

PASSION FOR PRINTING

Best-in-class system solutions of cellulosic and synthetic printed fabrics



How do we bring best-inclass expertise, sustainability and performance to printing?

CREATING SUSTAINABLE SOLUTIONS

At Archroma, we continuously challenge the status quo in the deep belief that we can make our industry sustainable.

Archroma is committed to developing innovative products and processes that are safer for the consumer and for the environment. We strongly believe, based on our extensive experience in textile processing, that sustainability can generate innovation, performance and often lead to cost reductions and added value for our customers. For this reason, our clear ambition is to offer our customers the best possible system for their textile segments.

Innovation is a core competence of Archroma, which ensures that our products and services meet future demands, foster future technologies and contribute to a more sustainable textile industry.

As a global leader in color and specialty chemicals with a trusted heritage, we offer bespoke product solution systems and innovations. We strive to be a reliable partner for textile mills as well as major retailers and brands for the whole textile chain – **from the first idea to the final article.**

Brand owners and retailers around the world are taking action to evaluate the environmental impact of textile treatment, dyeing and finishing processes in response to consumer concerns. We can support textile manufacturers with this. Our exclusive ONE WAY Process Simulator can be used to simulate and compare products and processes, and thus calculate the ecological and economical profile of the final end-product.



ABOUT US



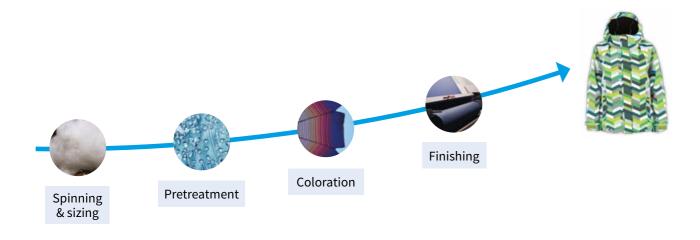
Archroma is a **global color and specialty chemicals** company committed to innovation, world-class guality standards, high service levels, cost-efficiency and sustainability.

From fiber to finish, Archroma plays a key role throughout the entire textile supply chain, with special system solutions for **spinning**, **sizing**, **pretreatment**, dyeing, printing and digital printing, as well as finishing.

At Archroma, we share your passion for printing,

and we bring our expertise, innovation power and our commitment to sustainability into developing cuttingedge technologies and products to support your needs.

From the classics stripes, to the most intricate designs derived from nature, on any kind of fabric, Archroma strives to be the preferred partner for printing, offering a complete printing system solution that obtain vibrant designs in most fields of textile printing applications.



Competence Center for Printing

Benefit from Archroma's printing expertise and networks for:

- Global experts in technical textile color and chemical solutions;
- Solutions-oriented, and customer-centric approach and objectives;
- Complete system offering thanks to unique combination of know-how in pigment preparation and auxiliaries;
- Access to global and regional knowledge and expert network for seamless support in global supply chain management
- State-of-the-art R&D labs for chemical packages and process developments.

At Archroma, we continuously challenge the status quo in the deep belief that we can make our industry sustainable.

The majority of Archroma's products are certified by some of the most important eco-standards, such as:

		• bluesign®	• Oeko-Tex®	• GOTS	• ZDHC	• REACH	• EU Ecolabel	• C2C	• RSL	• MRSL
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Flexibility on demand

At the very beginning of the textile chain, Archroma's spin finishes provide outstanding processing performance to all kinds of filaments and fibers. We combine our chemistry knowledge and yarn manufacturing

Archroma's spinning agents

• S

A

pin finish	 Softeners, lubricants
filan®	and antistatic agents
	Leomin®

> Spotlight on ECO2SIZE a fully synthetic sizing system for woven fabrics that increases productivity and reduces the BOD/COD effluent load



A heritage of performance

Pretreatment has always been a core competence in Archroma and our past heritage. We believe that a textile treatment process must be simple, robust and highly reliable.

Archroma's chemicals for PES & PA Archroma's chemicals for CEL Surfactants Enzymes Imerol[®] MFB lig/Kieralon[®] F-MFB lig Bactosol[®] HPA liq Sequestering & neutralizing Surfactants Lufibrol[®] MSD liq

> Spotlight on HARD CORE, a complete pretreatment and whitening system for a brighter and stronger cotton fabric for a style that lasts

experience to develop our high performance and innovative spin finishes and sizing systems, aimed at addresing the specific demands of our customers.

Archroma's sizing agents Additives Sizing agent Trefix® **Arkofil**®

With Archroma's pretreatment systems, you will be able to achieve better print quality on fabric.

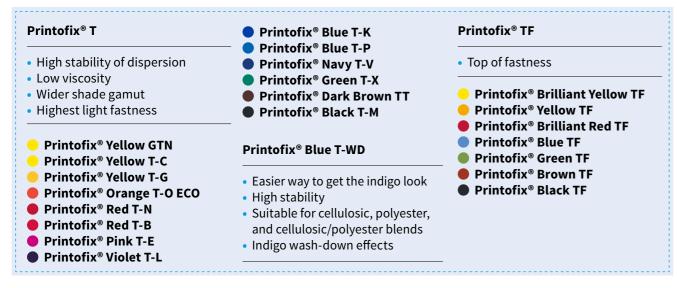
 Stabilizers Prestogen[®] FCB liq Sequestering & neutralizing Kieralon[®] UH liq Lufibrol[®] ANTOX liq

/ PRINTING

Pigment printing system for cellulosic, polyester and its blends

Our wide portfolio of **pigment printing preparations and auxiliaries,** places Archroma in the position to offer complete **printing solutions** that obtain vibrant colors in most fields of textile printing applications. From the classics stripes, to the most intricate designs derived from nature, together with high light-fastness performance, Archroma strives to be the preferred partner for printing with its focus on customer needs, quality, sustainability and performance.

Archroma's pigment printing preparations for CEL, PES & blends



Archroma's printing auxiliaries for CEL, PES & blends

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Thickener	Softener	Formaldehyde-free* printing system
Lutexal [®] CSFN liq	Luprintol [®] Soft VSN liq	Helizarin [®] Eco-Safe
Lutexal [®] HIT Plus liq	Luprintol [®] Soft SIG lig	
Lutexal [®] CSN liq	Luprintol [®] Soft H-P liq	Binder
		Helizarin® SFT liq c, Helizarin®
• Binder	Pastes	LTC New lig and Helizarin [®] CS lig
Helizarin [®] SFT liq c	Helizarin® White RT pa	
Helizarin [®] LTC New liq	Helizarin [®] Flock HT pa	 Fixing agent
Helizarin [®] CS liq	Helizarin® Ultra-fast Paste	Luprintol [®] Fixing Agent SE liq
Helizarin [®] TOW liq		
Helizarin [®] ET liq	 Improvers and problem solvers 	Softener
Helizarin [®] 83 liq	Luprintol [®] Emulsifier PE New liq	Luprintol [®] Soft VSN liq
Helizarin [®] CFN liq	Luprintol [®] Antifoam TC ECO liq	
	Luprintol [®] Additive RM liq	 Synthetic thickener
 Fixing agent 		Lutexal [®] CSFN liq
Luprintol [®] Fixing agent SE liq		
Luprintol [®] Fixing agent SF liq		 Special emulsifier
Luprintol [®] Fixing agent WB-FR liq		Luprintol [®] Emulsifier PE New liq

>Spotlight on <u>STAMP IT SAFE</u>, a formaldehyde-free* printing system for soft fabrics which is better for you and our planet

Reactive printing system for cellulosic

Drimaren® reactive dyes and printing auxiliaries are especially selected for printing on cellulosic. Suitable for applications whatever requirements standards: from home textiles to apparel, ensuring very soft hand feel properties.

Archroma's dyestuffs for CEL

Drimaren[®] P • Printing on cellulosic fibers • Brilliant shades to enable great color variety Drimaren[®] Blue P-5RN p • Drimaren[®] Black P-LS p Drimaren[®] Turquoise Blue P-GRS p Drimaren[®] Black P-GR p 😑 Drimaren® Yellow P-6GS p Drimaren[®] Red P-BN p Drimaren[®] Red P-4B p Drimaren[®] Navy P-2R p Drimaren[®] G. Yellow P-2R p Drimaren[®] Orange P-2RN p Drimaren[®] Blue P-3RL p • Drimaren[®] Black P-BL p Archroma's auxiliaries for CEL Synthetic thickener Lutexal[®] DRA liq Lutexal[®] F-RP Plus Lutexal®RP-HT liq Auxiliaries **Printogen® Oxidant grains** Lyocol[®] BC liq Dekol[®] 2005 liq Antimussol[®] UDF liq Washing off Ladipur[®] RSK liq Cyclanon[®] XC-W New lig Fastness Optifix[®] RSL liq

Optifix[®] EC liq



Disperse printing system for polyester

Foron® disperse dyes and printing auxiliaries are especially selected for printing on polyester. Suitable for applications whatever requirements standards: from automotive, exterior textiles, home textiles, apparel and sportswear.

Archroma's dyestuffs for PES

Foron [®] S	Foron [®] S-WF	Dorospers [®] K
Good chemical stability Suitable for printing, exhaust dyeing processes as well as thermosol dyeing	 High sublimation fastness Excellent wet fastness Suitable for yarn and piece dyeing by the exhaust process as well as for continuous dyeing and printing 	 Global core Highest light-fastness and hot-light-fastness State-of-the-art dispersability and dispersion stability Very high reproducibility
 Foron[®] Yellow S-6GL 200 Foron[®] Yellow Brown S-2RFL 150 Foron[®] Scarlet S-3GFL Foron[®] Brilliant Red S-RGL 200 Foron[®] Rubine S-2GFL 150 Foron[®] Brilliant Violet S-3RL 150 Foron[®] Blue S-BGL 200 Foron[®] Blue S-2RN Foron[®] Brilliant Blue S-BG 200 Foron[®] Navy S-2GRL 200 Foron[®] Black RD-S 	 Foron[®] Brilliant Yellow S-WF Foron[®] Golden Yellow S-WF Foron[®] Red S-WF Foron[®] Crimson S-WF Foron[®] Rubine S-WF Foron[®] Blue S-WF Foron[®] Cyanine S-WF Foron[®] Turquoise S-WF Foron[®] Navy S-WF Foron[®] Black S-WF 	 Dorospers® Yellow K-HM 150 Dorospers® Orange K-R Dorospers® Red K-AS Dorospers® Red K-LR New Dorospers® Brilliant Blue K-2G Dorospers® Blue K-LB 150 Dorospers® Navy Blue K-LN Dorospers® Black K-LSF

Acid printing system for polyamide

Nylosan® & Lanasyn® acid dyes and **printing auxiliaries** are especially selected for printing on polyamide. Suitable for applications whatever requirements standards: from automotive, exterior textiles, home textiles, apparel and sportswear.

Archroma's dyestuffs for PA

Nylosan [®] S	Lanasyn [®] F
 Metal free* acid dyes 	 Metal free* acid dyes
 High solubility 	 Brilliant range
 Highest wet fastness 	 High wet fastness
 Good combinability without blocking 	 Limited combinabili
 Strong dyestuff build-up 	
Nula ang Vallan C. I	• · · · · · · · · · · • • • · · · • •
Nylosan [®] Yellow S-L	Lanasyn [®] Yellow F
Nylosan [®] Orange S-3R	Lanasyn [®] Scarlet
Nylosan [®] Brilliant Red S-3R	Lanasyn [®] Red F-5 Lanasyn [®] Red F-5
Nylosan [®] Red S-3B	Lanasyn [®] Red F-6
Nylosan [®] Red S-B	Lanasyn [®] Brilliant
Nylosan [®] Blue S-R	Lanasyn [®] Blue F-2
Nylosan [®] Navy S-3G	•
 Nylosan[®] Navy S-3G Nylosan[®] Blue Black S-3R 	 Lanasyn[®] Blue F-L Lanasyn[®] Violet F Lanasyn[®] Brilliant

Archroma's auxiliaries for PES

- Thickener
 Lutexal[®] DRA liq
- Dispersing
 Lyogen[®] CN liq
 Lyocol[®] RDN liq
- Acid buffer
 Opticid[®] PB liq
- Fixation accelerator
 Lyocol[®] BC liq
- Washing off agent Ladipur[®] MCL liq Eganal[®] DFT liq

Antifoam agent
 Antimussol[®] UDF liq



Archroma's auxiliaries for PA





*below limits of detection

DIGITAL PRINTING



Archroma, a recognized global leader in integrated solutions for printing, is also investing in digital printing, bringing high innovation, creativity, quality and sustainability.

Together with our expertise, we bring economical benefits with wider design possibilities, opening new business opportunities for digital textile printers.

Archroma's pretreatment solutions for CEL & PA

- Wetting & deaerating Printogen[®] Inkjet NFW liq
- Levelness & definition improver Printogen[®] Inkjet DPE liq
- Reduction protection Printogen[®] Oxidant Grains
- Solubility & fixation (helps to reduce amount of urea in the recipe) Lyocol® BC liq
- Synthetic thickener to adjust viscosity Lutexal[®] GP Eco p

Our Inkpresso[®] system is a paradigm shift; it allows you to manufacture your own inks, close to the printing machines, ensuring high stability and fresh Ink from highly purified dyes with no issues of shelf life.

Inkpresso[®] brings together benefits that were unattainable so far in inkjet printing: Production flexibility, no shelf-life problems, a larger color spectrum and the possibility of an individual coloristic variant.

Archroma's dyestuffs solutions for CEL & PA



INKPRESSO

Archroma washing-off systems will help to remove unfixed dye and chemicals from fabric and avoid back staining of dyestuff onto unprinted/white areas.



> Spotlight on <u>COOL PRINT</u>, a complete formaldehyde-free* system that keeps your printed textiles soft and durable and the Earth cooler

Discover more information of Inkpresso[®] system in our 'Digital

printing' brochure

Archroma's washing-off agents

- Dispersing & complexing agents Cyclanon XC-W New liq Dekol[®] RSK
- Alkaline reduction clearing agent Ladipur[®] MCL liq

/FINISHING

Archroma is a recognized expert in finishing solutions to fulfill the different market segment requirements.

Archroma's performance and finishing solutions

Protection

- Fluorine free water repellent
 Smartrepel[®] Hydro
- Repellency & soil release
 Nuva[®] N
 Nanosphere[®]
- Antimicrobial & antimosquito
 Sanitized[®]
- Odor adsorption
 Sanitized[®] Odoractiv
- Flame retardant
 Pekoflam[®]
- Antistatic (PES, PES/CO)
 Elfugin[®] AKT liq
- Moisture management & thermocontrol
- Moisture management
 Hydroperm[®]
- Cooling effects/Thermocontrol coldblack[®] Lurapret[®] Comfort*

- Shape stabilization & shrink resistance
- Crease & shrink resistance Arkofix[®]
 Fixapret[®]
- Anti curling agent
 Appretan[®]
- Anti snagging/ Anti pilling Dicofix[®]
- Finishing specialties & additives
- Special crosslinker Arkophob[®]
- Wetting agents
 Kieralon[®] MRZ liq
 Fluowet[®] UD liq
 Imerol[®] JET-B liq c
- Foaming agent Kieralon[®] SAS 30 liq Afilan[®]
- Anti foaming agent Antimussol[®] UDF liq

Umidol®

- 5 30 liq
- Antimussol[®] UDF liq
 Yellowing protection (PA

Cepreton[®] Leomin[®] • Polyethylene softener/ lubricants Ceralube[®]

Hydrophilic silicone softener

Yarn lubricants
 Destofil[®]

Softening

Solusoft[®]

Siligen®

Silicone softener

Fatty acid softener
 Ceranine[®]

- Polyurethane softener
 Hydroperm[®] RPU New
 Perapret[®] PU New
- Softener for fluorocarbon finish Ceralube[®] PHD liq c

/Check our latest updates at

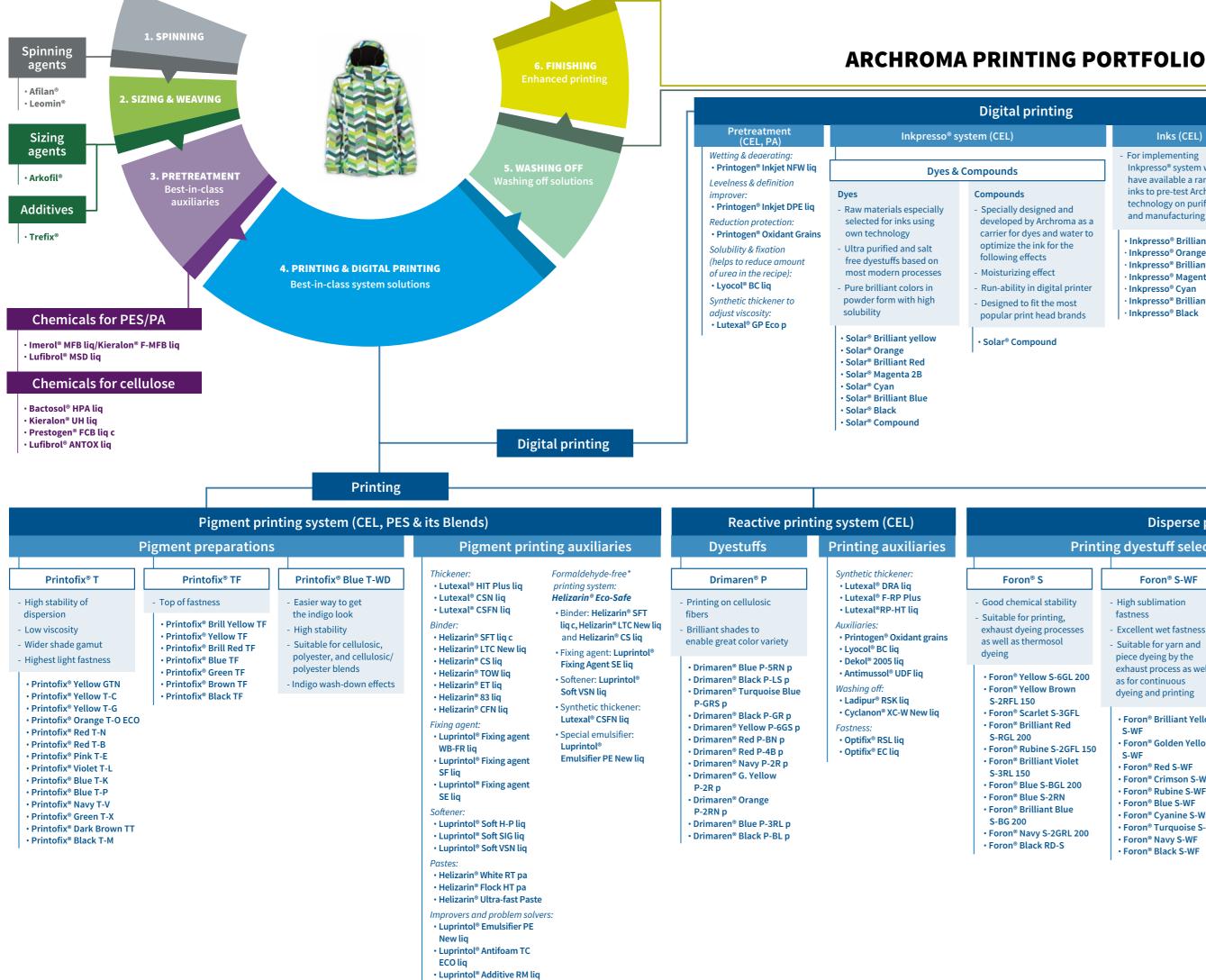
www.printing.archroma.com

...and know more about our SYSTEM SOLUTIONS for printing

- *application partnership with Outlast company
- > Spotlight on <u>POWER COTTON</u>, a system for comfortable cotton fabrics with more than 5 times higher abrasion resistance
- > Spotlight on <u>SMOOTH AS IRON</u>, a non-iron finishing system that keeps fabric smooth, soft and strong especially on collars, cuffs and home textiles

Discover more information in our 'Functional Finishing' brochure





printing			Performance and finishing solutions						
	Inks (CEL)	Digital printing auxiliaries	Protection	Moisture management & thermocontrol	Shape stabilization & shrink resistance	Softening	Finishing specialties & additives		
esigned and by Archroma as a dyes and water to the ink for the ffects ig effect in digital printer o fit the most nt head brands	 For implementing Inkpresso® system we have available a range of inks to pre-test Archroma technology on purification and manufacturing Inkpresso® Brilliant Yellow Inkpresso® Orange Inkpresso® Orange Inkpresso® Brilliant Red Inkpresso® Magenta 2B Inkpresso® Cyan Inkpresso® Brilliant Blue Inkpresso® Black 	Head cleaner: • Printogen® HC liq	Fluorine free water repellent: • Smartrepel® Hydro Repellency & soil release: • Nuva® N • Nanosphere® Antimicrobial & Antimosquito protection: • Sanitized® Odor adsorption: • Sanitized® Odoractiv Flame retardant: • Pekoflam® Antistatic (PES, PES/CO): • Elfugin® AKT liq	Moisture management: • Hydroperm® Cooling effects/ Thermocontrol: • coldblack® • Lurapret® Comfort*	Crease and shrink resistance: • Arkofix® • Fixapret® Anti curling agent: • Appretan® Anti snagging/Anti pilling: • Dicofix®	Silicone softener: • Solusoft Hydrophilic silicone softener: • Siligen® Fatty acid softeners: • Ceranine® • Cepreton® • Leomin® Polyethylene softeners/ lubricants: • Ceralube® Yarn lubricants: • Destofil® Polyurethane softeners: • Hydroperm® RPU New	Special crosslinkers: • Arkophob® Wetting agents: • Kieralon® MRZ liq • Fluowet® UD liq • Imerol® JET-B liq c Foaming agents: • Kieralon® SAS 30 liq • Afilan® Anti-Foaming agent: • Antimussol® UDF liq Yellowing protection (PA • Umidol®		
			Washing-off agents			Perapret® PU New Softener for fluorocarbon			
			Dispersing & complexing agents: • Cyclanon XC-W New liq • Dekol® RSK		agent:	finish: • Ceralube [®] PHD liq c	*application partnership with Outlast company		

Disperse printing system (PES)				Acid printing system (PA)				
Printi	ng dyestuff selection		Printing auxiliaries	Printing dyestuff selection			Printing auxiliaries	
printing, ng processes	Foron [®] S-WF - High sublimation fastness - Excellent wet fastness - Suitable for yarn and	Dorospers® K - Global core - Highest light-fastness and hot-light-fastness - State-of-the-art	Thickener • Lutexal® DRA liq Dispersing: • Lyogen® CN liq • Lyocol® RDN liq Acid buffer:	Nylosan® S - Metal free* acid dyes - High solubility - Highest wet fastness	Lanasyn® F - Metal free* acid dyes - Brilliant range - High wet fastness	Lanasyn® M - 1:2 metal complex - Very high wet and light fastness	Solvents: • Lyocol® BC liq • Lyocol® TGE liq Antifrosting: • Solidokoll® VN liq Antifoam:	
ow S-6GL 200 ow Brown	exhaust process as well as for continuous dyeing and printing	dispersability and dispersion stability - Very high reproducibility	 Opticid® PB liq Fixation accelerator: Lyocol® BC liq Washing off agent: Ladipur® MCL liq Eganal® DFT liq Antifoam agent: Antimussol® UDF liq 	 Good combinability without blocking Strong dyestuff build-up 	 Limited combinability Lanasyn[®] Yellow F-7GL Lanasyn[®] Scarlet F-3GL 130 Lanasyn[®] Red F-5B 150 	 Lanasyn® Yellow M-2GL Lanasyn® Bordeaux M-RLA 200 Lanasyn® Turquoise M-5G Lanasyn® Navy M-DNL Lanasyn® Dark Brown M-GLN Lanasyn® Grey M-BLA Lanasyn® Black M-DL 170 	 Antimussol® UDF liq Washing off: Ladipur® DK liq Lyogen® NH liq Fixation: Nylofixan® PM liq 	
rlet S-3GFL liant Red iine S-2GFL 150 liant Violet e S-BGL 200 e S-2RN liant Blue y S-2GRL 200	Foron® Brilliant Yellow S-WF Foron® Golden Yellow S-WF Foron® Red S-WF Foron® Crimson S-WF Foron® Rubine S-WF Foron® Blue S-WF Foron® Cyanine S-WF Foron® Turquoise S-WF Foron® Navy S-WF	 Dorospers® Yellow K-HM 150 Dorospers® Orange K-R Dorospers® Red K-AS Dorospers® Red K-LR New Dorospers® Brilliant Blue K-2G Dorospers® Blue K-LB 150 Dorospers® Navy Blue K-LN Dorospers® Black K-LSF 		 Nylosan® Yellow S-L Nylosan® Orange S-3R Nylosan® Brilliant Red S-3R Nylosan® Red S-3B Nylosan® Red S-B Nylosan® Blue S-R Nylosan® Navy S-3G Nylosan® Blue Black S-3R 	 Lanasyn[®] Red F-6B 140 Lanasyn[®] Brill Blue F-CLA Lanasyn[®] Blue F-2RFL 160 Lanasyn[®] Blue F-L 150 Lanasyn[®] Violet F-BL 180 Lanasyn[®] Brill Green F-6GLN 			

/ THE ARCHROMA WAY

Safe, efficient, enhanced.

As a global leader in color and specialty chemicals, we are committed to develop innovative systems and services to provide you with custom solutions that are:

Safe – It's our nature to protect. Safe to use, safe to release and safe to wear.

Efficient – It's our nature to rethink sustainable manufacturing. Innovating application processes that minimize resources and maximize productivity.

Enhanced – It's our nature to add another level of value. Effects, functionality and aesthetics to give additional value, for a life enhanced.





Ask your Archroma representative for additional information on our system solutions

*below limits of detection





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ARCHROMA PRINTING COMPETENCE CENTER

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