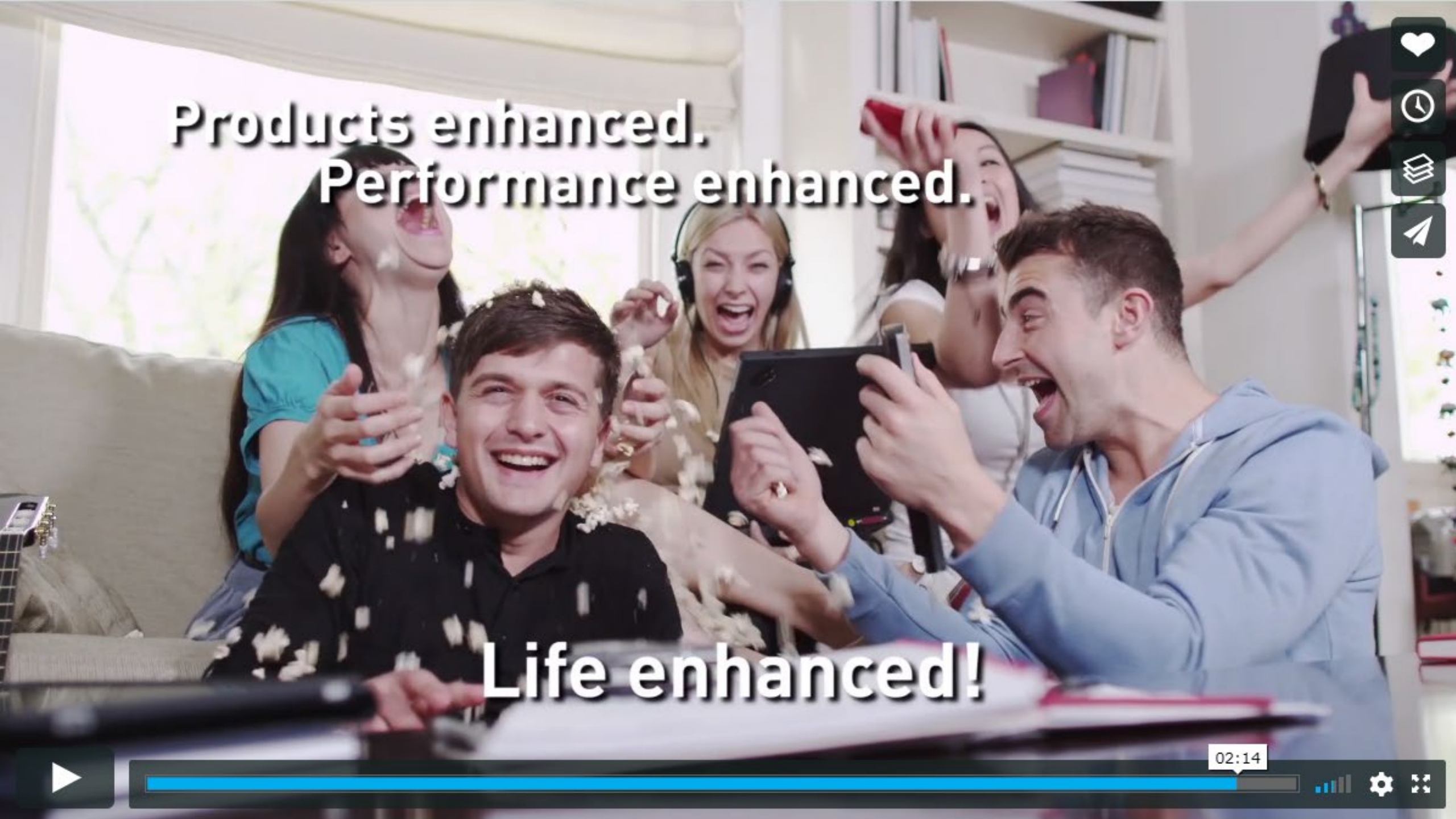
LIFE ENHANCED - IT'S OUR NATURE

Corporate presentation


Products enhanced.
Performance enhanced.
Life enhanced!
02:14

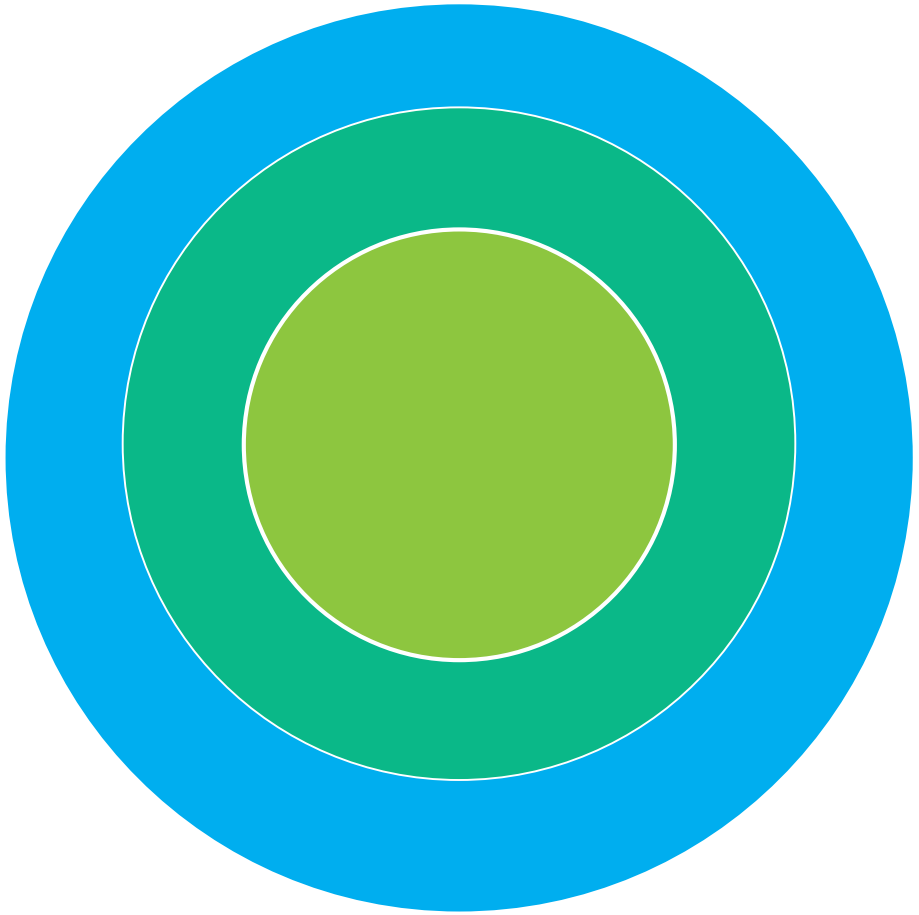
We touch and color **people's lives**

every day, everywhere

ARCHROMA
LIFE ENHANCED
We continuously challenge the status quo
in the **deep belief** that **we** can make our industry
sustainable.

ARCHROMA
LIFE ENHANCED
The “Archroma Way”
SAFE, EFFICIENT, ENHANCED
It’s our nature

The Archroma Way: Safe, Efficient, Enhanced. It’s our nature.



1. SAFE - IT'S OUR NATURE TO PROTECT

A solid core: Our deeply rooted goal to protect people and our planet.
Safe to use, safe to release and also safe to wear.

2. EFFICIENT - IT'S OUR NATURE TO RETHINK SUSTAINABLE MANUFACTURING

Innovating application processes that minimize resources and maximize productivity, both in our and our customers' manufacturing as well as by setting ourselves ambitious sustainability goals.

3. ENHANCED - IT'S OUR NATURE TO ADD ANOTHER LEVEL OF VALUE

Your innovation is critical. Additional effects, functionalities and aesthetics give additional value, helping consumers to achieve their goals, for a life enhanced.

The Archroma Way / Safe + Efficient = The Sustainable Collection

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The Archroma Way / Safe + Efficient + Enhanced = The Ultimate Collection. **It's our nature**.

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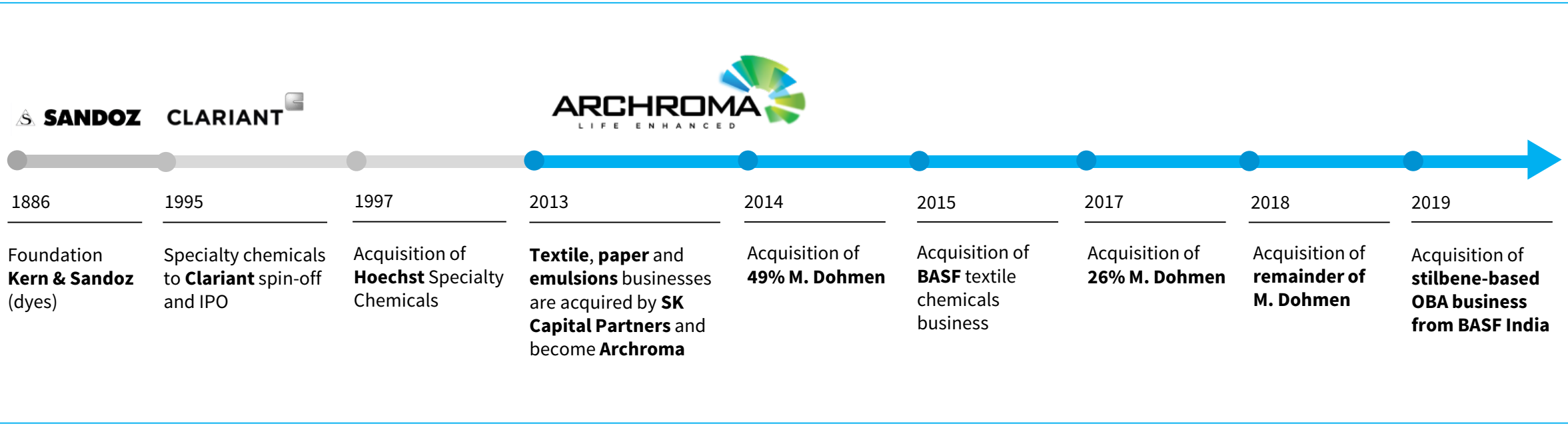
Archroma. A global leader with a trusted heritage.

"We touch and color people's lives every day, everywhere."

A trusted heritage



A global leader in specialty chemicals across the textile, paper and emulsions sectors

Brand & Performance Textile Specialties (BPT)

Global leader in textile chemicals and dyes

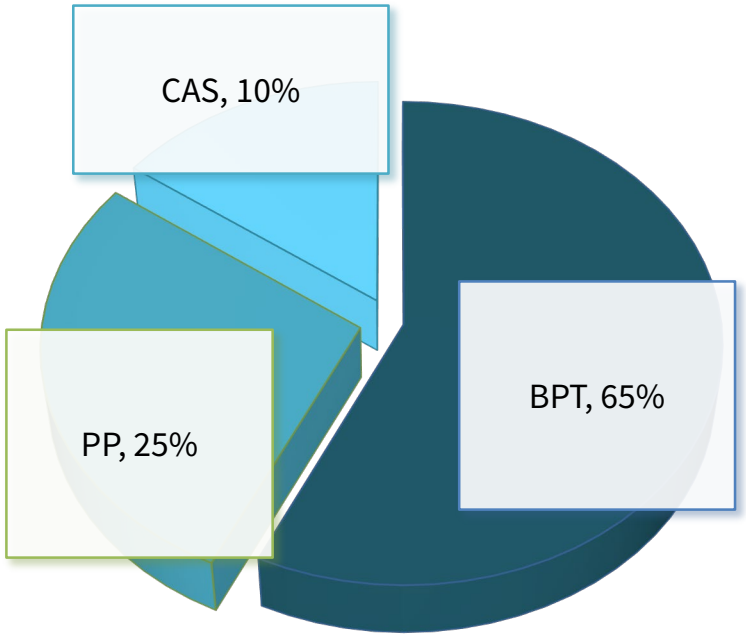
Packaging & Paper Specialties (PP)

Leading provider of colorants, optical brightening agents, process and surface chemicals

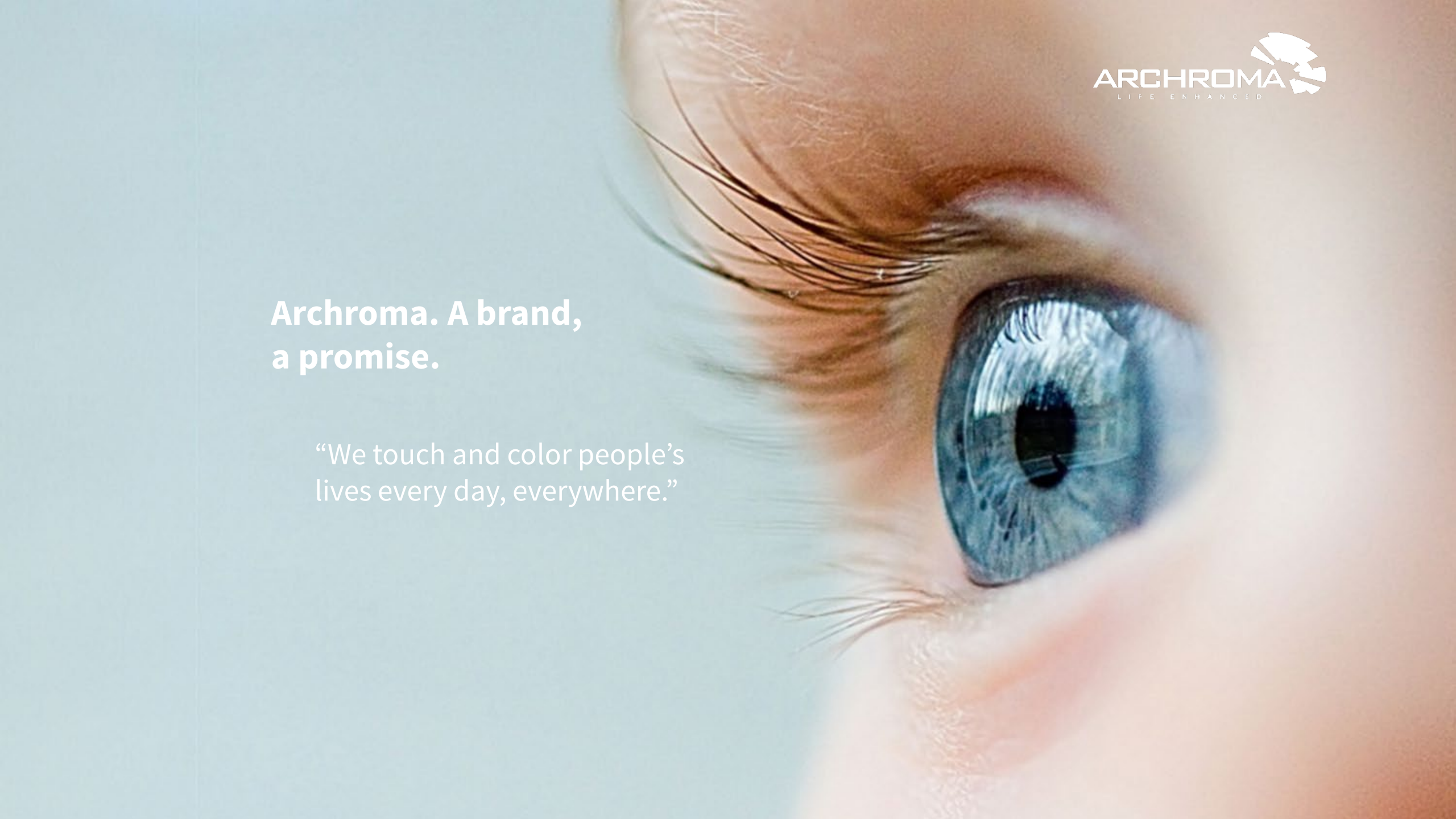
Coatings, Adhesives & Sealants (CAS)

Leading provider of specialty emulsions to paints, adhesives, construction and the textile, leather and paper sectors

Sales FY Oct-2016 to Sep-2017: 1.270 BUSD



A global player, part of the SK Capital team



Archroma. A brand, a promise.

"We touch and color people's lives every day, everywhere."

Introducing Archroma

Leading specialty chemicals company

Foundation

- Best in class **technologies**, **expertise**, and **people**
- **Global footprint**, Swiss & German designed assets, with **trusted heritage**

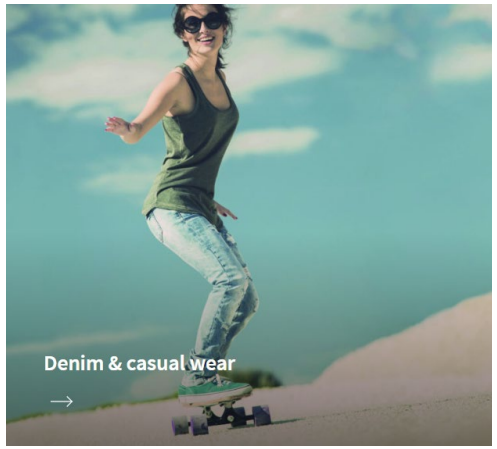
It's our nature

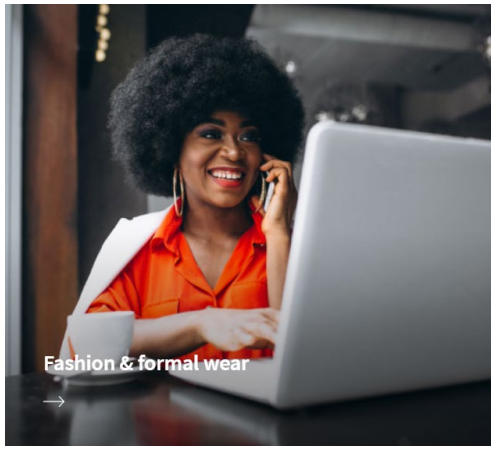
Brand focused marketing company

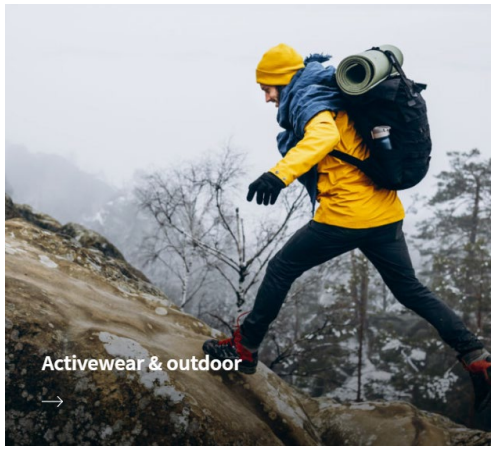
Execution/outcome

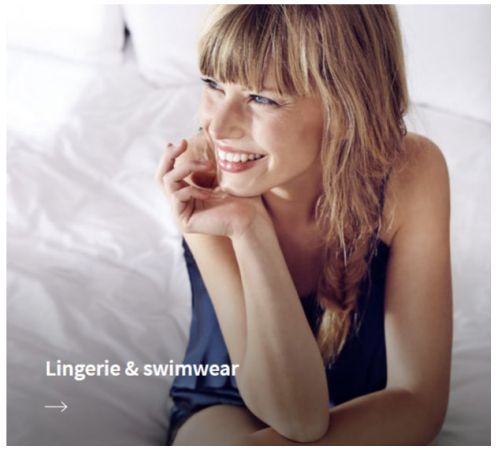
- **Brands** and **consumers** intimacy
- **Solutions focus** for **value creation** and **sustainability**

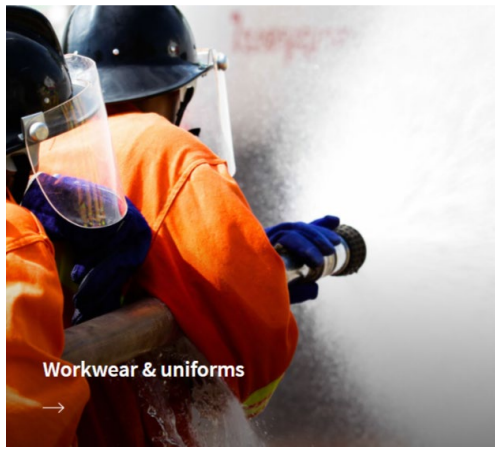
The markets segments that we serve / Clothing, textiles & leather materials

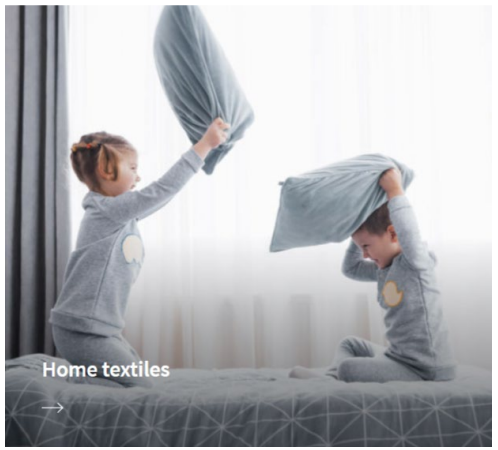


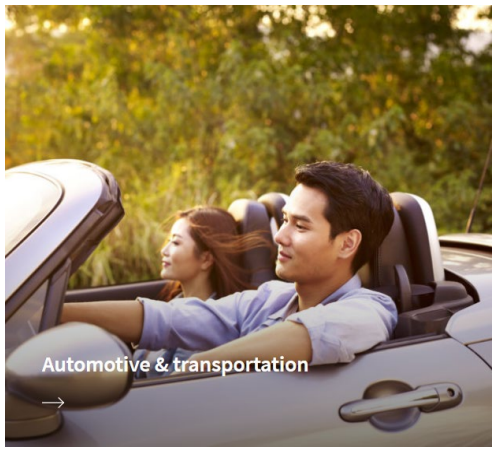


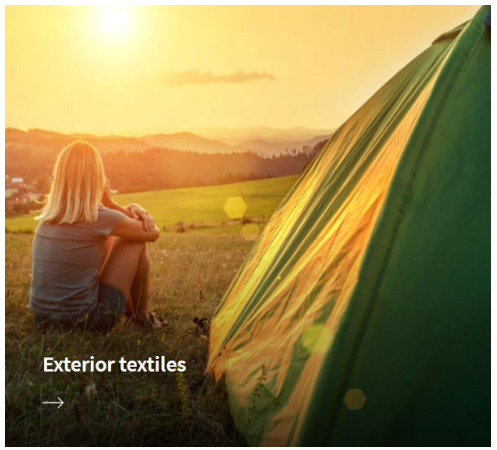




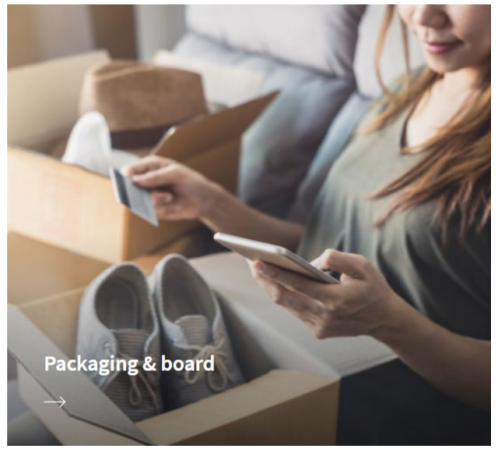


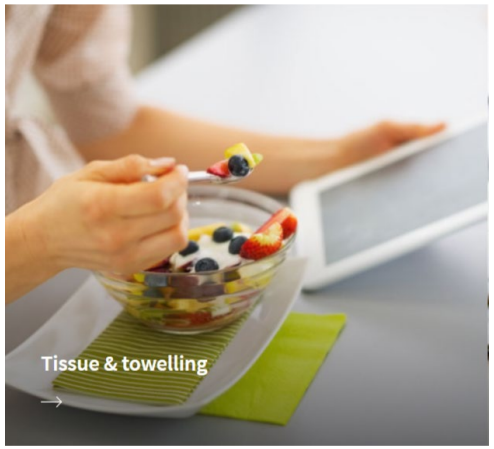


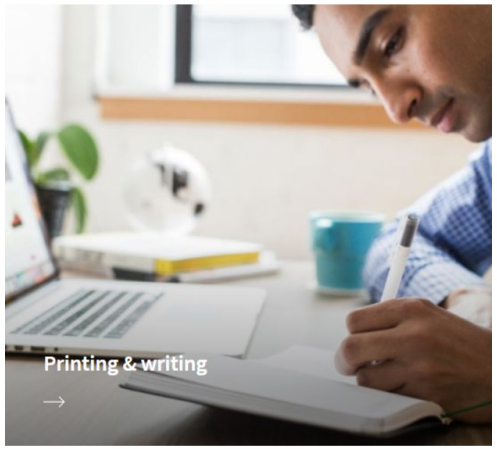




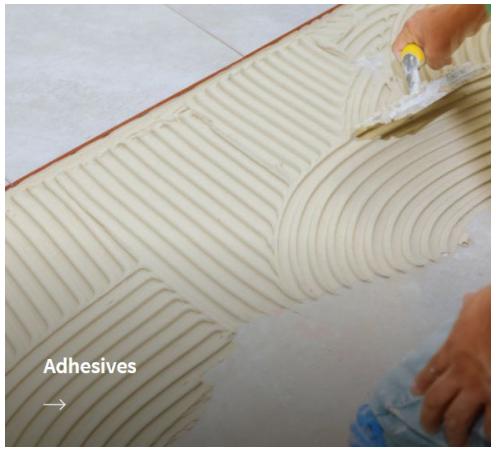
The markets segments that we serve / Packaging & paper

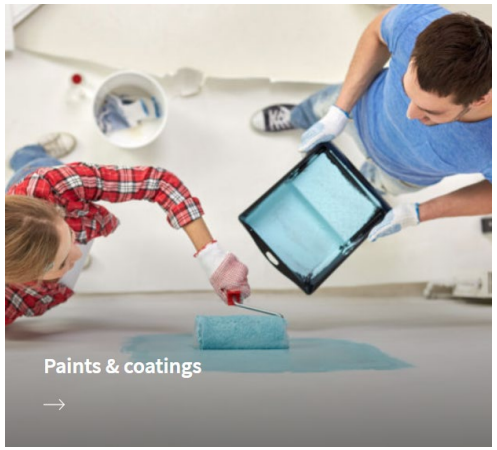


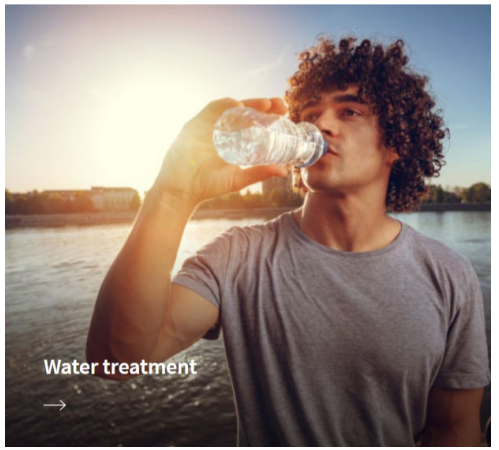


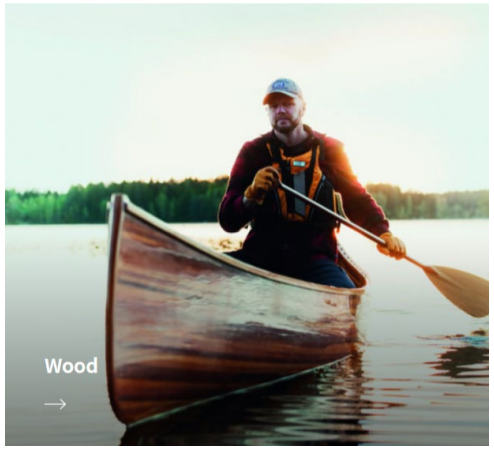


The markets segments that we serve / Paints, industrial & construction

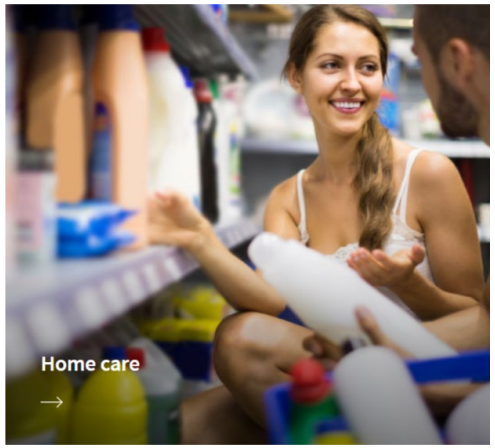


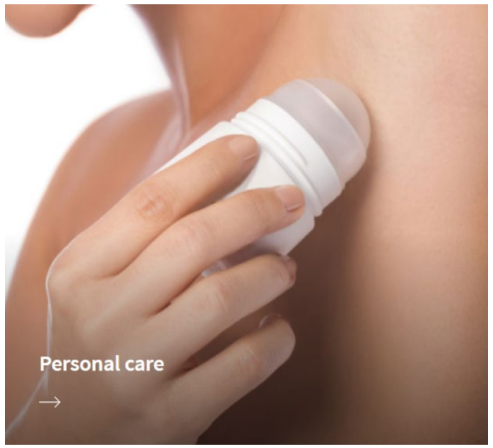






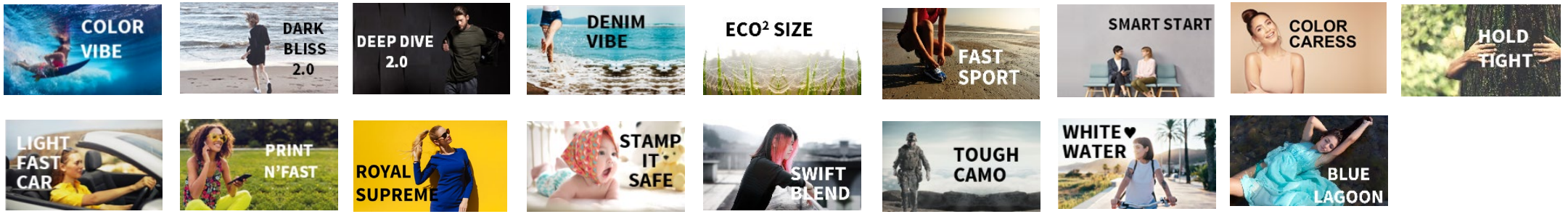
The markets segments that we serve / Home & personal care



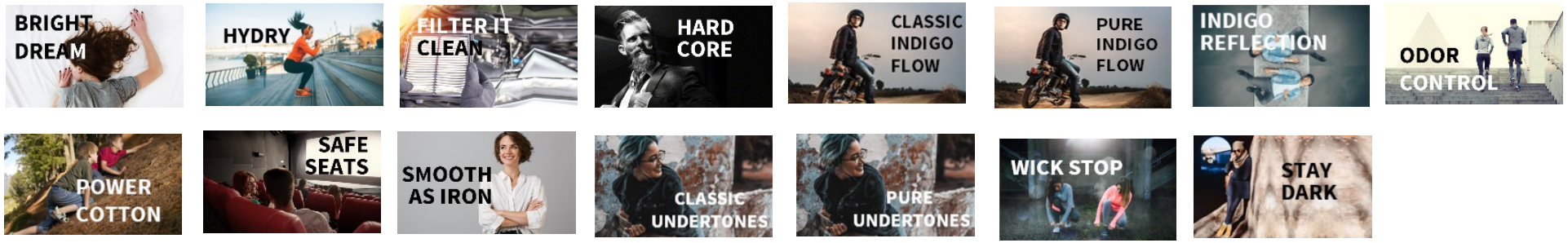


System solutions / With well established color and specialty chemicals

THE SUSTAINABLE COLLECTION BY ARCHROMA



THE ENHANCED COLLECTION BY ARCHROMA



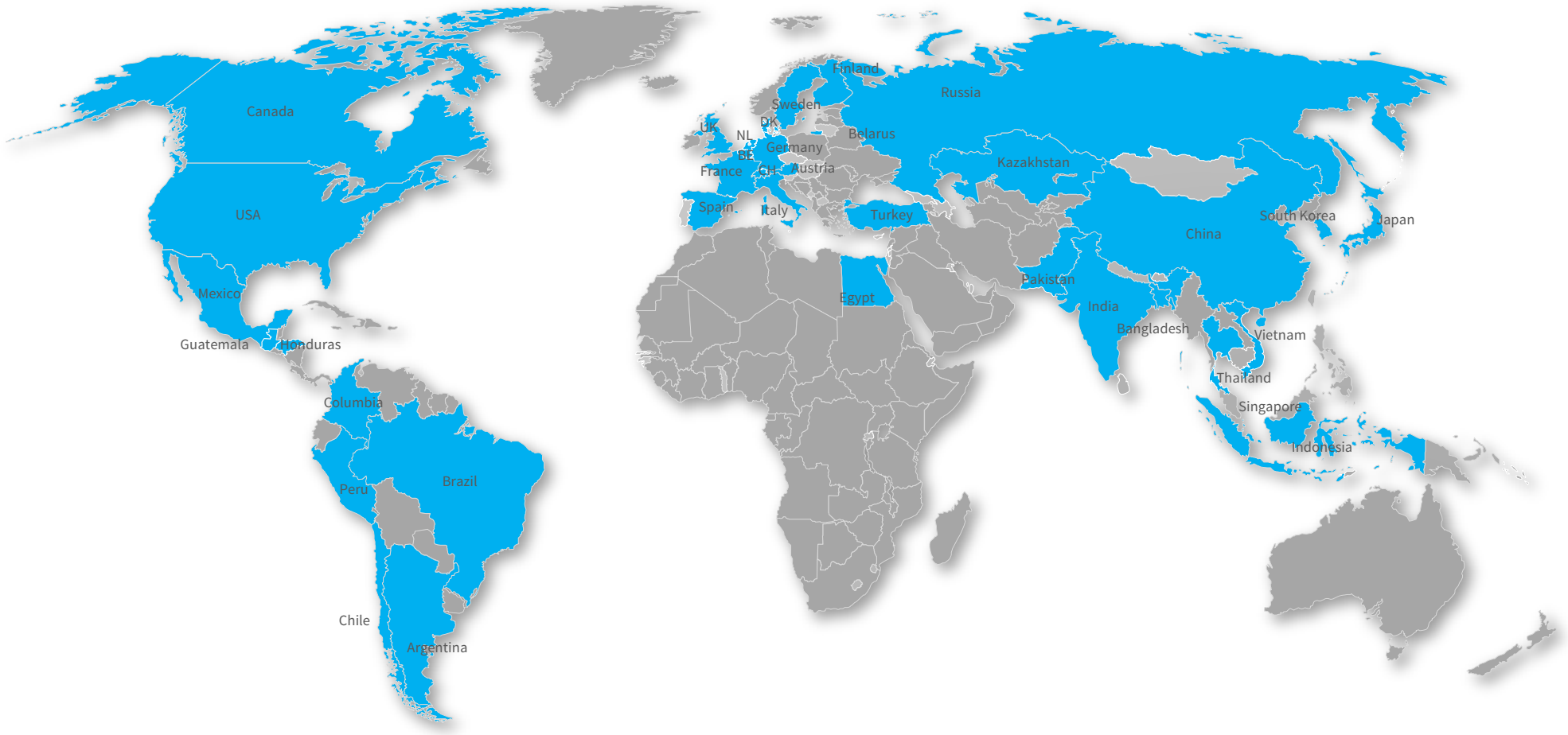
THE ULTIMATE COLLECTION BY ARCHROMA

Archroma. Global footprint and technology.

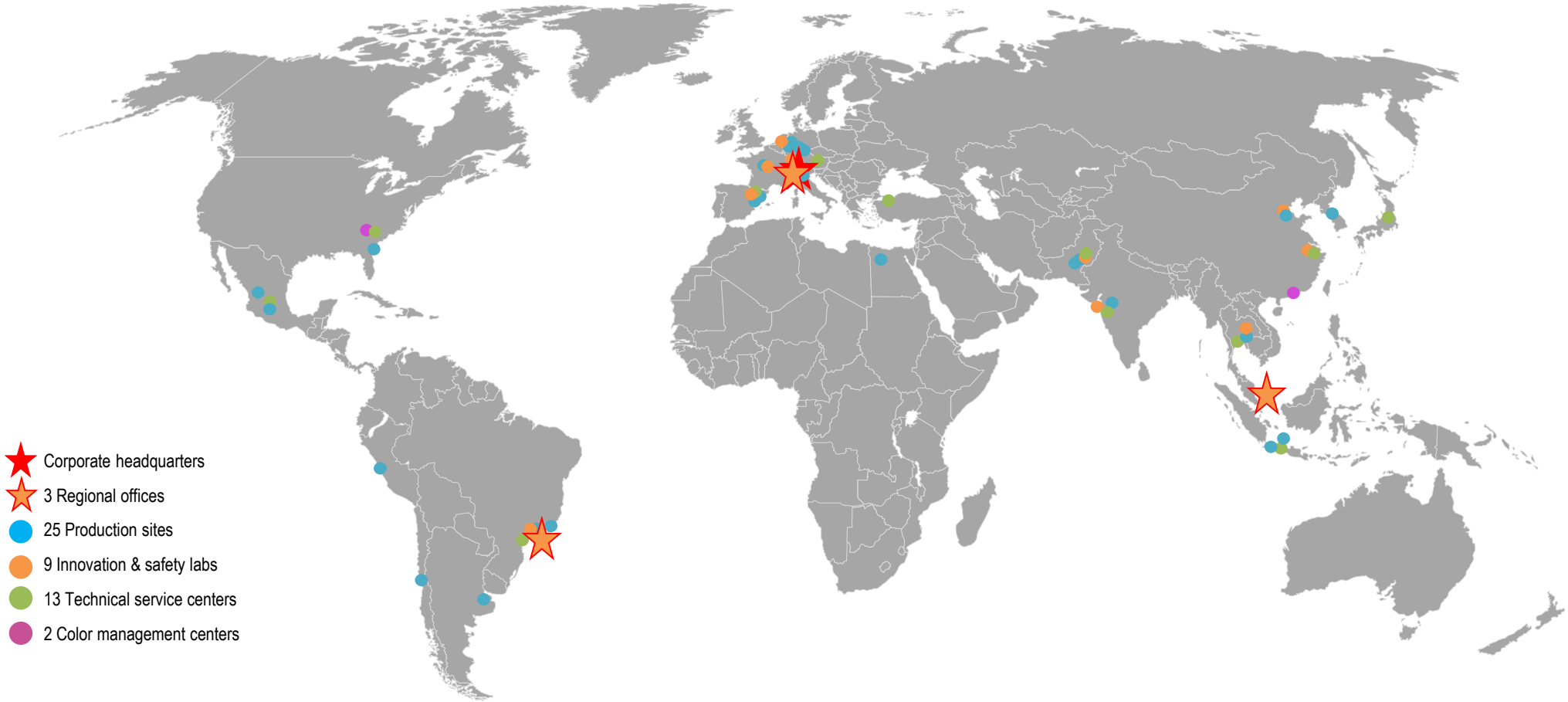
“We touch and color people’s lives every day, everywhere.”

A company with a global footprint

Archroma presence worldwide



Global presence / Sites and offices



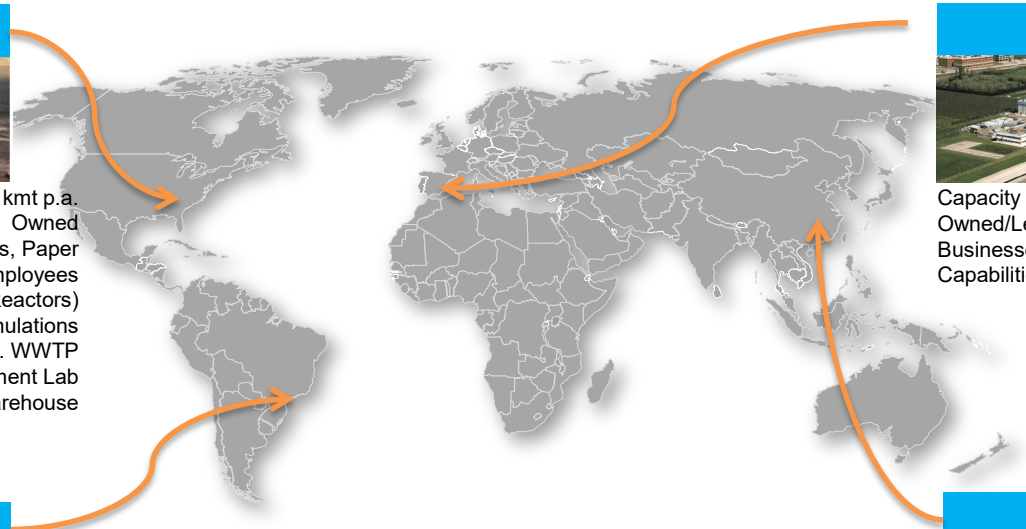
Key production sites well positioned in the main markets

Martin, United States

Capacity	80 kmt p.a.
Owned/Leased	Owned
Businesses	Textiles, Paper
Capabilities	80 skilled Employees
	Synthesis (30+ Reactors)
	Liquid Formulations
	Utilities incl. WWTP
	Process Improvement Lab
	Warehouse

Prat, Spain

Capacity	50 kmt p.a.
Owned/Leased	Owned
Businesses	Textiles, Paper
Capabilities	220 skilled Employees
	Synthesis (50+ Reactors)
	Liquid/Powder Formulations
	Utilities incl. WWTP
	Process Development Lab
	Warehouse



Over 680,000 tons nameplate capacity across 26 manufacturing sites

Resende, Brazil

Capacity	40 kmt p.a.
Owned/Leased	Owned
Businesses	Textiles, Paper, Emulsions
Capabilities	170 skilled Employees
	Synthesis (50+ Reactors)
	Liquid/Powder Formulations
	Utilities incl. WWTP
	Process Improvement Lab
	Warehouse

Tianjin, China

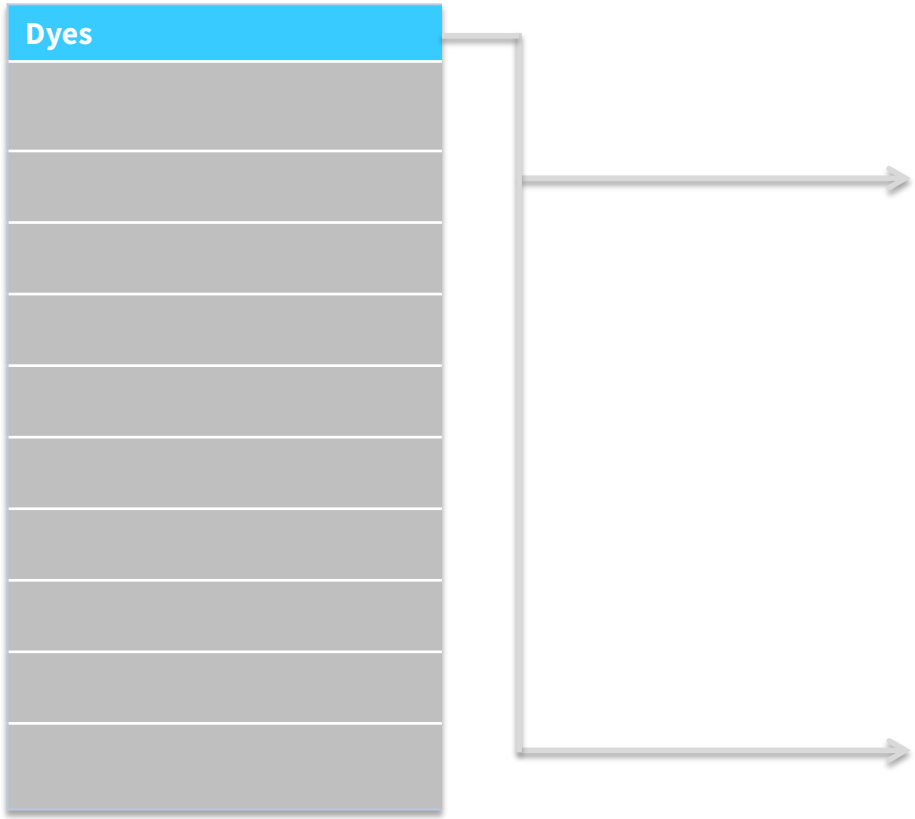
Capacity	40 kmt p.a.
Owned/Leased	Owned
Businesses	Textiles, Paper, Emulsions
Capabilities	270 skilled Employees
	Synthesis (40+ Reactors)
	Liquid/Powder Formulations
	Utilities incl. WWTP
	Process Development Lab
	Warehouse

One global technology platform / Serving many applications

- Dyes
- Emulsions
- Pigment dispersions
- Polymer dispersions
- Optical brighteners
- Fluorinated polymers
- Silicones
- Surfactants
- Glyoxal Resins
- Flame Retardants
- Hygienic products (Sanitized®)

- Fibers
- Fabrics
- Paper
- Packaging
- Tissue paper
- Pulp
- Coatings
- Paints
- Adhesives
- Construction

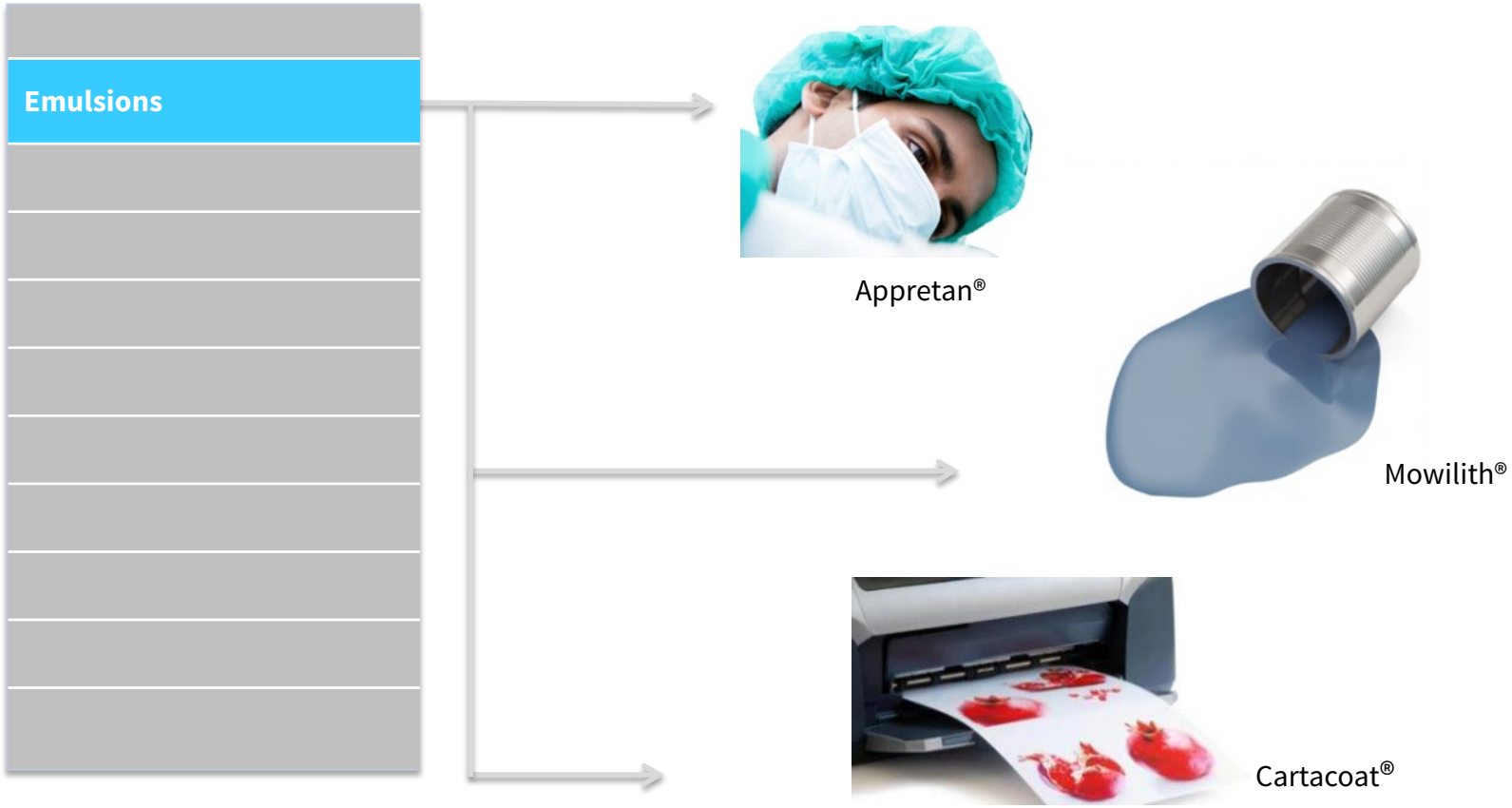
Technology improving many end products / Dyes



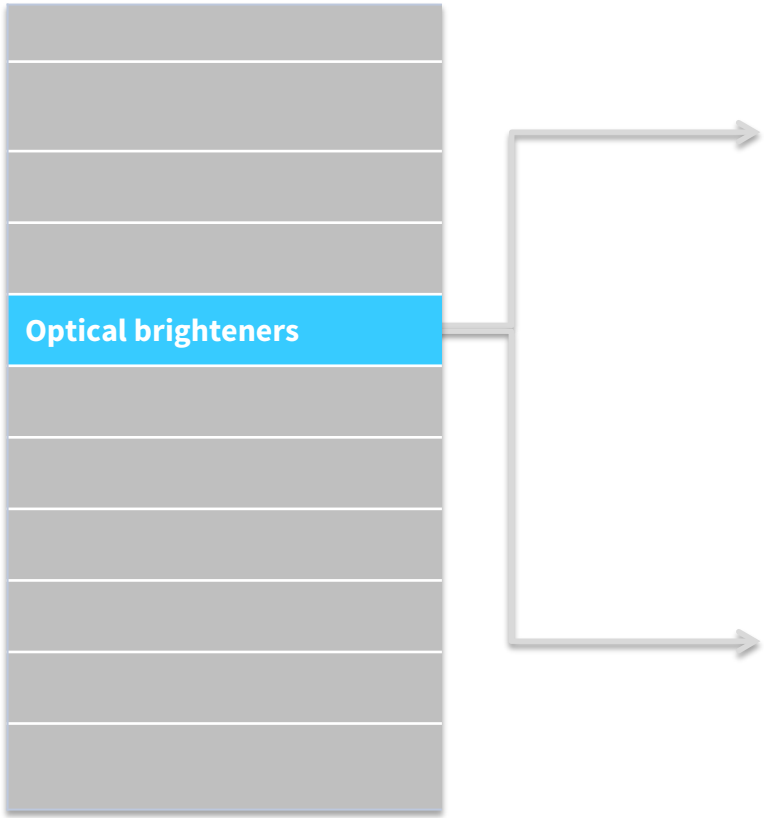
Foron®

Cartasol®

Technology improving many end products / Emulsions



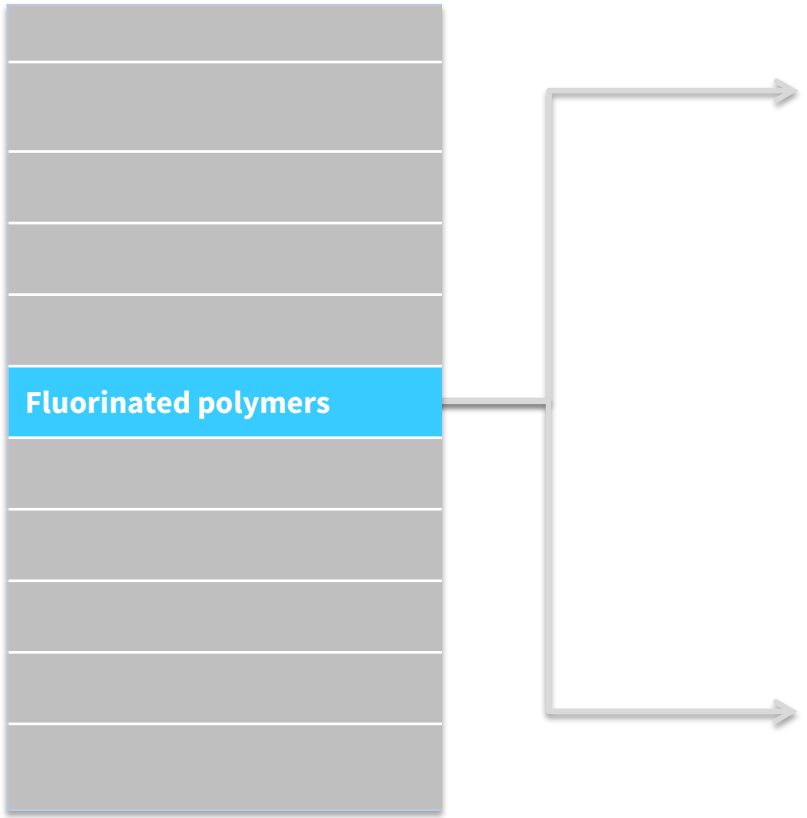
Technology improving many end products / Optical brighteners



Hostalux®, Leucophor®

Leucophor®

Technology improving many end products / Fluorinated polymers



Nuva® N

Cartafluor®

ARCHROMA
LIFE ENHANCED
Archroma. A proven innovation power.
“We touch and color people’s lives every day, everywhere.”

‘The purest Indigo’ / Aniline-free* Denisol® Pure Indigo, the purest indigo

* Below limits of detection according to industry standard test methods

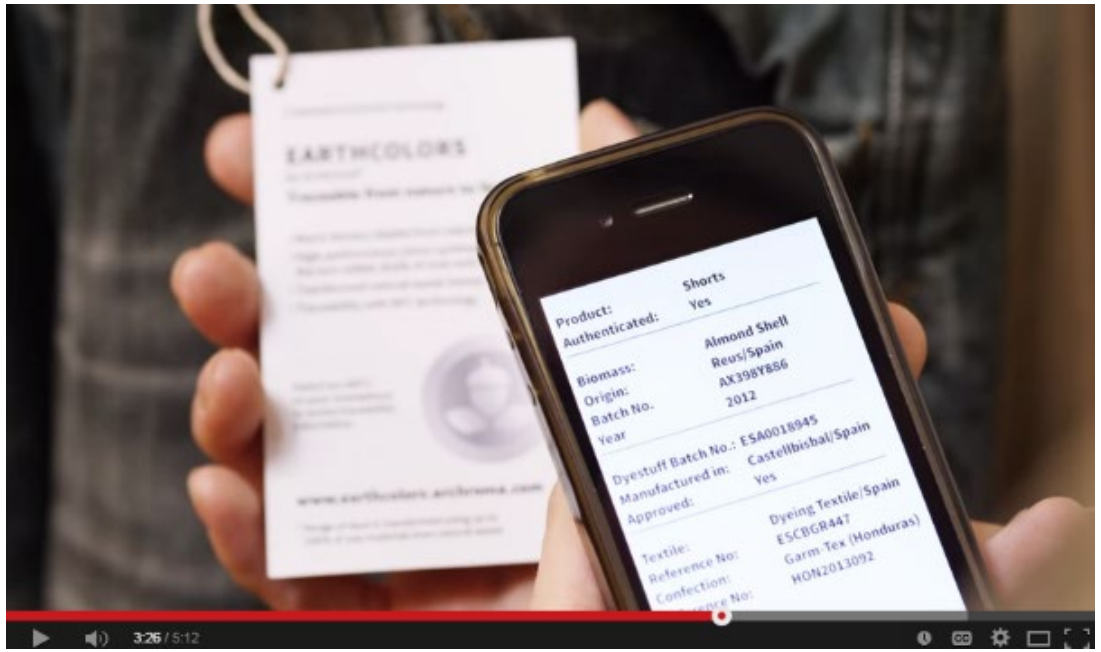
- Launched in 2018
- Aniline-free* pre-reduced synthetic indigo dye, **Denisol® Pure Indigo 30 liq**, is just the same as the authentic indigo blue that consumers associate with iconic denim…
- …without the eco-toxic substance usually found in traditional indigo

Don’t know what is aniline? Watch the video

Check the system

Traceable from nature to fashion / EarthColors®

- Warm ternary shades from nature
- High-performance colors synthesized from the non-edible shells of nuts and leaves
- Transformed natural waste-based colorants
- Traceability with NFC technology



Saving water with denim coloration technology / Advanced Denim

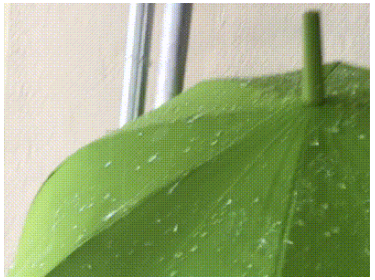
- Proprietary Pad/Sizing-Ox process with Diresul® RDT sulfur dyes:
  - 90% water
  - 30% energy
  - 87% cotton waste

- EU Eco-label 2011, 2012 ICIS Innovation Award and Sustainability Innovation Award

Nature-friendlier water protection / Smartrepel® Hydro for non-fluorine solutions

New Smartrepel® Hydro keeps outdoor clothing dry and nature cleaner

- Nature-friendlier water repellent protection with high wash resistance for cotton and synthetic fibers and their blends
- New generation of non-fluorine chemistry that meets criteria for PFC-free* finishes and clothing: compliant with ZDHC MRSL and Oeko-Tex® standard; blue-sign® approved

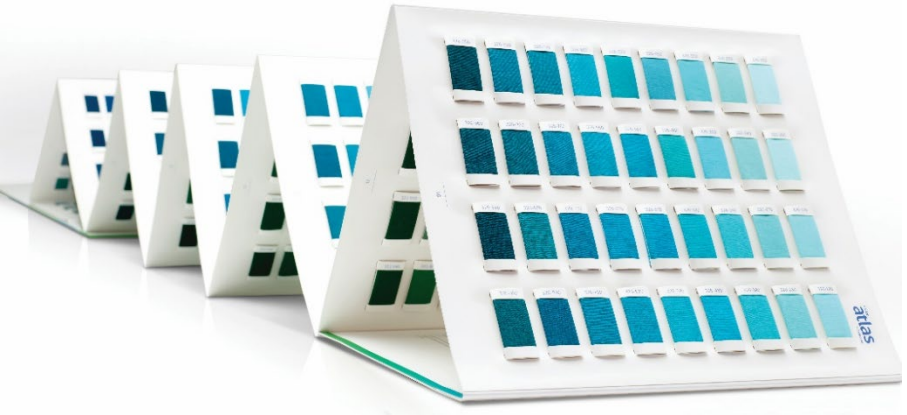


* Below limits of detection according to industry standard test methods

The Color Atlas by Archroma® / Do you dream in colors?

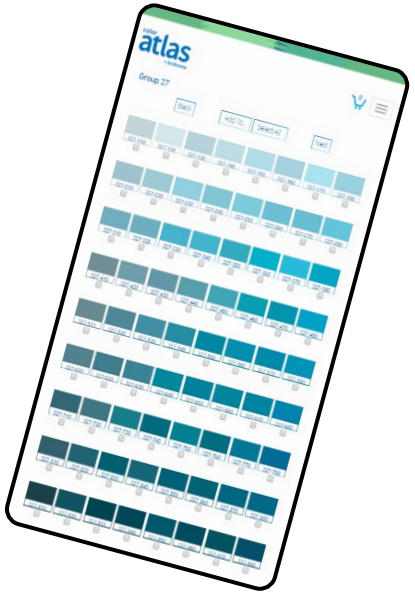
POWER UP THE PHYSICAL...

- **4,320 colors** sorted and arranged under daylight (D65) in a 6-volume book set
- Engineered Color Standards **reproducible in production**
- Mill technical support available through Archroma's global offices
- Many colors formulated with dyes that comply with leading eco-standards



...WITH THE DIGITAL

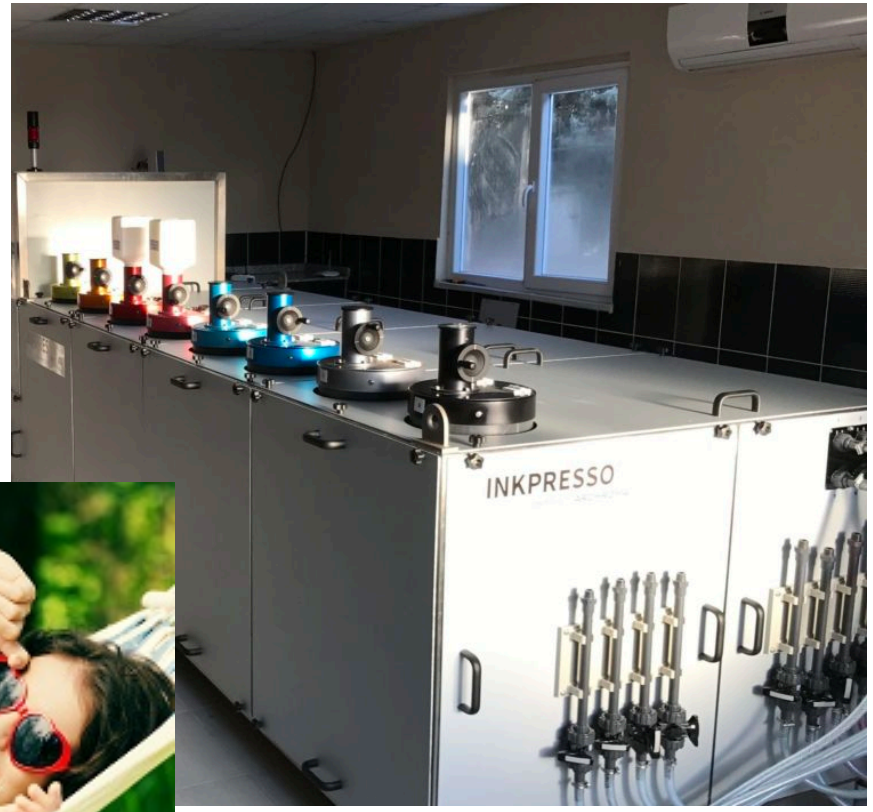
- **Digital Atlas App** and **Color Atlas Online** for easy online color browsing: coloratlas.archroma.com
- Match the **colors from any photo or image** via Color Atlas Online
- Dedicated color pages with dyeing recipes, technical support, and visual representation of similar colors
- **NFC tags** on Engineered Color Standards with order number and date, and link to online color page



Digital ink on site and on demand / Inkpresso® for textile digital printing

Developed with Ink-Situ Swiss technology provider, Inkpresso® brings ink manufacture back to the printers

- Mix your own ink on site and on demand
- Access benefits that were unattainable so far in inkjet printing:
  - ✓ Production flexibility and no shelf-life problems
  - ✓ Larger color spectrum, possibility of individual coloristic fingerprint
  - ✓ Reduced transport costs and environmental impact



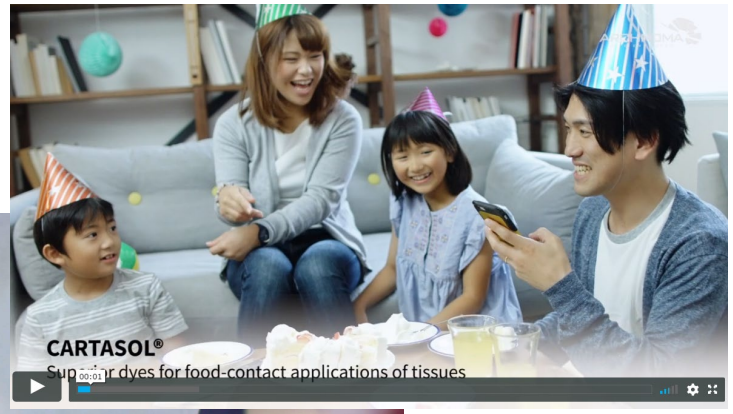
Nature-based polymers for food contact / Appretan® NTR

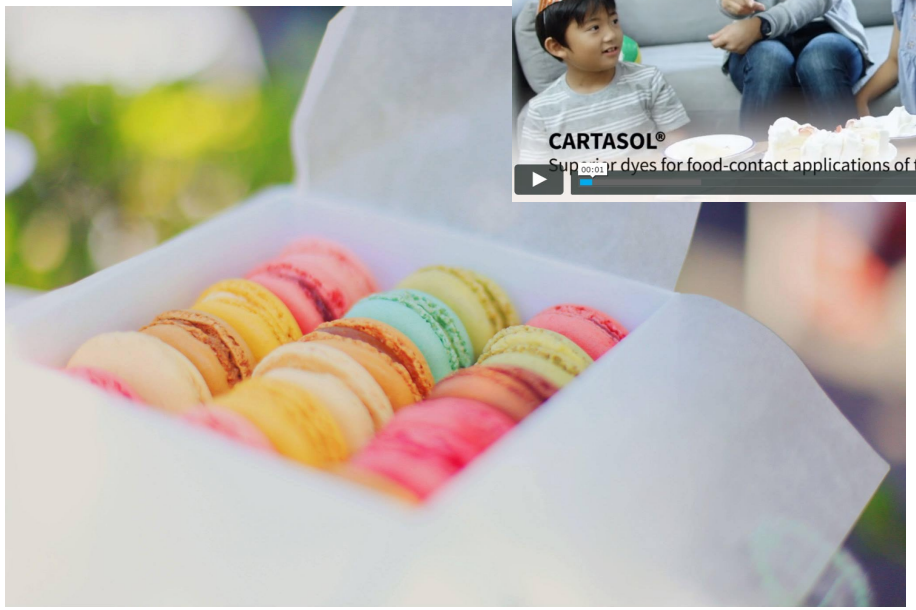
- Break-through coating binder range based on renewable natural ingredients
- Acrylic copolymer containing 1/3 based on a polysaccharide from renewable raw materials
- Hydrophobic and high film formation
- Excellent mechanical properties as such and in boiling water - Ideal for hot liquid applications such as tea bags, coffee filters or capsules
- Reduction in use of fossil fuel based resources without compromising on performance
- Formaldehyde free*, non-biocidal, APEO free
- Complies with BfR XXXVI/1 food contact regulation standard

* Below limits of detection according to industry standard test methods

New food compliant colorants and OBAs / Cartasol® & Leucophor® AFCN

- Cartasol® for tissue applications - New food compliant grades developed to comply with European regulations setting extremely low limitations for DEA and TEA contents in paper and board intended for food contact applications
- A new palette of safer grades that will help tissue paper makers create the exciting colors that the consumers are longing for
- Leucophor® AFCN, a new FDA-approved optical brightening agent (OBA) aimed for food contact, high-whiteness packaging and paper

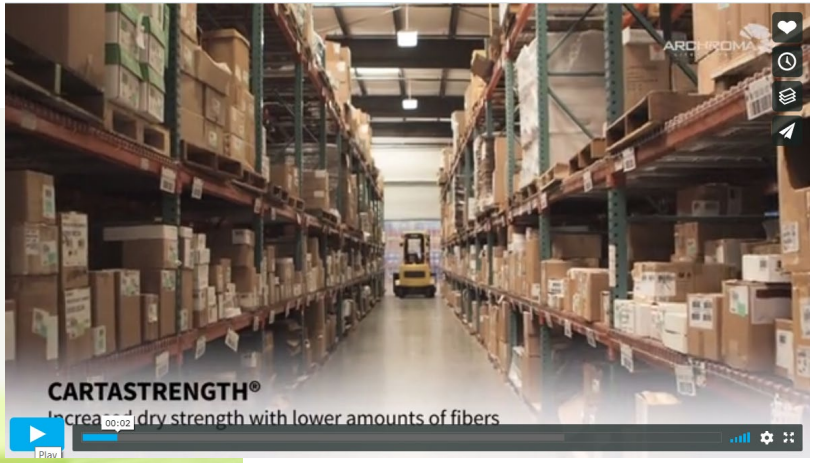




Click on the image to play video

Dry strength booster for more recyclability / Cartastrength® ABL for packaging and tissue

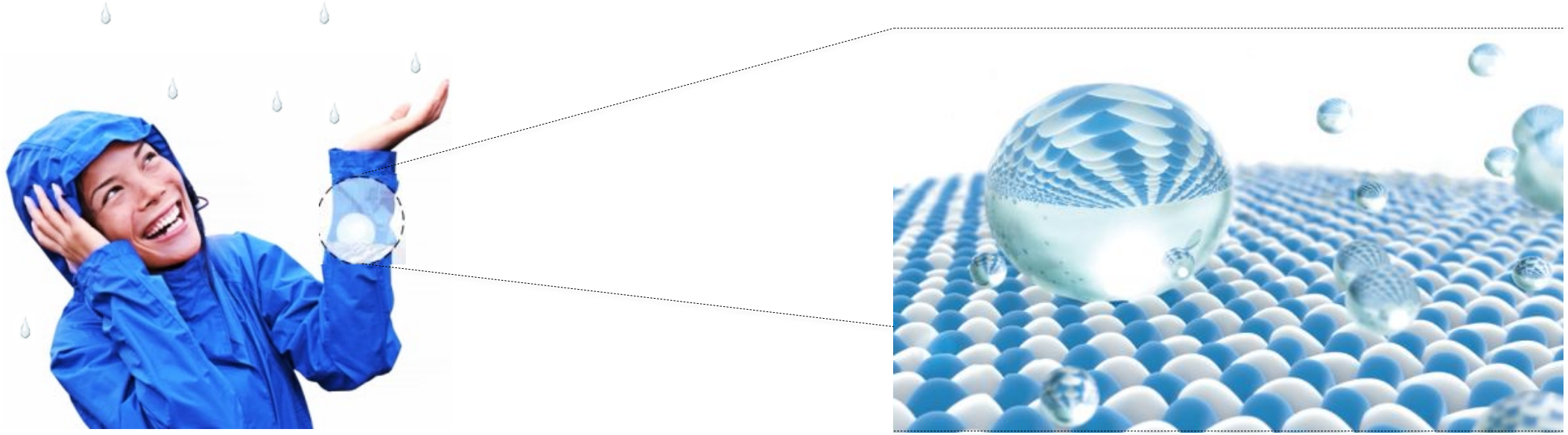
- Create more durable board and paper by making board and paper stronger or by making the use of recycled fiber easier
- Cartastrength® ABL to boost the performance of wet, dry and surface strength solutions, as well as improve the retention of fines and fillers
- Cartastrength® ABL also helps with deposit control (stickies) and machine runnability
- A new chemistry that benefits not only paper producers – who will enjoy a more efficient and cost effective production process, but also the environment, because the recyclability of paper and board is made easier



Click on the image to play video

Uncompromised repellency / Nuva® N, PFOA-free* C6–based chemistry

- EPA voluntary global stewardship elimination program of PFOA from manufacturing emissions and products by 2015
- C6 next-generation PFOA-free* fluorochemical alternatives first introduced in 2006
- Uncompromised repellency of water, oil and soil, as well as soil release effects



* Below limits of detection according to industry standard test methods

New generation of high-strength, urea-free disulphonated OBAs / Leucophor® ACK

Highly concentrated disulphonated OBA with advantages of reduced transportation and handling:

- Reduced carbon dioxide effect by estimated 42 tons per year[2]
- Up to 40% reduction in OBA demand in a wet-end application

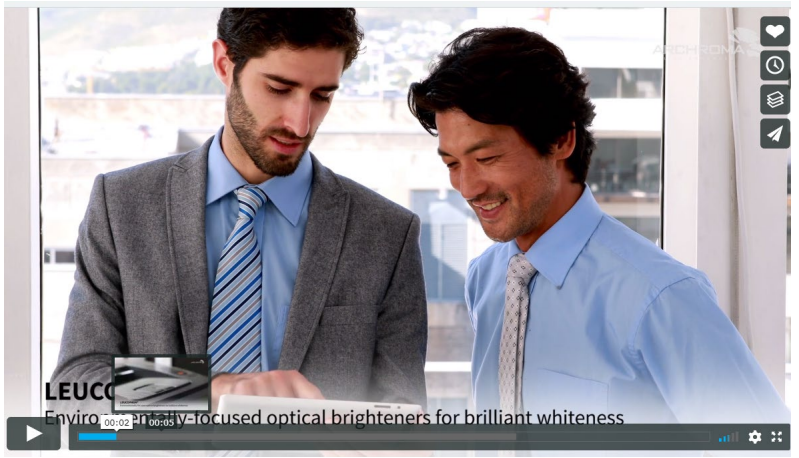
/ Unique in strength and chemistry

/ Free-flowing liquid at room temperature

/ Urea- and glycol-free* - Registered under REACH

/ Application cost advantage over existing chemistry

Click on the image to play video



* Below limits of detection according to industry standard test methods

Practical and sustainable one-component waterproofing mortars / Mowilith® POWDER 2702

* Below limits of detection according to industry standard test methods

- Ground-breaking innovation for practical and sustainable one-component waterproofing mortars in building and construction applications
- Enhanced waterproofing performance in comparison to traditional two-component systems and to other polymers available for waterproofing mortars
- Meets the requirements for being approved to potable water reservoirs
- APEO-free*, solvent-free*, ammonia-free*, low odor, low VOC and low formaldehyde content

Archroma. A recognized commitment to sustainability.

“We touch and color people’s lives every day, everywhere.”

Commitment to sustainability

- Strong support for and focus on **compliance to eco-standards**:
  - Bluesign®
  - Cefic
  - ETAD®
  - EU Ecolabel
  - FluoroCouncil
  - GOTS
  - Nordic Swan
  - Oeko-Tex®
  - SAC
  - SDC
  - Textile Exchange
  - TEGEWA
  - The Blue Angel
  - UNGC
  - ZDHC
  - TSCA
  - FDA
  - BfR
  - REACH

- Committed to Safety, Environment & Health as a **fair and responsible company** and **employer**

Industry recognition

- Award-winning innovation:
  - 2017 Gold Winner at the **OutDoor Industry Award 2017**, Sustainable innovations Category, for **EarthColors**
  - 2014 Corporate Water Stewardship Award (Global Water Summit) for our SET **Sustainable Effluent Treatment Facility** in Pakistan
  - 2013 ICIS Innovation Award for our **ONE WAY Sustainability Service**
  - 2012 ICIS Innovation Award for **Advanced Denim dyeing**
  - 2007 EPA “P2 Recognition Project” Award for **deposit control agent Cartaspers® PSM**, a product used in paper manufacturing

- Certified quality, environmental and safety management:
  - 2016 WWF Pakistan Eco-innovation Award For **Sustainability Initiatives**
  - **Global certification** to **ISO 9001**, **ISO 14001** and **OHSAS 18001** (Occupational Health and Safety Assessment Series)

Leading the way towards zero discharge – Archroma's Sustainable Effluent Treatment facility in Jamshoro, Pakistan

- Presence since 1970 in a region under severe water stress
- A substantial investment (c. $3.5 million US) made in 2010
- A unique combination and sequence of treatment techniques to recover water, return it in the production facility and significantly reduce our demand from local water supplies
- 1,200 and 1,300 cubic meters of effluent generated daily passing through treatment
- 3 to 4 tons dried sludge incinerated to create steam used in the production facility

➔ Reduced steam energy and reclaimed water for Jamshoro

ARCHROMA LEADERSHIP TEAM

Leadership team with significant experience in the chemicals and process industries

Heike van de Kerkhof
Chief Executive Officer (CEO)

John Jansen
President Commercial Region Americas

Michel Zumstein
President Commercial Region Asia

Beate Plueckhan
President Commercial Region EMEA

Marcos Furrer
President Businesses, New Markets and Innovation

Andreas Wickli
President Operations

Danielle Blomert
President Supply Chain & Strategic Initiatives

Roland Waibel
Chief Financial Officer (CFO)

Silke Wischeropp
General Counsel

THANK YOU