

PASSION FOR / PRINTING

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



# How do we bring best-in-class 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.



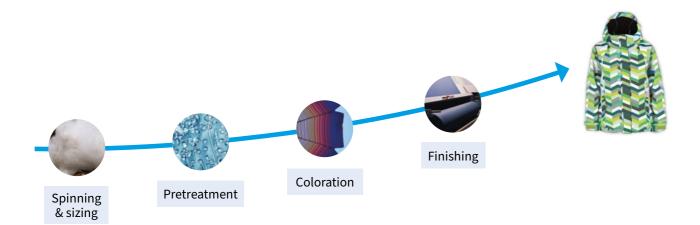
# **ABOUT US**

Archroma is a global color and specialty chemicals company committed to innovation, world-class quality 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

## **SPINNING & SIZING**

#### 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

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

#### **Archroma's spinning agents**

 Spin finish Afilan®

 Softeners, lubricants and antistatic agents Leomin®

#### **Archroma's sizing agents**

 Additives Sizing agent **Arkofil® Trefix**®

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

## **PRETREATMENT**

#### 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.

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

#### **Archroma's chemicals for PES & PA**

- Surfactants Kieralon® F-MFB liq
- Sequestering & neutralizing Lufibrol® MSD liq

#### **Archroma's chemicals for CEL**

- Enzymes Bactosol® HPA liq
- Stabilizers
- Bactosol® CBS liq
- Prestogen® FCB liq
- Surfactants Kieralon® UH liq
- Sequestering & neutralizing Lufibrol® ANTOX liq

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

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# / PRINTING

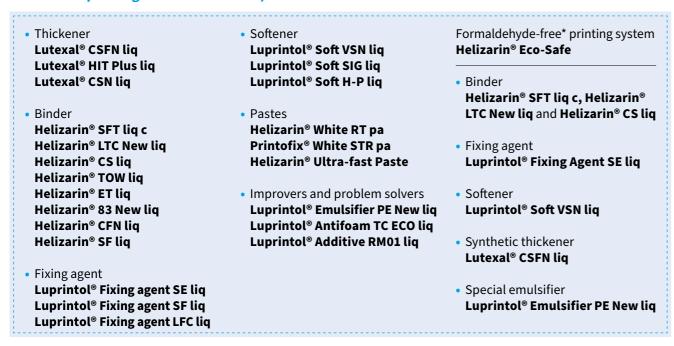
#### Pigment printing system for cellulosic, polyester and its blends

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

Printofix® T	Printofix® Blue T-K	Printofix® TF
High stability of dispersion	<ul> <li>Printofix® Blue T-P</li> <li>Printofix® Navy T-V</li> </ul>	Top of fastness
Low viscosity	Printofix® Green T-X	
• Wider shade gamut	Printofix® Dark Brown TT	Printofix® Brill Yellow TF
Highest light fastness	Printofix® Black T-M	Printofix® Yellow TF
	<u> </u>	Printofix® Brill Red TF
Printofix® Yellow T-C	Printofix® Blue T-WD	Printofix® Blue TF
Printofix® Yellow T-G		Printofix® Green TF
Printofix® Orange T-O ECO	<ul> <li>Easier way to get the indigo look</li> </ul>	Printofix® Brown TF
Printofix® Red T-N	High stability	Printofix® Black TF
Printofix® Red T-B	<ul> <li>Suitable for cellulosic, polyester,</li> </ul>	
Printofix® Pink T-E	and cellulosic/polyester blends	
Printofix® Violet T-L	<ul> <li>Indigo wash-down effects</li> </ul>	

#### Archroma's printing auxiliaries for CEL, PES & blends



<sup>&</sup>gt; 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
   Printogen® Enhancer BC liq
   Dekol® 2005 liq
   Antimussol® UDF liq
- Washing off
   Ladipur® RSK liq
   Cyclanon® XC-W New liq
- Fastness
   Optifix® RSL liq
   Optifix® EC liq



\*below limits of detection according to industry standard test methods

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

# 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



#### 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 <sup>®</sup> F	Lanasyn <sup>®</sup> M
<ul> <li>Metal free* acid dyes</li> <li>High solubility</li> <li>Highest wet fastness</li> <li>Good combinability without blocking</li> <li>Strong dyestuff build-up</li> </ul>	<ul> <li>Metal free* acid dyes</li> <li>Brilliant range</li> <li>High wet fastness</li> <li>Limited combinability</li> </ul>	<ul> <li>1:2 metal complex</li> <li>Very high wet and light fastness</li> </ul>
Nylosan® Brill Yellow S-10G Nylosan® Yellow S-L Nylosan® Orange S-3R Nylosan® Brill Red S-3R Nylosan® Red S-3B Nylosan® Red S-B Nylosan® Blue S-R Nylosan® Navy S-3R	Lanasyn® Yellow F-7GL Lanasyn® Scarlet F-3GL 130 Lanasyn® Red F-5B 150 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® Yellow M-2GL Lanasyn® Red S-GA Lanasyn® Turquoise SD-5G Lanasyn® Navy SD-NL Lanasyn® Dark Brown S-GLN Lanasyn® Grey M-BLA Lanasyn® Black M-DL 170

\*below limits of detection according to industry standard test methods

#### Archroma's auxiliaries for PA

- Solvents
   Lyocol® BC liq
   Lyocol® TGE liq
- Antifrosting
   Solidokoll® VN liq
- Antifoam
   Antimussol® UDF liq
- Washing off agent Lyogen® NH liq
- Fixation
   Nylofixan® HF liq c
   Nylofixan® P liq



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## DIGITAL PRINTING

**WASHING OFF** 

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.

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

#### **Archroma's washing-off agents**

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

# 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

#### Archroma's dyestuffs solutions for CEL & PA

- Purified reactive dyes
- Solar® Brill Yellow
- Solar® OrangeSolar® Brill Red
- Solar® Magenta 2B
- Solar® Cyan
- Solar® Brill BlueSolar® Black
- .
- ue
- Compound
   Solar® Compound

- Inks
- Inkpresso® Brill Yellow
- Inkpresso® Orange
- Inkpresso® Brill Red
- Inkpresso® Magenta 2B
- Inkpresso® Cyan
- Inkpresso® Brill Blue
- Inkpresso® Black
- Head cleaner
   Printogen® HC liq



Discover more information of Inkpresso® system in our "Digital printing" brochure

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

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# / 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<sup>®</sup>
- 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
- Yellowing protection (PA Umidol®

#### Softening

- Silicone softener
   Solusoft®
- Hydrophilic silicone softener Siligen®
- Fatty acid softener Ceranine® Cepreton® Leomin®
- Polyethylene softener/ lubricants
   Ceralube®
- Yarn lubricants
   Destofil®
- Polyurethane softener Hydroperm® RPU New Perapret® PU New
- Softener for fluorocarbon finish Ceralube® PHD liq c

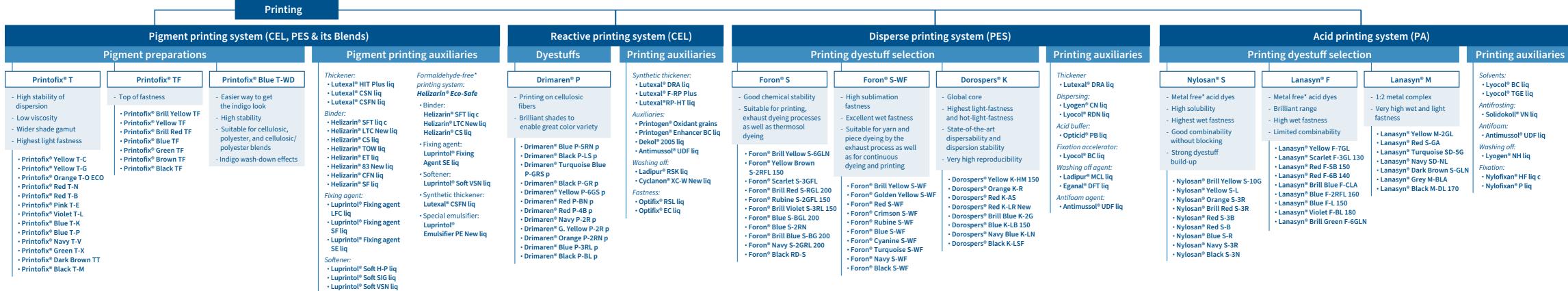
- > Spotlight on <u>POWER COTTON</u>, a system for comfortable cotton fabrics with more than 5 times higher abrasion resistance
- > Spotlight on <u>SMOOTH AS IRON</u>, a non-iron finishing system that keeps fabric smooth, soft and strong especially on collars, cuffs and home textiles

/Check our latest updates at www.printing.archroma.com ...and know more about our **SYSTEM SOLUTIONS** for printing

Discover more information in our "Functional Finishing" brochure

application partnership with Outlast compan

#### 1. SPINNING **ARCHROMA PRINTING PORTFOLIO** agents · Afilan® . SIZING & WEAVIN · Leomin® Performance and finishing solutions Digital printing Digital printing Inkpresso® system (CEL) Sizing Inks (CEL) agents Crease and shrink Wetting & deaerating: For implementing Head cleaner: Fluorine free water repellent: 5. WASHING OFF • Printogen® Inkjet NFW liq Inkpresso® system we Printogen® Smartrepel® Hydro • Hydroperm® Solusoft · Arkophob® **Dyes & Compounds** 3. PRETREATMENT · Arkofil® have available a range of HC liq Arkofix<sup>®</sup> Levelness & definition Repellency & soil release: Cooling effects/ Hydrophilic silicone softener Fixapret® inks to pre-test Archroma Compounds • Kieralon® MRZ liq • Nuva® N Siligen® Thermocontrol technology on purification Printogen® Inkjet DPE liq Nanosphere® coldblack® Anti curling agent: • Fluowet® UD liq **Additives** - Raw materials especially Specially designed and Fatty acid softeners: and manufacturing • Lurapret® Comfort\* Appretan® • Imerol® JET-B liq c selected for inks using developed by Archroma as a Antimicrobial & Antimosauito Reduction protection: • Ceranine® · Printogen® Oxidant Grains own technology carrier for dyes and water to protection: Anti snagging/Anti pilling: Cepreton<sup>®</sup> Foaming agents: · Trefix® Inkpresso® Brill Yellow ontimize the ink for the Sanitized® Dicofix® • Kieralon® SAS 30 liq • Leomin® - Ultra purified and salt Solubility & fixation Inkpresso® Orange following effects • Afilan® free dyestuffs based on (helps to reduce amount Odor adsorption: Polyethylene softeners/ Inkpresso® Brill Red 4. PRINTING & DIGITAL PRINTING most modern processes Moisturizing effect Anti-Foaming agent: of urea in the recipe): Sanitized® Odoractive lubricants: Inkpresso® Magenta 2B Best-in-class system solutions · Lyocol® BC liq • Ceralube® Antimussol® UDF liq - Pure brilliant colors in Run-ability in digital printer · Inkpresso® Cyan Flame retardant powder form with high Synthetic thickener to Designed to fit the most Inkpresso® Brill Blue Pekoflam® Yarn lubricants: Yellowing protection (PA). · Inkpresso® Black solubility Destofil® adjust viscosity: • Umidol® popular print head brands Antistatic (PES, PES/CO): Chemicals for PES/PA • Lutexal® GP Eco p • Elfugin® AKT liq Polyurethane softeners: Solar® Brill Yellow • Hydroperm® RPU New · Solar® Compound · Kieralon® F-MFB lig · Solar® Orange • Perapret® PU New · Lufibrol® MSD liq Solar® Bril Red Washing-off agents Softener for fluorocarbon Solar® Magenta 2B \*application partnership finish: Chemicals for cellulose Solar® Cyan Alkaline reduction clearing agent: Dispersina & complexina agents: · Ceralube® PHD liq c with Outlast company · Solar® Brill Blue Cyclanon XC-W New liq · Ladipur® MCL liq · Bactosol® HPA liq • Solar® Black Dekol® RSK · Bactosol® CBS liq · Solar® Compound · Kieralon® UH liq **Digital printing** · Prestogen® FCB liq o · Lufibrol® ANTOX liq



Pastes:

Helizarin® White RT pa
Printofix® White STR pa
Helizarin® Ultra-fast Paste
Improvers and problem solvers:
Luprintol® Emulsifier PE New liq
Luprintol® Antifoam TC ECO liq
Luprintol® Additive RM01 liq

# / THE ARCHROMA WAY TO A SUSTAINABLE WORLD

#### 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.





























IMPACT ON WASTEWATER



COST OPTIMIZATION



PRODUCTIVITY OPTIMIZATION





MOISTURE MANAGEMENT



UV RAYS PROTECTION







MICROBIAL MATERIAL







STRENGTH



FRESH & ODORLESS



TOUCH / SOFT



DURABILITY / STAY NEW



NON IRON



Ask your Archroma representative for additional information on our system solutions

\*below limits of detection according to industry standard test methods





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SN EN ISO 14001:2015
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