# Innovative solutions THAT PROTECT OUR WORLD

# Silently protecting

Arxada is a global industry trailblazer in innovative solutions that protect our world.
Our microbial control solutions are the silent protectors you don't even know exist in your everyday products.

Wherever there is water, there are harmful microbes—and wherever microbes exist, our solutions help control them.

You'll find our products in your home, from shampoos and dish soap to disinfecting wipes, the paint on your walls or on your boat, and even in the wood deck or fence surrounding your property.

OUR JOURNEY, SCALE & market focus

#### **Timeline**



**1897** Lonza



**1950** Troy Corporation



1991 Enviro Tech

7,200



2021 Arxada founded



Dec 2021 Troy merger Dec 2021
Enviro Tech
acquisition

#### **Key stats**

2bn

revenue in 2024

customers

unique trademarks

1,600

products across multiple end markets

99

new inventions filed in the last 5 years

#### **End markets**

active granted

patents



Human Health & Nutrition



Home & Personal Care



Paints & Coatings



**Wood Protection** 



Industrials

3,200 Employees worldwide

14 R&D facilities

24
Manufacturing facilities

100+
Countries served

Global presence, locally manufactured across Americas, EMEA & APAC



#### Headquarters

• Basel (Switzerland)

#### **Main Commercial Sites**

- Barcelona (Spain)
- Bangkok (Thailand)
- Delft (Netherlands)
- Morristown (NJ, USA)
- Shanghai (China)
- Tokyo (Japan)

#### R&D

- Alpharetta (GA, USA)
- Bangkok (Thailand)
- Morristown (NJ, USA)
- Hannover (Germany)
- Manchester (UK)
- Melbourne (Australia)
- Shanghai (China)

#### Manufacturing

- Auckland (New Zealand)
- Newark (NJ, USA)
   Holona (AP, USA)
- Helena (AR, USA)
- Penang (Malaysia)
- Huddersfield (UK)
- Phoenix (AZ, USA)Horhausen (Germany)
- Port Shepstone (South Africa)
- · Kabin Buri (Thailand)

- Rochester (NY, USA)
- Kalama (VA, USA)
- Suzhou (China)
- Mapleton (IL, USA)Trentham (Australia)
- Moerdijk (Netherlands)
- Valparaiso (IN, USA)
- Nanjing (China)

#### Combined R&D/manufacturing

- Conley (GA, USA)
- Modesto (CA, USA)
- New Plymouth (New Zealand)
- Kourim (Czech Republic)
- Salto (Brazil)
- Visp (Switzerland)
- Williamsport (PA, USA)



Our competitive strengths

Microbial control
POWERHOUSE

Unparallelled REGULATORY SUPPORT

One-stop shop
WITH GLOBAL REACH

Leading
TECHNOLOGY
PLATFORMS

Innovative solutions
THAT PROTECT
OUR WORLD

*Decide* & DRIVE

Collaborate ALWAYS

Go BEYOND

Foster GRIT

Our behaviors

Arxada company presentation | 2025

Unparalleled regulatory support and leading technology platforms

#### Unparalleled regulatory support

No other company matches our regulatory expertise. We help customers launch compliant products that stand out—enabling them to make new, marketable claims.

As regulations grow more complex, our regulatory and R&D capabilities ensure customers bring products to market with added value, confidence, and a license to operate.

#### Leading technology platforms

Arxada is leading a new age of microbial control innovation.
We provide a unique combination of disciplines with expertise in biology, chemistry, and chemical engineering. Our scalable technology platforms align with market demands and customer needs, positioning us for significant organic growth through breakthrough technologies.

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Microbial Control Solutions MCS

Microbial Control Solutions offers an extensive portfolio of active chemistries and solutions, backed by exceptional regulatory support. Our strong track record in regulated markets sets us apart from our competitors.



Microbial Control Solutions

# Paints & COATINGS

#### **Applications**

Providing solutions that prevent algae, fungi, and fouling on coated surfaces, while ensuring product protection throughout the supply chain—from manufacturing and transportation to storage and final application.

#### **Solutions**

Our service capabilities are without equal in the industry, with technical service centers on four continents, plus applications labs, expert microbiology, outdoor exposure testing, and robust dedicated R&D teams.



Microbial Control Solutions | Paints & Coatings

# In-can PROTECTION

Solutions to protect products and resist spoilage in storage by inhibiting bacterial & fungal contamination, using a wide range of actives for optimized use.







Microbial Control Solutions | Paints & Coatings

# Marine *ANTIFOULING*

Advanced solutions for helping prevent algae and other growth on hulls and marine surfaces—supporting optimized vessel performance, fuel efficiency, lower carbon emissions, and contributing to healthier marine ecosystems.



Microbial Control Solutions | Paints & Coatings

### Performance ADDITIVES

Our broad portfolio enhances liquid and powder coatings—improving application, drying time, and performance—with solutions like defoamers, dispersants, flow agents, and multifunctional additives.

Advanced resin systems provide superior durability, strength, and protection for critical, high-performance applications.



Microbial Control Solutions | Paints & Coatings

# Advanced *COMPOSITES & COATINGS*

We provide high-performance composite materials for telecommunications, consumer electronics, aerospace, automotive, and industrial sectors, supporting a wide range of structural and specialty uses.



Microbial Control Solutions

# Paints & COATINGS

#### Wet-state preservation

Proxel® Mergal®

#### Marine antifouling

Copper Omadine® UmiGard®

# Advanced composites & coatings

Primaset® Primacure® Primadur®

#### **Dry-paint preservation**

TIME Fungitrol® Polyphase® Omadine® Troysan® Omacide®

#### **Performance additives**

Polyboost™ Troythix®
Troysol® Powdermate®
Troykyd® Troymax®
Troysperse® Troycat®





Microbial Control Solutions

# Professional *HYGIENE*

#### **Applications**

Protecting public and professional environments, including healthcare settings, offices, schools and transportation.

#### **Solutions**

Our service capabilities are without equal in the industry, with global regulatory expertise, quality control programs, technical service centers, in major markets around the world on four continents, plus applications labs, expert microbiology and robust dedicated R&D teams.



Microbial Control Solutions | Professional Hygiene

# Professional *DISINFECTION*

Leading the way in trusted hygiene solutions, we protect various environments like offices, schools, restaurants, nursing homes, and transportation. We innovate for hospitals creating ready-to-use products, concentrates, and wipes for superior hygiene and safety. Our anti-microbial solutions, including Next-Gen disinfectants, are essential for the professional hygiene industry.





Microbial Control Solutions | Professional Hygiene

Food, beverage & WATER

We protect food, beverage, agriculture, industrial process water and wastewater industries with effective and economical solutions to kill harmful microorganisms.

Our differentiated portfolio sets industry standards for quality and reliability.



Microbial Control Solutions

# Professional *HYGIENE*

#### **Professional disinfection**

Quanticare<sup>™</sup> NUGEN® Bardac® Barquat®

#### Food, beverage & water

PeraGuard®
BioSide® HS 15%
Perasan A
BromMax®
Peraspray<sup>TM</sup>
Peragreen® WW

Peragreen® 5.6% ProMax® Peragrain A Dantobrom® Barlox® Hyamine®





Microbial Control Solutions

# Home & PERSONAL CARE

#### **Applications**

Our portfolio supports a wide range of uses across personal care and home care—covering everything from shampoos and lotions to disinfectants, laundry, and cleaning products.

#### **Solutions**

We offer high-performing, more sustainable solutions—featuring mild surfactants, bioactives, natural emulsifiers, and multifunctional ingredients made with renewable or biodegradable components, designed for efficacy and global compliance.

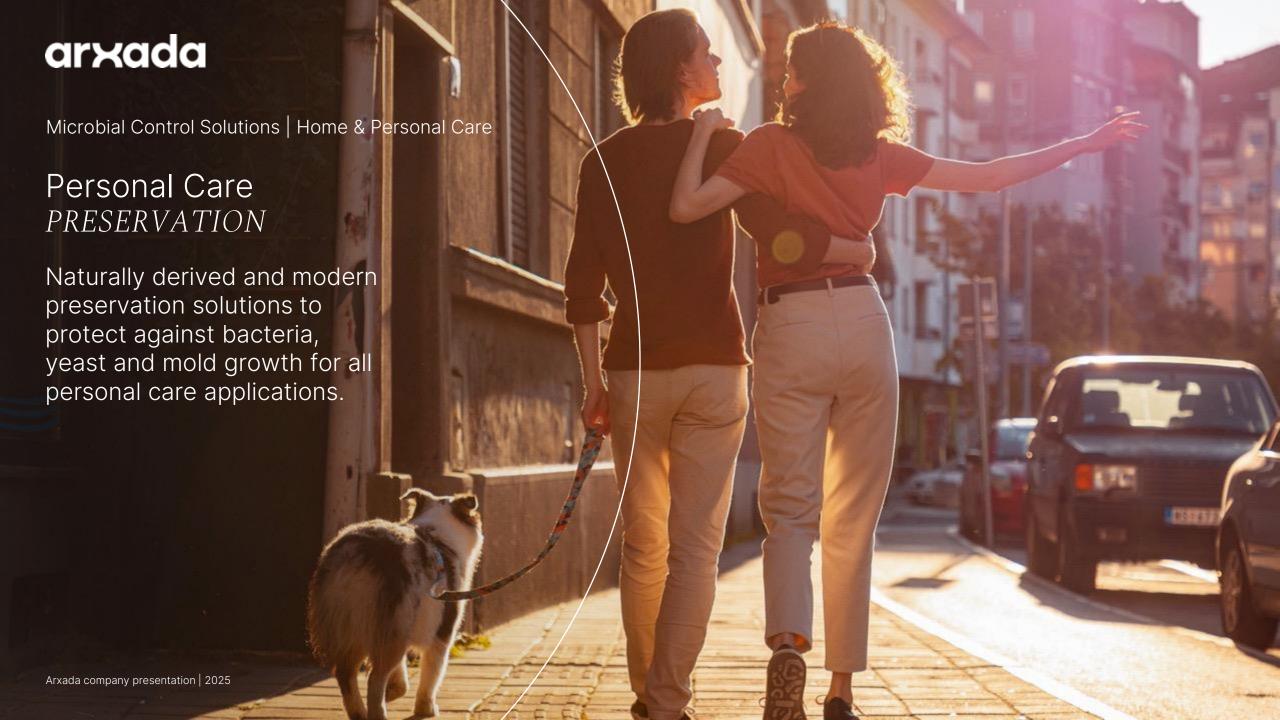


Microbial Control Solutions | Home & Personal Care

# Hair Care SOLUTIONS

Anti-dandruff actives, aesthetic modifiers, conditioners, mild surfactants, naturally derived emulsifiers, emollients and solublisers suitable for all hair care applications.





Microbial Control Solutions | Home & Personal Care

# Skin Care SOLUTIONS

Bioactives, aesthetic modifiers, mild surfactants, naturally derived emulsifiers, emollients and solubilizers suitable for leave-on and rinse-off skin care applications.



Microbial Control Solutions | Home & Personal Care

# Home Care Preservation & DISINFECTION

Antimicrobial actives solutions for sanitization and disinfection in household market, including disinfecting wipes, liquids, concentrates, and hand sanitizer. Preservation solutions for formulations such as laundry detergents, surface cleaners and liquid dishwashing detergents.



Microbial Control Solutions

# Home & PERSONAL CARE

#### Hair care

Geomulse™
LaraCare®
ViscUp®
Zinc Omadine®
Carsoquat®
Amphoterge®
Natrulon®

#### Skin care

Metabiotics® LaraCare® Geomulse™ Amphoterge®

#### Personal care preservation

Cosmocil® Glydant®
Geogard® Isocil®
Glycacil® Spectradyne®
Mikrokill® Natrulon®
TroyCare®

#### Home care

**NUGEN®** 

Dantobrom® Bardac® Lbac® Dantogard® **NUGEN®** Troyguard® Mergal® Vantocil® Isocil® Nuosept® Sodium Omadine® Proxel® Barquat® Barlox® Carboquat® Omacide®





Microbial Control Solutions

# Material *PROTECTION*

#### **Applications**

Our technologies enhance durability, reduce microbial contamination, and meet operational demands in plastics, textiles, metalworking fluids and energy.

#### **Solutions**

We offer advanced antimicrobials, H<sub>2</sub>S scavengers, corrosion inhibitors, lubricants, antistats, and defoamers, backed by global expertise and technical service.



Microbial Control Solutions | Material Protection

### Plastics

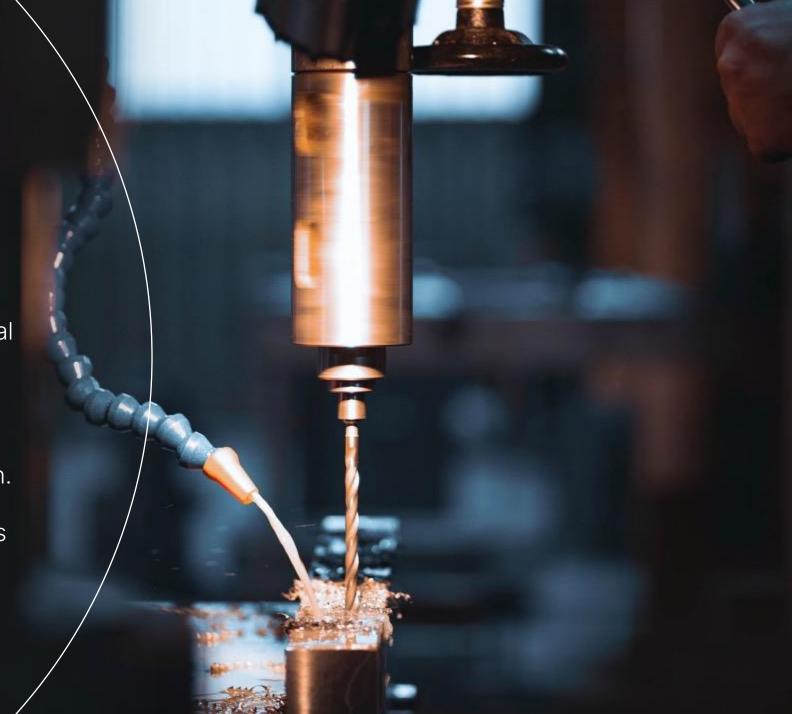
We offer a broad portfolio to plastics and textiles manufacturers, including advanced antimicrobials, lubricants, antistats and anti-fogs for enhanced performance and aesthetics.



Microbial Control Solutions | Material Protection

# Metalworking *FLUIDS*

Our long-standing presence in the metalworking fluids (MWF) space is rooted in a deep portfolio of antifungal and antibacterial preservatives for soluble oil, semi-synthetic, & synthetic systems. Our products help prevent or remediate contamination while protecting metal parts against corrosion. Our offering also includes defoaming additives, esters, and cleaning additives as well as microbial detection kits.



Microbial Control Solutions | Material Protection

### Energy

We provide a wide range of technologies for the oil and gas industry, such as corrosion inhibitors that safeguard material integrity, biocides that protect vital operating systems from contamination during extraction, storage, and transportation, and hydrogen sulfide (H<sub>2</sub>S) scavengers that effectively capture and eliminate this toxic gas.



Microbial Control Solutions

# Material *PROTECTION*

#### **Plastics**

Vanquish® Micropel® Plastiguard® Omadine® Acrawax® Glycolube®

#### Metalworking fluids

Polyphase® Omacide®
Grotan® Omadine®
Troyshield® Mergal®
Densil® Carboshield®
Dantogard® Troykyd®
Barchlor®

#### Energy

Bardac® Unamine®
Vantocil® Akolidine®
Barquat® Carboshield®
Nuosept® TurboScav<sup>TM</sup>
Uniquat® Sourban®
Troycat®





Microbial Control Solutions

# Wood *PROTECTION*

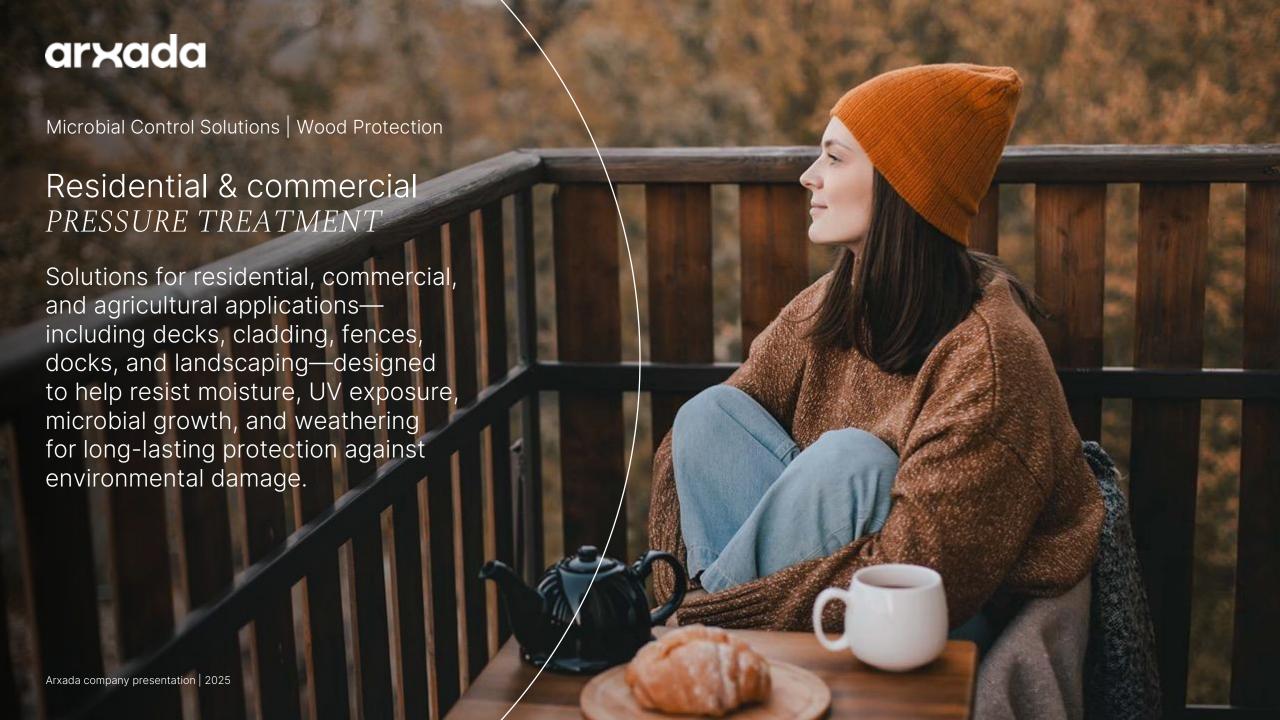
#### **Applications**

We support wood uses from residential to industrial, including agricultural and appearance-grade applications, maintaining structural integrity and visual appeal.

#### **Solutions**

Our wood protection solutions enhance performance and aesthetics, making wood resistant to mold, moisture, insects, fungi, smoke development and flame spread. We provide short and long-term protection, color enhancements, innovations, and expert support to improve efficiency and reduce environmental impact.









Microbial Control Solutions | Wood Protection

#### Wood SPECIALTIES

Protective solutions for whitewood, flooring, furniture, and cabinetry—enhancing longevity and performance by helping guard against moisture, mold, insect damage, and surface degradation. Our specialty treatments protect freshly sawn timber during seasoning and storage, helping preserve appearance and commercial value.



Microbial Control Solutions

# Wood *PROTECTION*

# Residential & commercial pressure treatment

Tanalith® Resistol®
Wolmanized® Dricon®
Wolman® Tempus®
Vacsol® SillBor®

#### **Industrial treatment**

Chemonite® ACZA
Wolmanac® CCA
Tanasote®
Wolmanac® DCOIT
Wolman® ET®

#### **Wood specialties**

Dricon® Azotek
Wolman® AG Resistol®
FrameGuard® Borolith®
Antiblu® Antiborer®
Mycostat® LotusPro™
Permatek®





Nutrition, Care & Environmental | CDMO

Contract Development & Manufacturing Organization *CDMO* 

#### **Chemical CDMO**

Location: Visp, Switzerland
A fully integrated, "one-stop-shop" for chemical process
development and manufacturing. We offer customized
solutions across all stages—from early development through
commercial production—ensuring quality, efficiency, and
scalability. Our unique backward-integrated setup secures
key raw material supply and enhances process control.

#### **Fermentation CDMO**

Location: Kouřim, Czech Republic Comprehensive "one-stop-shop" services for fermentation processes, designed to maintain product integrity and deliver on customer needs. Our expertise spans all microbial strains, including genetically modified organisms, enabling innovative solutions for even the most complex fermentation challenges.



Nutrition, Care & Environmental | CDMO

Contract Development & Manufacturing Organization *CDMO* 

#### Solutions provided

**Feasibility.** Early-phase lab testing to assess technical feasibility and validate key assumptions.

**Process development.** Development and scale-up of robust processes tailored for commercial manufacturing.

**Engineering.** Detailed design of manufacturing concepts to ensure scalable and efficient production.

**Technology transfer.** Seamless handover to production, including analytical method development and optimization.

**Commercial production.** Reliable, high-quality production at any scale, supported by continuous improvement initiatives.

**Ongoing support.** Full QA and regulatory support, analytical services, and assistance with product registration.



Nutrition, Care & Environmental | Nutrition & Infrastructure

# Nutrition & *INFRASTRUCTURE*

N&I supports diverse industries—from nutrition and personal care to pharma, agriculture, and industrial markets—by supplying essential ingredients and intermediates. Our integrated supply chain ensures reliable delivery, while tailored services and on-site support enhance product integrity and performance, especially in global vitamin and aroma ingredient sectors.





### Quanticare™

This versatile disinfectant replaces multiple products within one solution, making it easier for frontline nurses and cleaning staff to effectively combat Healthcare Acquired Infections.

- [1] HAI and Antimicrobial Use Prevalence Surveys | HAIs | CDC
- [2] Stone PW. "Economic burden of healthcareassociated infections: an American perspective. Expert review of pharmacoeconomics & outcomes research." 2009, 9(5), 417 – 422.
- [3] Arxada survey.



arxada Polyboost<sup>TM</sup> Arxada company presentation | 2025

# Polyboost™

Polyboost™ is a first-of-its-kind multifunctional additive for the paint & coatings industry.

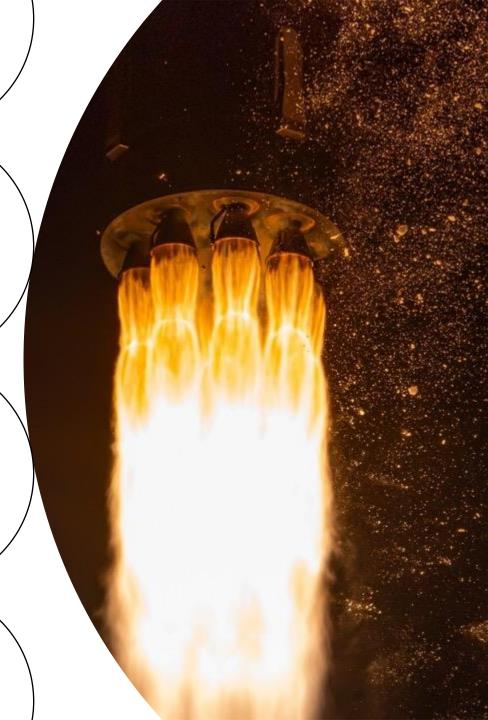
The coatings industry faces costly challenges from stability issues, tolerant organisms and reduced in-container protection during storage and transport.

Paint spoilage, recalls, and rework cost manufacturers CHF 20–30M1 annually and can harm their reputation.

New regulatory limits on preservative levels may lead to additional hazard labels to paints.<sup>2</sup>

Polyboost™ technology enables low preservative use to avoid hazard labels, and supports Nordic Swan and EU Eco-labels.

[1] Based on Arxada interviews with industry experts[2] BIT levels must be below 360ppm or face H317 hazard labelling on finished product in Europe





#### TIME

TIME Controlled Release technology revolutionizes dry-film preservation for paints and coatings, offering a comprehensive range of anti-fungal and anti-algal preservatives available worldwide. paint, which can damage exterior coatings.1

Rain and humidity

fungal growth on

promote algae and

of global warming could increase rainfall by 7%², putting the \$20 billion global exterior coatings market at greater risk of damage.

Every degree

Free actives in coatings result in low regional use limits and hazard labeling, making them undesirable to both manufacturers and customers.

TIME helps avoid hazard labeling and leaching of actives into the environment, enabling reliable, longer-term protection and less wasted material



- [1] World Meteorological Association
- [2] IHS Paints and Coatings industry report



#### PeraGuard® AH

PeraGuard® AH is a newly EPA-registered and OMRI Certified biosecurity disinfectant designed to combat Avian Influenza and other pathogens. This innovative solution enhances biosecurity measures in poultry operations, which have been severely impacted by Highly Pathogenic Avian Influenza (HPAI).

Since February 2022, Highly Pathogenic Avian Influenza (HPAI) outbreak, over 169 million birds have been affected.<sup>1</sup>

HPAI has been detected in all US states with 782 commercial flocks impacted.<sup>1</sup>

PeraGuard® AH is a granular peracetic acid (PAA) EPA-registered disinfectant to combat Avian Influenza and other pathogens.

Enhances biosecurity in high-risk areas on farms, reducing cross-contamination and supporting overall operational health.

[1] Source: USDA



## NUGEN® HLD-CD

NUGEN® HLD-CD is a groundbreaking healthcare disinfectant designed to provide effective germ control in just five minutes. This innovative solution is tailored to meet the stringent demands of healthcare environments, ensuring rapid and thorough disinfection of medical devices and surfaces.

Healthcare-associated infections (HAIs) are a major concern in healthcare settings, leading to increased morbidity, mortality, and healthcare costs.

More than 3.5 million cases of HAIs are estimated to occur annually in the EU and EEA, resulting in over 90,000 deaths each year.<sup>1</sup>

Effective infection control practices could prevent up to 50% of HAIs in the EU and EEA.1 NUGEN HLD-CD® is a non-invasive medical device disinfectant that provides full sporicidal coverage in just 5 minutes, effectively combating HAIs.

[1] Source: European Centre for Disease Prevention and Control





#### Tanasote®

Tanasote® is a copper-oil wood preservative for heavy-duty timbers like utility poles, railway sleepers, and agricultural fencing. It provides long-lasting protection and is a 40+ year alternative to creosote.

Europe's 2030 creosote ban threatens industries reliant on durable wood treatments like rail, utility, and agricultural sectors. Before the EU restriction in 2023 70,000 Tonnes of creosote were used across multiple sectors such as agriculture timbers, rail sleepers and utility poles.<sup>2</sup>

Tanasote® solution is comprehensive for wood preservation, ensuring long-term protection and compliance with regulatory standards

Tanasote® solution offers a high-performance alternative to creosote keeping wood as a decarbonizing substrate for the industrial sector.

- [1] Source: European Chemicals Agency (ECHA)
- [2] Based on Arxada interviews with industry experts





#### Tanalith® E

Tanalith® E is a high-pressure, water-based wood preservative that combines copper and organic biocides for long-term protection against fungal decay and insect attacks. It is commonly used for decking, fencing, and landscaping timbers, ensuring durable and reliable outdoor wood structures.

The industry struggles If the industry did not to ensure long-term preserve softwood, protection against it would mean that fungal decay and insect timber would fail within attacks, while adhering 3 years, making it an to strict environmental unattractive substrate. regulations.1 Tanalith® solution is Tanalith® E is a leading cost-effective for wood preservative internal and external brand in Europe. building applications.

[1] Based on Arxada interviews with industry experts



### Geomulse™

Geomulse<sup>™</sup> is an innovative line of high-performance, mild polyglyceryl esters developed as versatile, non-ionic emulsifiers and surfactants. Naturally derived and customizable, these esters are designed to enhance the sensorial experience in both leave-on and rinse-off personal care applications.

- [1] Grand View Research, Inc.
- [2] ISO 16128 standards provide guidelines for defining and calculating the natural and organic content of cosmetic ingredients and products.

Consumers are increasingly shifting their preferences towards natural and organic personal care products.<sup>1</sup>

Global market for natural and organic personal care products has grown by >9% since 2022 and is projected to reach \$25 billion by 2025.<sup>2</sup>

Geomulse™ emulsifier enhances the sensorial aesthetics in a wide range of personal care products, providing consumers with an enhanced product experience.

Geomulse™ esters are 100% naturally derived from plant origins, compliant with ISO 161282 standards.



Geogard®



# Geogard®

Geogard® offers a broad-spectrum preservation for personal care products. It ensures product integrity and protection against microbial contamination, meeting consumer expectations for gentle and well-preserved cosmetics.

Modern consumers want preservation that's effective without compromising on safety or sustainability.<sup>1</sup> Over 10% of beauty and personal care products are discarded due to spoilage or damage, with 4% specifically attributed to perishing or microbial contamination.<sup>2</sup>

Geogard® technology enhances skin hydration and improves skin feel. It meets COSMOS and ECOCERT standards.

Geogard® technology is derived from natural sources and biodegradable.



[1] Global Cosmetics Industry

[2] Avery Dennison Research



# Our global leadership



SANJEEV RASTOGI Chief Executive Officer



PETER
FRAUENKNECHT
Chief Financial Officer



OLIVIER
LAMBRECHTS
President, NCE



RICHARD STRITTMATTER

Chief Technology& Innovation Officer



SCOTT CAMPBELL

SVP, Integrated Operations



ANNETTE BERGKNUT

Chief People Officer



KRISTIN RINALDI

SVP, Legal, IP & Compliance



TAFA MAGAYA

SVP, Growth, Strategy & Transformation





SILVER | Top 15%

COVADIS

Sustainability Rating
FEB 2025

Our carbon management journey Arxada leadership continues
Towards net zero 2050



EcoArx:

Sustainable procurement & responsible sourcing