

PASSION FOR TOWELING

Best-in-class solutions for cellulose and polyester/cellulose blends



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

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

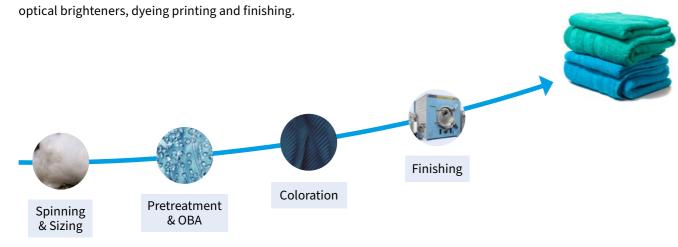


Archroma is a global color and specialty chemicals company committed to innovation, world-class guality standards, high service levels, cost-efficiency and sustainability.

From fiber to finish, Archroma plays a key role throughout the entire textile supply chain, with special system solutions for spinning, sizing, pretreatment,

At Archroma, we share your passion for toweling,

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



Archroma has specialized Competence Centers bringing to our customers:

- A hub of knowledge, R&D, expertise, technology and creativity support;
- A wide range of testing and experts services in synthetics & wool, cellulosics, printing, denim, finishing & repellents;
- A complete system offering thanks to our unique combination of expertise in spinning, pretreatment, coloration, as well as finishing;
- Access to global and regional network for seamless support in global supply chain management;
- Powerful training centers for our affiliates, partners and customers.

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

• bluesign[®] • Oeko-Tex[®] • GOTS • ZDHC • REACH • EU Ecolabel • C2C • RSL • MRSL

Flexibility on demand

At the 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

 Spin finish Softeners, lubricants and antistatic agents Leomin[®]

PRETREATMENT & OBA

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 pretreatment agents

 Desizing agent Bactosol[®] HPA liq 	 Sequestering agent Lufibrol[®] PF ECO liq Lufibrol[®] ANTOX liq
 Antiperoxide agent Bactosol[®] SAP New liq c 	 Neutralization agent Sirrix[®] NE liq
 Detergent agent Imerol[®] PCLF liq Kieralon[®] UH liq Imerol[®] Blue New liq 	 Peroxide stabilizer Prestogen[®] FCB liq c

> Spotlight on WHITE WATER, a system for towels and bathroom textiles that stay white and bright for longer, without wasting a single precious drop

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

Archroma's sizing agents Additives Sizing agent Arkofil[®] DNT Trefix® Arkofil[®] CMC20

With Archroma's pretreatment and optical brightening systems, you will be able to obtain a perfectly prepared fabric and get the whiteness and the shade that you need, with high fastness level.

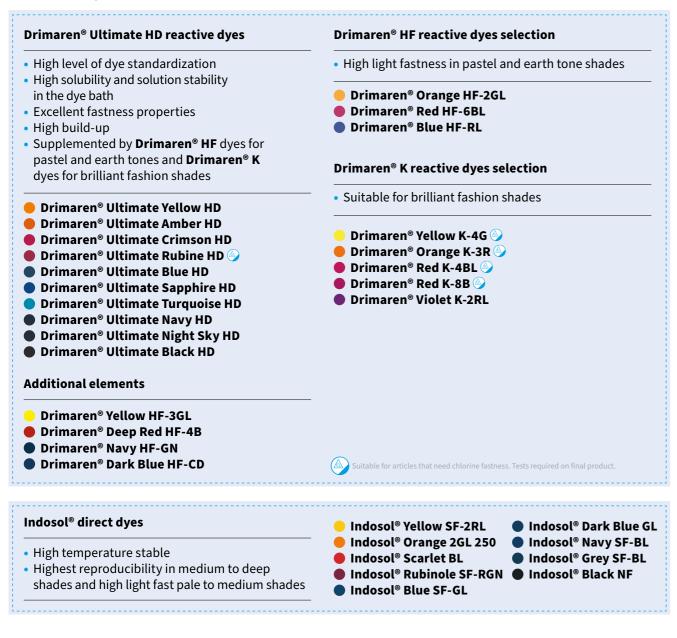
Archroma's optical brightening agents

 OBA for cellulose Leucophor [®]BSB liq (neutral bluish white) Leucophor[®] BSBB liq (bluish white) Leucophor[®] PC new liq (neutral reddish white) Leucophor[®] BMB liq (neutral bluish white) Leucophor[®] BMBB liq (bluish white) Leucophor[®] BMBB liq (neutral reddish white) 	
 OBA for polyester Ultraphor® HF liq (neutral white) Ultraphor® HFN liq (violet shade) Ultraphor® ETB liq (neutral bluish) Ultraphor® XSR liq (neutral reddish) Ultraphor® SFN (bluish violet) Ultraphor® SFR plus liq (neutral reddish) 	

/ COLORATION

Archroma is a recognized leader in **integrated solutions for dyeing.** Our portfolio includes systems designed to answer the specific requirements for all types of polyester and cellulosic goods.

Archroma's dyestuffs for cellulose (CEL)



- > Spotlight on <u>ROYAL SUPREME</u>, a royal blue coloration system for a simpler and more controlled process, with less resources and without the supply surprise!
- >Spotlight on <u>BLUE LAGOON</u>, stress-free dyeing system for turquoise colors with better application control and easier wash-off, that's also less stress for water reserves
- > Spotlight on <u>DEEP DIVE 2.0</u>, a complete system for maximum coloration efficiency with enhanced fastness, and dramatically reduced use of water, chemicals and energy
- > Spotlight on <u>DARK BLISS 2.0</u>, a system for dyeing deep navy and black shades more efficiently with enhanced fastness and dramatically lighter use of water and chemicals

Archroma's dyeing auxiliaries for CEL

Antifoam agent	Washing-off agent	• W
Antimussol® UDF liq	Cyclanon® XC-W plus liq	0
	Ladipur [®] RSK liq	0
 Wetting, deaerating agent 		0
Leonil® EHC liq c	 UV absorber 	
	Rayosan® C pa	• Ci
 Lubricant agent 		in
Imacol [®] C3G liq	 Multifunctional product 	0
Imacol [®] X-JET liq	Humectol® C liq hc	
		• D
		R



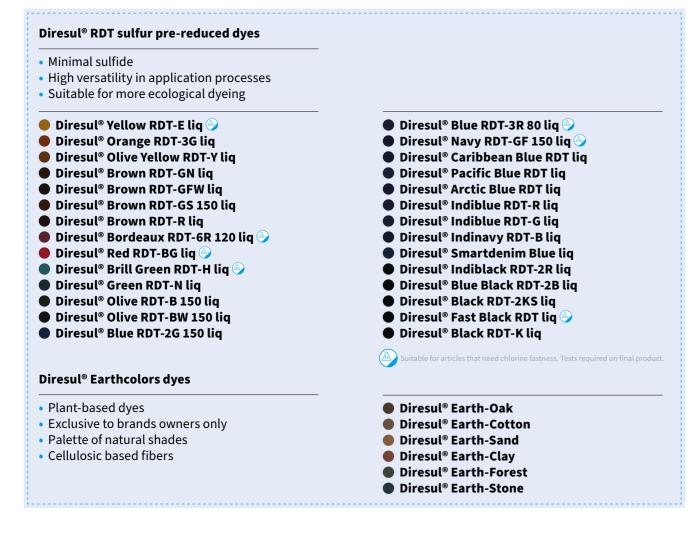
Wet fastness improver Optifix® RSL liq Optifix® EC liq Optifix® F liq

Crocking fastness improver **Optifix® RUB New liq**

Dyestuff protection agent **Revatol® NS liq c**

- Chlorine fastness improver
 Optifix[®] CLC liq
- Levelling agent
 Drimagen[®] E3R liq
- Sequestering agent
 Dekol[®] 2005 liq c
 Dekol[®] 1097 N liq
 Dekol[®] SN-S liq

Archroma's dyestuffs & auxiliaries for CEL



Archroma's dyeing auxiliaries for Diresul® RDT

Leonil [®] EHC liq c ager Dek	• Reducing agent • Cyclanon® MSA j ol® SN liq ol® 2005 liq c	 Peroxide oxidation booster Direfix[®] GPF liq 	 Light fastness improver: Direfix[®] LFIN p
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> Spotlight on LOVE NATURE x EARTHCOLORS®, an efficient dyeing system based on upcycled plant waste for colors inspired by nature that preserve its precious resources

EarthColors® is currently exclusive to brand owners only, supporting the efforts of the brand owners towards transparency and traceability.



Archroma's dyestuffs for polyester (PES) & PES CEL BLENDS

	XLD disperse dyes
Medium/his	gh energy performance dyes
 Good wet fa 	
🦲 Lumacroi	n® Yellow XLD
Lumacroi	n® Yellow Brown XLD
🛑 Lumacroi	n® Red XLD
Lumacroi	n [®] Rubine XLD
🔵 Lumacroi	n® Blue XLD
• •	n® Navy XLD
Lumacroi	-
-	n® Black XLDF

Archroma's dyeing auxiliaries for PES & PES CEL BLENDS

	Eganal® X-ACT liq	E
	 Levelling agent Eganal[®] DFT liq 	E
Imacol® MPE liq Imacol® X-JET liq	• Lovelling agent	C) C
 Lubricant agent 	Revatol [®] AR liq	cl
	 Dyestuff protection agent 	• A
Leonil® EHC liq c		
agent	Cyclanon [®] Eco plus liq	D
 Wetting, deaerating 	 Acid reduction clearing 	• D
Antimussol® UDF liq	Humectol [®] LYS liq	Ly
 Antifoam agent 	 Degreasing agent 	• D

If you are interested in microfiber towels, please contact your Archroma representative for further information.





- Dispersing oligomers Lyocol[®] POD liq
- Diffusion accelerator Dilatin[®] POE liq
- Alkaline reduction clearing Cyclanon[®] MCL liq Cyclanon[®] MSA p Ekalin® F liq
- Sun protection Rayosan® PES liq
- Acid buffer dispersing Opticid[®] PSD lig c **Opticid®** PB liq
- Dispersing agent Lyocol[®] RDN/PRDN liq Setamol[®] WS p

/ PRINTING

Our wide portfolio of **reactive dyes and auxiliaries**, allows us to offer complete **printing system solutions** to obtain vibrant colors in most fields of textile printing applications.

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

Archroma's reactive dyes for CEL

Archroma's printing auxiliaries

Drimaren® P 실

- Drimaren[®] P are monochloro triazine dyes
 Brilliant shades to enable great color variety
- High solubility to avoid pre-dissolving step
- Easy dosing and dust-free environment
- Suitable for articles that need chlorine fastness. Tests required on final product
- Drimaren® Yellow P-6GS p
 Drimaren® G. Yellow P-2R p
 Drimaren® Orange P-2RN p
 Drimaren® Red P-BN p
 Drimaren® Red P-4B p
 Drimaren® Violet P-2R p
 Drimaren® Blue P-3RL p
 Drimaren® Blue P-5RN p
 Drimaren® Navy P-2RS p
 Drimaren® Turquoise Blue P-GRS p
 Drimaren® Black P-BL p
 Drimaren® Black P-GR p

Thickeners Lutexal® DRA liq Lutexal® F-RP Plus liq Lutexal® RP-HT Plus liq Luprintol® Additive RM 01 liq

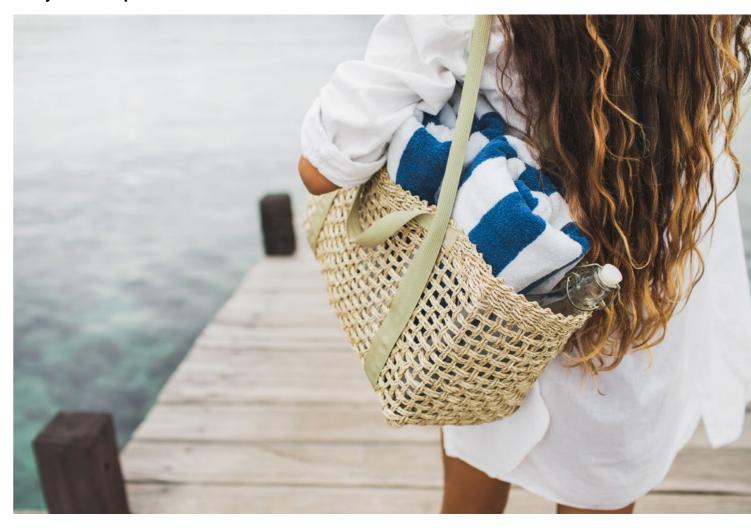
Washing-off Cyclanon[®] XC-W liq Ladipur[®] RSK liq

Fastness Printogen® Fixing agent RP liq Optifix® RSL liq Optifix® EC liq

Auxiliaries Printogen® Oxidant Grains g Printogen® Enhancer BC liq Printogen® Level VN liq

A Suitable for articles that need chlor

> Spotlight on <u>PRINT N'FAST</u>, a cost-efficient reactive printing system for soft hand-feel that is good for you and the planet



Archroma also offers other printing solutions, such as:

- **Pigment printing systems,** suitable for all fibers & blends, to obtain vibrant colors, while ensuring very soft hand feel properties and high light-fastness performance required for toweling articles.
- Foron[®] disperse dyes and printing auxiliaries, specially selected for printing on polyester.
- Nylosan[®] & Lanasyn[®] acid dyes and printing, auxiliaries, specially selected for printing on polyamide.
- > Spotlight on <u>STAMP IT SAFE</u>, a formaldehyde-free* pigment printing system for soft fabrics which is better for you and our planet
- > Spotlight on <u>COOL PRINT</u>, a complete formaldehyde-free* system that keeps your pigment printed textiles soft and durable and the Earth cooler

Archroma strives to be the preferred partner for printing, with our focus on customer needs, quality, sustainability and performance.

Discover more information about pigment, reactive, disperse and acid printing in our <u>PASSION FOR PRINTING</u> and <u>DIGITAL PRINTING</u> brochure.

below limits of detection according to industry standard test methods



Innovative tailor-made solutions

Like other textiles in the bathroom, towel materials are continually subject to the effects of warm humidity. In order to provide the greatest possible microbial protection, Archroma uses products that simultaneously provide lasting softness and drying properties. Feel great straight from the shower.

Archroma's performance and finishing solutions

Protection	 Fatty acid softener Leomin[®] 	Finishing specialties & additives
 Yellowing protection 	Cepreton®	
Umidol®	Ceranine®	 Wetting agents Kieralon[®] MRZ lig
Antistatic	 Polyethylene softener/stitching 	Imerol® JET-B liq c
Elfugin® AKT liq	assistant	
	Ceralube®	 Anti-foaming agents Antimussol[®] UDF liq
Odor management	 Yarn lubricants 	
	Destofil [®] LC liq	
 Antimicrobial protection Sanitized[®] 	Ceralube [®] ET liq	Viral load reduction up to 99.9%*
	Absorbency improver	Antimicrobial and antiviral
Softening	& thermocontrol	Sanitized® T99-19 (Cellulosic) Sanitized® T11-15 liq (Synthetic
Silicone softener	Moisture management	
Solusoft®	Siligen® Hydroperm®	
Hydrophilic silicone softener		
Siligen®	 Cooling effects 	*Applied in the right fabric with the right conditions,
	coldblack [®]	according ISO 18184-2019

> Spotlight on HYDRY, a system for odor-fresh towels where bacteria cannot build up on your favorite towel, bath robe or sports towel

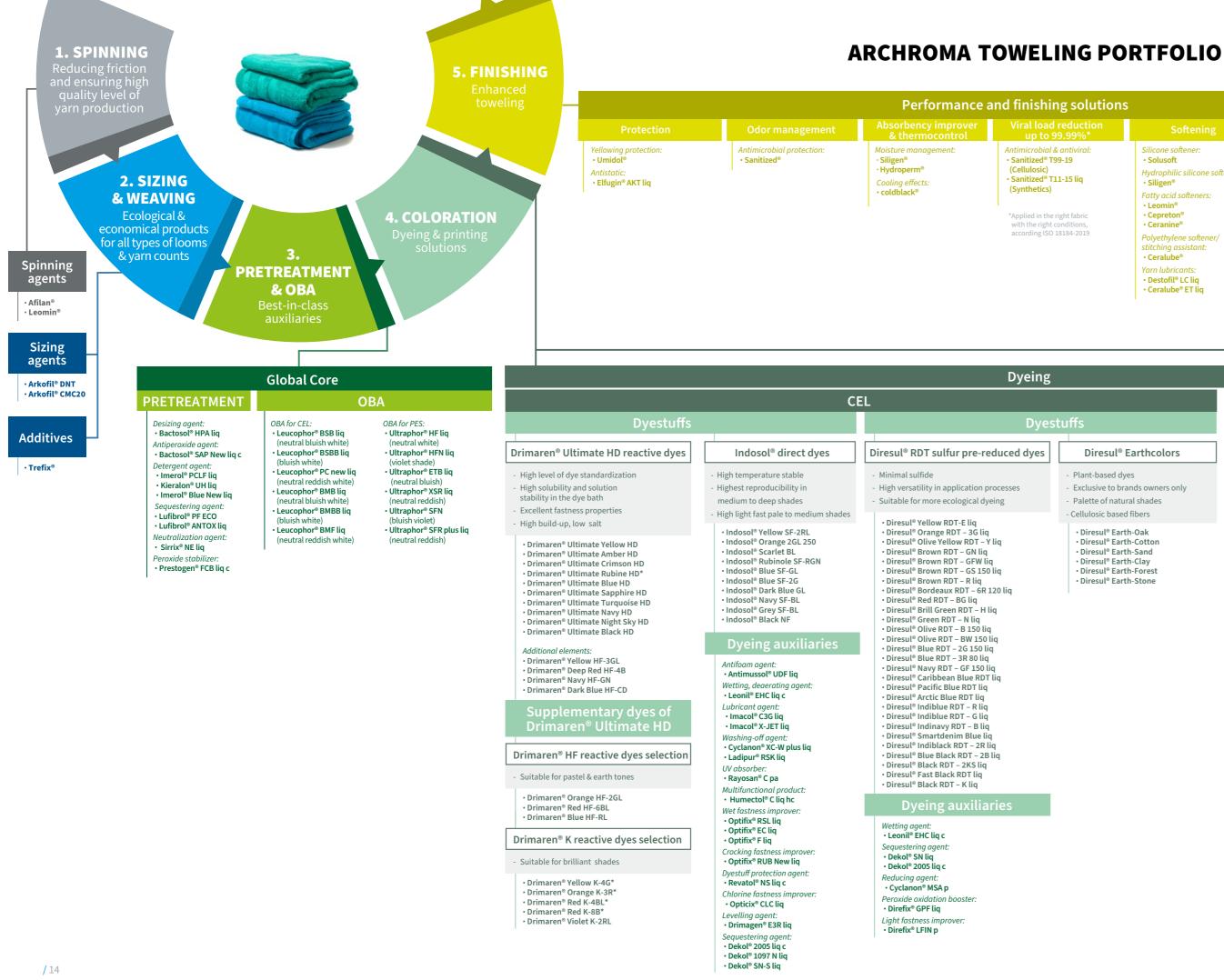


Check our latest updates at

www.toweling.archroma.com

...and know more about our **SYSTEMS SOLUTIONS** for toweling





g solutions			
eduction .99%*	Softening	Finishing specialties & additives	
ntiviral: - 19	Silicone softener: • Solusoft	Wetting agents: • Kieralon® MRZ liq	
- 15 liq ht fabric nditions,	Hydrophilic silicone softener: • Siligen [®]	• Imerol [®] JET-B liq c Anti-foaming agents:	
	Fatty acid softeners: • Leomin [®] • Cepreton [®] • Ceranine [®]	• Antimussol® UDF liq	
184-2019	Polyethylene softener/ stitching assistant: • Ceralube®		
	Yarn lubricants: • Destofil® LC liq • Ceralube® ET liq		

			Print	ting	
	PES/PES CEL blends		PES/PES CEL blends CEL		E
uffs	Dyestuffs	Dyeing auxiliaries	Reactive dyestuffs	Printing auxiliaries	
Diresul® Earthcolors - Plant-based dyes - Exclusive to brands owners only - Palette of natural shades - Cellulosic based fibers Diresul® Earth-Oak Diresul® Earth-Cotton Diresul® Earth-Clay Diresul® Earth-Forest Diresul® Earth-Stone	Lumacron® XLD disperse dyes - Medium/high energy performance dyes - Good wet fastness - Lumacron® Yellow XLD - Lumacron® Red XLD - Lumacron® Red XLD - Lumacron® Red XLD - Lumacron® Blue XLD - Lumacron® Black XLDF - Lumacron® Black XLDF - Lumacron® Black XLDN Foron® S-WF disperse dyes - High-energy performance dyes - High sublimation fastness - High wet fastness • Foron® Brill Yellow S-WF* • Foron® Brill Yellow S-WF* • Foron® Brill Yellow S-WF* • Foron® Red S-WF • Foron® Rubine S-WF • Foron® Rubine S-WF* • Foron® Navy S-WF* • Foron® Navy S-WF* • Foron® Black S-WF*	Antifoam agent: • Antimussol® UDF liq Wetting, deaerating agent: • Leonil® EHC liq c Lubricant agent: • Imacol® MPE liq • Imacol® X-JET liq Degreasing agent: • Humectol® LYS liq Acid reduction clearing: • Cyclanon® Eco plus liq Dyestuff protection agent: • Revatol® AR liq Levelling agent: • Eganal® DFT liq • Eganal® DFT liq • Eganal® DFT liq Dispersing oligomers: • Lyocol® POD liq Diffusion accelerator: • Dilatin® POE liq Alkaline reduction clearing: • Cyclanon® MSA p • Ekalin® F liq Sun protection: • Rayosan® PES liq Acid buffer dispersing: • Opticid® PSD liq c • Opticid® PB liq Dispersing agent: • Lyocol® RDN/PRDN liq • Setamol® WS p	 Drimaren® P Printing on cellulosic fibers Drimaren® P are MCT dyes Brilliant shades to enable great color variety High solubility to avoid pre-dissolving step Easy dosing and dust-free enviroment Suitable for articles that needs chlorine fastness. Tests required on final product Drimaren® Yellow P-6GS p Drimaren® Golden Yellow P-2R p Drimaren® Red P-BN p Drimaren® Red P-4B p Drimaren® Blue P-3RL p Drimaren® Blue P-3RN p Drimaren® Isle P-5RN p Drimaren® Isle P-5RN p Drimaren® Isle P-5RN p Drimaren® Isle P-5RN p Drimaren® Black P-BL p Drimaren® Black P-BL p Drimaren® Black P-GR p 	Thickeners: • Lutexal® DRA liq • Lutexal® F-RP Plus liq • Lutexal® RP-HT Plus liq • Luprintol® Additive RM 01 liq <i>Auxiliaries:</i> • Printogen® Chidant Grains g • Printogen® Chidant Grains g • Printogen® Level VN liq <i>Washing off:</i> • Cyclanon® XC-W liq • Ladipur® RSK liq <i>Fastness:</i> • Printogen® Fixing agent RP liq • Optifix® RSL liq • Optifix® RSL liq • Optifix® EC liq * Suitable for articles that need chlorine fastness. Tests required on final product.	

/ THE ARCHROMA WAY TO A SUSTAINABLE WORLD

Safe, efficient, enhanced. It's our nature.

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 according to industry standard test methods





www.archroma.com bptmarketing@archroma.cor

ARCHROMA MANAGEMENT LLC

Neuhofstrasse 11 4153 Reinach Switzerland

BRAND & PERFORMANCE TEXTILE SPECIALTIES

Archroma Singapore, Pte. Ltd. 1 International Business Park #06-01 The Synergy 609917 Singapore

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