) in hydrocarbon solvents and styrene-based systems	Recommended for polyester putties, to provide anti-settling, high body and sag control. Not suitable for strong/polar solvent-based applications
MT	Powder	0.2 – 2.0	High speed dispersion during millbase grind: <ul style="list-style-type: none"> • 35-75°C (95-165°F) in aliphatic hydrocarbon solvents • 30-50°C (85-120°F) in aromatic hydrocarbons solvents 	Recommended for polyester putties if seeding issues with CRAYVALLAC® Antisettle CVP, to provide anti-settling, high body and sag control
SF	Powder	0.2 – 1.5	High speed dispersion during millbase grind 35-65°C (85-150°F) in aromatic hydrocarbons solvents	Recommended for polyester putties as an alternative of CRAYVALLAC® MT, to provide anti-settling, high body and sag control
Super	Powder	0.5 – 2.0	High speed dispersion during millbase grind: <ul style="list-style-type: none"> • 35-75°C (95-165°F) in aliphatic hydrocarbon solvents • 30-50°C (85-120°F) in aromatic hydrocarbons solvents 	Recommended in primers, base-coats and some top-coats. Excellent sag control and edge covering, with low thickening
PA4 X 20	Paste	0.5 – 5.0	Incorporation under medium or moderate speed dispersion	Mainly used in top-coats to provide sag resistance, film transparency, gloss retention and edge covering
PA4 BA 20	Paste	0.5 – 5.0		Aromatic-free version of the CRAYVALLAC® PA4 X 20
PA3 X 20	Paste	0.5 – 5.0		Mainly used in primers and base-coats for anti-settling, sag resistance and edge covering
PA3 BA 20	Paste	0.5 – 5.0		Aromatic-free version of the CRAYVALLAC® PA3 X 20
LA-150	Liquid	0.1 – 1.0	Pourable liquid with simple stir-in incorporation under medium shear	Anti-settling and sag control additive for primers and base-coats. Viscosity adjustment and good transparency
LA-350	Liquid	0.1 – 2.0		For water-based primers and base-coats, to bring anti-settling properties, viscosity adjustment and good transparency

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

Flow and Levelling Additives

CRAYVALLAC®	Addition level (wt %)	Technology	Features
Flow-100	0.2 – 2.0	Polyacrylate (solvent-free)	Improves surface aspect in primers and base-coats
Flow-200	0.1 – 2.0	Polyester (solvent-free)	Improves substrate wetting and surface aspect in solvent-borne coatings. Good transparency
Flow-450	0.5 – 2.5	Polyacrylate in aromatic-free solvent	Excellent levelling with defoaming properties. Good transparency
A-2678-M	0.5 – 2.0	Polyacrylate in water/glycol	Suitable for water-borne primers and base-coats. Provides defoaming and substrate wetting properties

Dispersants

CRAYVALLAC®	Solids	Supplied in	Technology	Features
D-801	45%	Xylene/BA/MPA	High molecular weight wetting and dispersing agent	Universal dispersing agent for solvent-borne coatings, for organic and non organic pigments and fillers



CAN AND COIL COATINGS

Rheology Modifiers

CRAYVALLAC®	Product Form	Addition level (wt %)	Incorporation	Features
Super	Powder	0.5 – 2.0	High speed dispersion during millbase grind: <ul style="list-style-type: none"> • 35-75°C (95-165°F) in aliphatic hydrocarbon solvents • 30-50°C (85-120°F) in aromatic hydrocarbons solvents 	Excellent sag control and edge covering, with low thickening
PA4 X 20	Paste	0.5 – 5.0	Incorporation under medium or moderate speed dispersion	Provides excellent sag control, anti-settling and transparency, with good levelling. Suitable for all solventborne systems
PA4 BA 20	Paste	0.5 – 5.0		Aromatic-free paste for sag control and anti-settling, with good transparency
PA4 WDA 12	Paste	1.0 – 5.0		Higher transparency paste, with good sag control, anti-settling and easier dispersion
LA-150	Liquid	0.1 – 2.0	Pourable liquid with simple stir-in incorporation under medium shear	Anti-settling additive, also used for viscosity adjustment, with good transparency

Abrasion and Scratch Resistance Agents

CRAYVALLAC®	d ₅₀ / d ₁₀₀ (µm)	Dropping point (°C)	Technology	Features
WN-1495	4.5 - 20	112	Polyolefin powder	Versatile wax to improve slip, anti-blocking and mar and rub resistance
WN-1265	5.5 / 30	146	Modified amide powder	Increases slip and mar resistance, with higher temperature resistance than polyolefin waxes
WF-3200	5.0 / 25	112	PTFE-based powder	Versatile wax with high slip and lubricity. Improves anti-blocking, abrasion, mar resistance and surface hardness
WF-6010	5.0 / 25	112	PTFE-based powder	Similar to WF-3200 but gives higher lubricity, blocking and abrasion resistance. Suitable where more demanding technical properties are required
WF-1000	7.5 / 30	325	PTFE powder	Highest abrasion, mar, rub and temperature resistance. Lowest coefficient of friction



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

Flow and Levelling Additives

CRAYVALLAC®	Addition level (wt %)	Technology	Features
Flow-450	0.5 – 2.5	Polyacrylate in aromatic-free solvent	Excellent levelling with defoaming properties and good compatibility in many systems
Flow-100	0.2 – 2.0	Polyacrylate (solvent free)	Improves surface aspect
Flow-200	0.1 – 2.0	Polyester (solvent free)	Improves substrate wetting and surface aspect in solventborne and solvent-free coatings
A-620-A2	0.2 – 2.0	Polyacrylate in solvent	Improves levelling and gloss. Eliminates cratering and pinholes
A-2201-M	0.2 – 2.0	Polyacrylate in solvent	Very effective air release additive to improve edge bursts. Also improves flow, levelling, gloss and eliminates orange peel, cratering and pinholes
A-72-A2-60	0.2 – 2.0	Polyacrylate in solvent	Higher molecular weight version of the A-620-A2
A-2678-M	0.5 – 2.0	Polyacrylate in water/glycol	For elimination of orange peel, cratering and pinholes in water-based systems. Also an effective pigment wetting agent and provides some defoaming properties

Matting Agents

CRAYVALLAC®	d ₅₀ / d ₁₀₀ (µm)	Dropping point (°C)	Technology	Features
WN-1135	5.5 / 26	151	Modified polypropylene (Powder)	For satin finish. Excellent dispersability, hydrophobicity, slip and mar resistance
WN-1110	4.5 / 21	151	Modified polypropylene (Powder)	Improved transparency in thin layers while maintaining slip and anti-blocking. Good abrasion resistance

Dispersants

CRAYVALLAC®	Solids	Supplied in	Technology	Features
D-801	45%	Xylene/BA/MPA	High molecular weight wetting and dispersing agent	Universal dispersing agent for solvent-borne coatings, for organic and non organic pigments and fillers

ARCHITECTURAL COATINGS

Rheology Modifiers

CRAYVALLAC®	Product Form	Addition level (wt %)	Incorporation	Features
MT	Powder	0.2 – 2.0	High speed dispersion during millbase grind at 35-60°C (95-150°F) in aliphatic hydrocarbon solvents	General purpose thixotrope for solventborne coatings
Super	Powder	0.5 – 2.0	High speed dispersion during millbase grind at 35-75°C (95-165°F) in aliphatic hydrocarbon solvents	Excellent sag control with low thickening and good levelling balance. Suitable for premium quality, architectural solventborne paints
PA3 WDA 20	Paste	0.5 – 5.0	Incorporation under medium or moderate speed dispersion	Paste in mineral oil to provide excellent anti-settling and sag control properties with good levelling properties
PA4 WDA 12	Paste	1.0 – 5.0		Softer version of PA3 WDA 20, with much easier incorporation. Suitable for aerosols, wood stains and decorative paints
LA-250	Liquid	0.1 – 2.0	Pourable liquid with simple stir-in incorporation, under medium shear. Suitable for post-addition	Anti-settling and sag control additive, with excellent levelling properties. Also used for viscosity adjustment
LA-350	Liquid	0.1 – 2.0		Provides anti-settling properties to water-based coating, with excellent levelling properties



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

Abrasion and Scratch Resistance Agents

CRAYVALLAC®	d ₅₀ / d ₁₀₀ (µm)	Dropping point (°C)	Technology	Features
WN-1495	4.5 / 20	112	Polyolefin powder	Versatile wax to improve slip, anti-blocking and mar and rub resistance
WF-3200	5.0 / 25	112	PTFE-based powder	Higher slip and lubricity performances. Improves anti-blocking, abrasion, mar resistance and surface hardness

Matting Agents

CRAYVALLAC®	d ₅₀ / d ₁₀₀ (µm)	Dropping point (°C)	Technology	Features
WN-1135	5.5 / 26	151	Modified polypropylene (Powder)	For satin finish. Excellent dispersability, hydrophobicity, slip and mar resistance
WW-1001	d ₅₀ = 6.0	112	Polyolefin aqueous dispersion	Excellent stability with high slip, abrasion and rub resistance in water-based coatings. Good compatibility and rapid dispersion. 40% wax content
WW-1074	d ₅₀ = 7.0	125	Polyolefin aqueous dispersion	High slip, abrasion and rub resistance, with water repellent properties. 40% wax content
WW-1077	d ₅₀ = 6.0	112	PTFE-based aqueous dispersion	Gives exceptional slip, scuff and rub resistance for demanding applications. Wide compatibility and excellent stability in water-based systems. 50% wax content

GENERAL INDUSTRIAL COATINGS

Rheology Modifiers

CRAYVALLAC®	Product Form	Addition level (wt %)	Incorporation	Features
MT	Powder	0.2 – 2.0	High speed dispersion during millbase grind: • 35-75°C (95-165°F) in aliphatic hydrocarbon solvents • 30-50°C (85-120°F) in aromatic hydrocarbons solvents	General purpose thixotrope for industrial coatings where solvent strength and incorporation temperature are not extreme
Super	Powder	0.5 – 2.0	High speed dispersion during millbase grind: • 35-75°C (95-165°F) in aliphatic hydrocarbon solvents • 30-50°C (85-120°F) in aromatic hydrocarbons solvents	Recommended in top-coats, with excellent sag control, low thickening and good levelling
Ultra	Powder	0.5 – 1.5	High speed dispersion during millbase grind at 45-65°C (113-150°F) in aromatic hydrocarbon:alcohol blends	Allows excellent recoatability, sag control and anti-settling properties
PA4 X 20	Paste	0.5 – 5.0	Incorporation under medium or moderate speed dispersion	Provides excellent sag control, transparency and anti-settling properties, with good levelling
PA4 BA 20	Paste	0.5 – 5.0		Aromatic-free version of the CRAYVALLAC® PA4 X 20
LA-150	Liquid	0.1 – 1.0	Pourable liquid additives with simple stir-in incorporation (medium shear)	Rheological additive with excellent levelling and good anti-settling and sag resistance
LA-350	Liquid	0.1 – 2.0		Provides anti-settling properties to water-based coating
LA-375	Liquid	0.1 – 2.0	Pourable liquid with simple stir in incorporation, under medium to high shear	Especially recommended for water-borne epoxy systems in order to achieve a very good sag resistance and sprayability
LA-380	Liquid	0.1 – 2.0	Pourable liquid with simple stir in incorporation, under medium to high shear	Especially recommended for water-borne PU systems in order to achieve a very good sag resistance and sprayability. Not recommended for epoxies

Surface Modifiers

CRAYVALLAC®	d50/ d100 (µm)	Dropping Point (°C)	Technology	Features
WN-1135	5,5 / 26	151	Modified polypropylene powder	For matting effect, scratch and abrasion resistance
WN-1495	4,5 / 20	112	Polyolefin powder	Economical wax to improve slip, anti-blocking, mar and rub resistance. Fine particle size
WF-3200	5,0 / 25	112	PTFE-based powder	Versatile wax with high slip and lubricity. Improves antiblocking, abrasion resistance, surface hardness and slip
WW-1077	6,0 / 25	112	PTFE-based aqueous dispersion	Gives exceptional slip, scuff and rub resistance for demanding applications. Wide compatibility and excellent stability in water-based systems. 50% wax content

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

Flow and Levelling Additives

CRAYVALLAC®	Addition level (wt %)	Technology	Features
Flow-450	0.5 – 2.5	Polyacrylate in aromatic-free solvent	Excellent levelling with defoaming properties
Flow-200	0.1 – 2.0	Polyester (solvent-free)	Improves substrate wetting and surface aspect in solvent-borne and solvent free coatings
A-2678-M	0.5 – 2.0	Polyacrylate in water/glycol	For elimination of orange peel, cratering & pinholes in water-based systems. Also effective as pigment wetting agent

Dispersants

CRAYVALLAC®	Solids	Supplied in	Technology	Features
D-801	45%	Xylene/BA/MPA	High molecular weight wetting and dispersing agent	Universal dispersing agent for solvent-borne coatings, for organic and non organic pigments and fillers



ADHESIVES & SEALANTS

Rheology Modifiers

CRAYVALLAC®	Product Form	Technology	Addition level (wt %)	Incorporation	Features
Antisettle CVP	Powder	Castor oil derivatives	1.0 - 5.0	High speed dispersion at 30 to 55°C	General purpose rheology modifier, suitable for sealants and adhesives when solvent strength and activation temperatures are not extreme
MT	Powder	Castor oil derivatives	1.0 - 5.0	High speed dispersion at 30 to 60°C	General purpose rheology modifier, suitable for sealants and adhesives when solvent strength and activation temperatures are not extreme
SL	Powder	Amide	3.0 - 8.0	High speed dispersion at 90 to 115°C, typical activation time 30 min	Micronised amide wax specifically developed for adhesives and sealants producers, which imparts good shear thinning rheology, excellent sag and slump resistance and good storage stability
SLX	Powder	Amide	3.0 - 8.0	High speed dispersion at 60 to 90°C, typical activation time 30 min	Micronised amide wax specifically developed for adhesives and sealants producers, which imparts excellent shear thinning rheology, excellent sag and slump resistance, very good storage stability, reduced cycle times and processing temperature
SLT	Powder	Amide	3.0 - 8.0	High speed dispersion at 50 to 65°C, typical activation time 30 min	Micronised amide wax specifically developed for adhesives and sealants producers, which imparts excellent shear thinning rheology, excellent sag and slump resistance, very good storage stability, reduced cycle times and processing temperature (semi-cold process)
PA3 X 20	Paste	20 % active amide in xylene	0.5 - 5.0	Incorporation under medium or moderate speed dispersion	Pre-activated amide paste for low shear incorporation showing excellent sag resistance and enhanced antisetling properties
LA-150	Liquid	Modified urethane	0.1 - 2.0	Pourable liquid with simple stir-in incorporation under medium shear	NMP and NEP free liquid additive designed for use in high to medium solvent polarity (for example in polychloroprene adhesives). Exhibits excellent anti-settling properties, good shear thinning behaviour and a thixotropic rheology
LA-350	Liquid	Modified urethane	0.1 - 2.0	Pourable liquid with simple stir-in incorporation under medium shear	NMP and NEP free liquid additive designed for use in water based sealants (for example in acrylic sealants). Exhibits excellent anti-settling properties, good shear thinning behaviour and a thixotropic rheology
60P	Powder	Polyolefin powder	0.3 - 5.0	High speed dispersion at 80 to 90°C	100% solids powder. For solvent-free systems (Perfect for hybrids and polysulfide sealants), exhibits shear thinning rheology, enhanced solvent resistance



Rheological modifiers, Recommendations per technology

	MS & hybrids	Polychloroprene	Polysulfide	Silicone	2K PU	WB Acrylic	Acrylate	Butyl Rubber	2K Epoxy
Antisettle CVP		X		X	XX		X		X
MT	X	XX	X	X	X		X	X	X
Super	X	X	XX	X	X			XX	X
SL	XX		X	X					X
SLX	XX		XX	X			XX	XX	XX
SLT	XX		X	XX			XX		XX
PA3 X 20					X				X
LA-150		X			X		X		X
LA-350						X			
60P	X		X		X				X



Storage Requirements

- No sedimentation
- Good long term stability (in presence of catalyst)
- Viscosity stability

Application Requirements

- Extrusion
- Easy to apply by gun or knife
- Non-slumping
- Must function regardless of application area
- Not affecting the curing process
- Not affecting adhesion

In-Service Requirements

- Not affecting mechanical properties
- Weather ability
- Cost effective



Blank

With Crayvallac® SLT

CRAYVALLAC® RHEOLOGY MODIFIERS

Selection guide by application

APPLICATIONS	PROPERTIES	SYSTEMS	MICRONISED POWDERS										PASTES					LIQUIDS											
			Antisettle CVP	PC	MT	SF	SUPER	ULTRA	EXTRA	OPTIMA	LV	SL	SIX	SLT	60P	60X	PA3 X 20	PA3 BA 20	PA4 X 20	PA4 BA 20	PA3 S 12	PA3 WDA 20	PA4 WDA 12	PA3 XAF 20	LA-150	LA-250	LA-350	LA-375	LA-380
Heavy Duty	Shear thinning	Aliphatic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
General Industry	Thixotropic	Aliphatic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Sag Control	Aliphatic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Anti-Settling	Aliphatic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Levelling	Aliphatic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	High Speed dispersion	Aromatic/polar Blends	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Low Shear	Solvent-Free	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Post Addition	Water-Based	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Heavy Duty	Shear thinning	Aliphatic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
General Industry	Thixotropic	Aliphatic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Sag Control	Aliphatic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Anti-Settling	Aliphatic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Levelling	Aliphatic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	High Speed dispersion	Aromatic/polar Blends	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Low Shear	Solvent-Free	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Heavy Duty	Shear thinning	Aliphatic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
General Industry	Thixotropic	Aliphatic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Sag Control	Aliphatic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Anti-Settling	Aliphatic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Levelling	Aliphatic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	High Speed dispersion	Aromatic/polar Blends	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Low Shear	Solvent-Free	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Heavy Duty	Shear thinning	Aliphatic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
General Industry	Thixotropic	Aliphatic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Sag Control	Aliphatic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Anti-Settling	Aliphatic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Levelling	Aliphatic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	High Speed dispersion	Aromatic/polar Blends	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Low Shear	Solvent-Free	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Key : ● = not recommended, ✓ = can be used, ✓✓ = recommended, ✓✓✓ = highly recommended

CRAYVALLAC® SURFACE MODIFIERS

Selection guide by application

Arkema's Surface Modifiers		CRAYVALLAC® Range	Inks	Coil Coatings	Can Coatings	Wood Finishing	Powder Coatings	Metal Packaging	Industrial Coatings	Overprint Varnishes	UV Coatings	Heat-Seal Applications	
Micronised Powders	PP	WN-1110*	🔴🔴	🔴🔴	🔴	🔴🔴🔴	🔴🔴	🔴🔴	🔴🔴🔴	🔴🔴	🔴🔴	🔴	
		WN-1135 *	🔴	🔴	X	🔴🔴	🔴🔴	🔴	🔴🔴	🔴🔴	🔴🔴	🔴	
	EBS	WN-1265 **	🔴	🔴	X	🔴🔴	🔴🔴	🔴	🔴	🔴	X	🔴	
	Polyethylene	WN-1150****	X	X	X	X	🔴🔴🔴	X	X	X	X	X	X
		WN-1220	🔴🔴	🔴	🔴	🔴🔴	🔴	X	🔴	🔴	X	X	X
		WN-1442	🔴🔴	🔴	🔴	🔴	🔴🔴	🔴	🔴🔴	🔴🔴	🔴	X	X
		WN-1495	🔴🔴	🔴	🔴	🔴	🔴🔴	🔴	🔴🔴	🔴🔴	🔴	X	X
		WN-2950	🔴🔴	🔴🔴	🔴🔴	X	X	🔴🔴	🔴🔴	X	🔴🔴	🔴	🔴
		WN-3025	🔴🔴	🔴🔴	🔴🔴	🔴🔴	X	🔴🔴	🔴	X	X	X	X
		WN-1875 ***	🔴	🔴	🔴	🔴🔴	🔴	🔴	🔴	X	🔴🔴	🔴	X
	PTFE	WN-1810	🔴🔴🔴	🔴🔴🔴	🔴🔴🔴	🔴🔴	🔴	🔴🔴	🔴	🔴	🔴🔴	🔴	X
		WF-1000	🔴🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴
	PTFE Modified Polyethylene	WF-1000 NF	🔴🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴
		WF-1039	X	X	X	X	🔴🔴	X	X	X	X	X	X
		WF-3200	🔴🔴	🔴🔴	🔴🔴	🔴🔴	🔴🔴	🔴🔴	🔴	🔴🔴	🔴	🔴	🔴
		WF-3200 NF	🔴🔴	🔴🔴	🔴🔴	🔴🔴	🔴🔴	🔴🔴	🔴	🔴🔴	🔴	🔴	🔴
		WF-3290	🔴🔴	🔴🔴	X	X	X	🔴🔴	🔴🔴	🔴	X	X	🔴
		WF-6010	🔴🔴	🔴🔴	🔴🔴	🔴🔴	X	🔴🔴	🔴🔴	X	X	🔴	🔴
		WF-6010 NF	🔴🔴	🔴🔴	🔴🔴	🔴🔴	X	🔴🔴	🔴🔴	X	X	🔴	🔴
		WF-9200	🔴🔴	🔴	X	X	X	🔴	🔴	X	X	🔴	🔴
WF-9710	🔴	🔴	X	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴🔴		
Wax Dispersions	Water-Based	WW-1001	🔴🔴	🔴🔴	X	X	X	🔴🔴	🔴	X	X	X	
		WW-1074	🔴🔴	🔴🔴	X	X	X	🔴🔴	🔴🔴	X	X	X	
		WW-1077	🔴🔴	🔴🔴	X	🔴🔴	X	X	🔴🔴	X	X	🔴🔴	
		WW-1326	🔴🔴	🔴	X	🔴	X	🔴	X	🔴🔴	X	X	
		WW-9500	🔴	🔴	X	🔴🔴	X	🔴	🔴🔴	X	X	X	
		WW-9790	🔴🔴	🔴🔴	X	X	X	🔴🔴	🔴	🔴	X	X	
	Solvent-Based	TW-1340	🔴🔴🔴	🔴🔴	X	X	X	🔴	🔴🔴	X	X	X	
		WS-4700	🔴🔴	🔴	X	X	X	🔴	🔴🔴	X	X	X	

- 🔴🔴🔴 Highly recommended
- 🔴🔴 Recommended
- 🔴 Suitable
- X Not recommended

- * WN -1135 and WN-1110 are special modified polypropylenes
- ** WN -1265 is a special EBS grade
- *** WN -1875 is a high melting point cross-linked polymer
- **** WN -1150 is a special modified polyethylene

ARKEMA'S PRODUCT PORTFOLIO FOR COATINGS APPLICATIONS INCLUDES:

- Waterborne, solventborne and powder coating resins from Arkema Coating Resins.
- Rheology additives for coatings, adhesives and sealants from Arkema Coating Resins..
- Rheology additives for water borne coatings from Coatex.
- High added value photocure resins for fiber optics, graphic arts, electronics, etc. from Sartomer.
- Enhanced waterborne polymer emulsions using KYNAR® and KYNAR® Aquatec fluoropolymers.
- High performance texturing additives, namely ORGASOL® and RILSAN® fine powders.
- Amines, oxygenated solvents, and DMSO polar aprotic solvent for special formulations.
- Nanostructured materials.
- Acrylic monomers.





Europe

• Headquarters

- Arkema - Colombes, France
- Coatex - Genay, France

• Technical and R&D Centers

- Boretto, Italy - Coating Resins
- Genay, France - Coatex
- Sant Celoni, Spain - Coating Resins
- Verneuil, France - Coating Resins - Sartomer

• Production Facilities

- Boretto, Italy - Coating Resins
- Brummen, The Netherlands - Coating Resins
- Drocourt, France - Coating Resins
- Gissi, Italy - Coating Resins
- Genay, France - Coatex
- Moerdijk, The Netherlands - Coatex
- Mollet, Spain - Coating Resins
- Sant Celoni, Spain - Coating Resins
- Stallingborough, United Kingdom - Coating Resins
- Villers St-Paul, France - Coating Resins - Sartomer
- Zwickau, Germany - Coating Resins

Americas

• Headquarters

- Arkema Coating Resins - Cary, NC
- Arkema Inc. - King of Prussia, PA

• Technical and R&D Centers

- Araçariquama, Brazil - Coatex - Coating Resins
- Cary, NC - Coating Resins
- Chester, SC - Coatex
- King of Prussia, PA
- North Kansas City, MO - Coating Resins

• Production Facilities

- Alsip, IL - Coating Resins
- Araçariquama, Brazil - Coatex - Coating Resins
- Chester, SC - Coatex
- Grand Rapids, MI - Coating Resins
- North Kansas City, MO - Coating Resins
- Saint Charles, LA - Coating Resins
- Saukville, WI - Coating Resins
- Torrance, CA - Coating Resins

Asia

• Headquarters

- Arkema Greater China - Shanghai, China
- Arkema K.K. - Tokyo, Japan

• Technical and R&D Centers

- Changshu, China - Coatex
- Guangzhou, China - Sartomer - Coating Resins
- Kyoto Technical Center, Japan
- Navi Mumbai, India - Coating Resins
- Pasir Gudang, Malaysia - Coating Resins

• Production Facilities

- Changshu, China - Coatex - Coating Resins - Kynar
- Kunsan, Korea - Coatex
- Navi Mumbai, India - Coating Resins
- Pasir Gudang, Malaysia - Coating Resins

Global Headquarters + Americas

Arkema Coating Resins
410 Gregson Dr.
Cary, NC, (USA) 27511
+1 919-469-6700

European Regional Headquarters

Arkema Coating Resins
420, rue d'Estienne d'Orves
92700 Colombes - France
+33 (0)1 49 00 79 44

Asia Pacific Regional Headquarters

Arkema (China) Investment Co., Ltd.
Shanghai Branch
6/F, Block 1, Life Hub @ Daning
1868 Gonghexin Road
Shanghai 200072, P.R. China
Tel: + 86 21 6147 6888
Fax: + 86 21 6147 6777 / 6746

Customer Service

Americas
1-866-837-5532 (toll free)
+1-919-469-6700
Europe
+33 (0)1 49 00 79 44
China
+86 21 6147 6888 (324)
Asia Pacific (excluding China)
+603-7839-5888

IMPORTANT: The statements, technical information and recommendations contained herein are believed to be accurate as of the date hereof. Since the conditions and methods of use of the product and of the information referred to herein are beyond our control, Arkema expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information; NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OR MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE CONCERNING THE GOODS DESCRIBED OR THE INFORMATION PROVIDED HEREIN. The information provided within relates only to the specific product designated and may not be applicable when such product is used in combination with other materials or in any process. The user should thoroughly test any application before commercialization. Nothing contained herein constitutes a license to practice under any patent and it should not be construed as an inducement to infringe any patent and the users is advised to take appropriate steps to be sure that any proposed use of the product will not result in patent infringement.

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

The products described in the brochure are not Medical grades designated for Medical Device applications.

Arkema has implemented an internal Medical Policy regarding the use of Arkema products in Medical Devices applications. Arkema has designated Medical grades to be used for Medical Device applications. Products that have not been designated as Medical grades are not authorized by Arkema for use in Medical Device applications.

In addition, except for limited cases as determined by the Medical Device Policy, Arkema strictly prohibits the use of any Arkema products in Medical Device applications that are implanted in the body or in contact with bodily fluids or tissues for greater than 30 days.

For any use of Arkema's product in Medical Device applications, please contact Arkema's sales network.

ARKEMA
INNOVATIVE CHEMISTRY

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

CRAYVALLAC®, REAFREE®, KYNAR®,
ORGASOL® and RILSAN® are trademarks of Arkema Inc.
PRIMID® is a registered trademark
of EMS CHIMIE AG