

ARKEMA, A LEADER IN SPECIALTY MATERIALS

2021 CORPORATE PRESENTATION

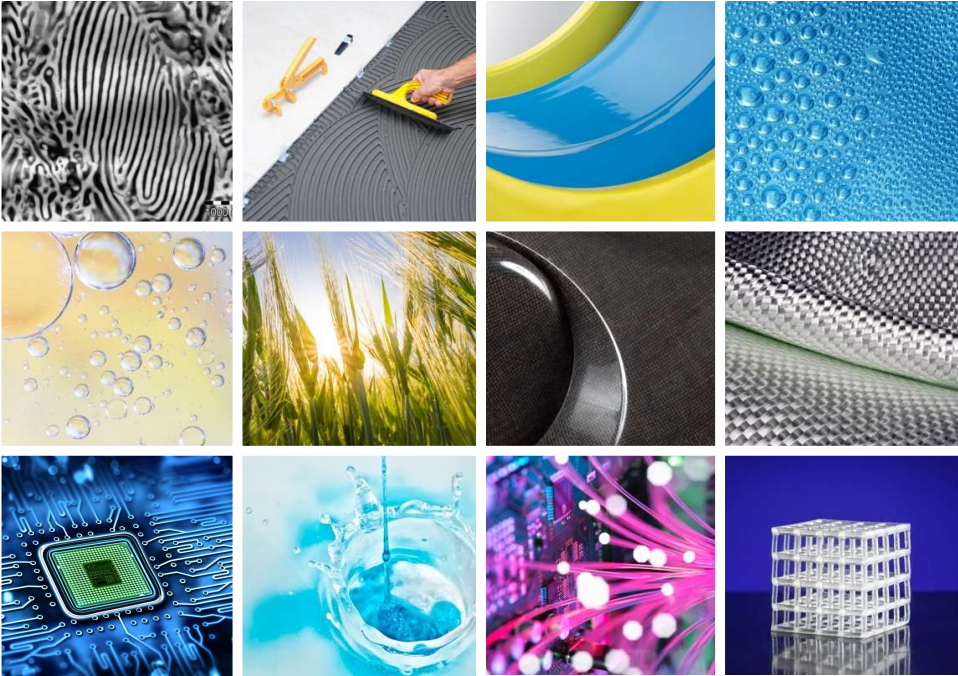


ARKEMA
INNOVATIVE CHEMISTRY



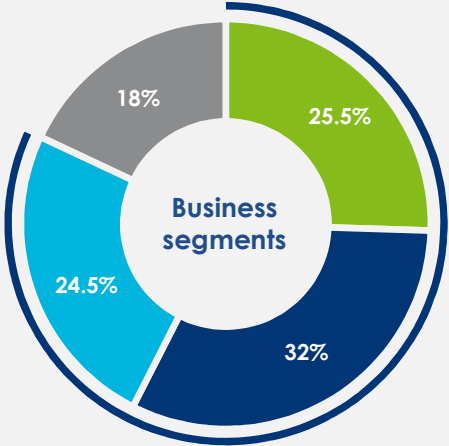
OUR VISION:
TO BE A GLOBAL LEADER IN
SPECIALTY MATERIALS,
OFFERING THE MOST
INNOVATIVE
AND SUSTAINABLE
SOLUTIONS
TO MEET OUR
CUSTOMERS' NEEDS,
TODAY AND TOMORROW

A UNIQUE POOL OF KNOW-HOW IN SUSTAINABLE MATERIALS



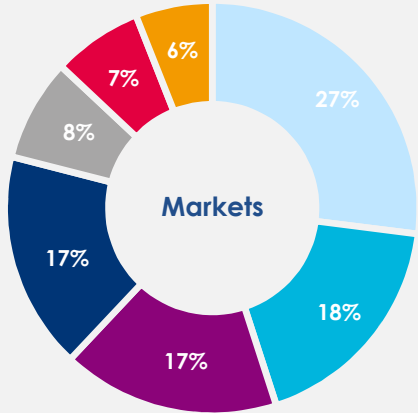
ARKEMA TODAY

2020 SALES: €7.9 BN

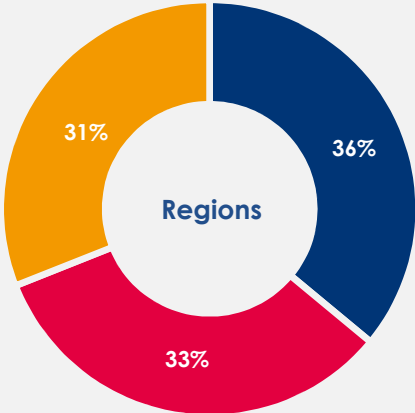


82%* Specialty Materials

- Adhesive Solutions
- Coating Solutions
- Advanced Materials
- Intermediates



- Industry
- Consumer Goods
- Paints & Coatings
- Building & Construction
- Food & Water
- Automotive & Transportation
- Electronics & Energy



- Europe
- North America
- Asia and Rest of the World

* 89% on pro forma basis, including annual contribution of divestments/acquisitions announced in 2020

20,600

talents

11,300

in Europe

4,000

in North America

5,300

in Asia and the rest of the world



over
10,000
customers

Collaborations
with the leading
global brands

**WOMEN AND MEN
AT THE HEART OF OUR
DEVELOPMENT**

~1,300

new hires
in 2020



Presence in

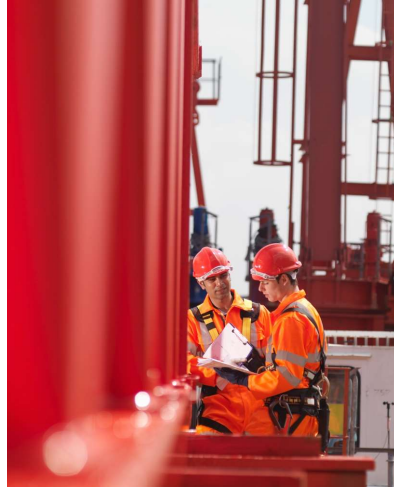
55
countries

147
plants

15
R&D centers

ARKEMA
INNOVATIVE CHEMISTRY

OUR WORLD IS CHANGING FAST, ACCELERATING DEMAND FOR NEW MATERIALS



Future of mobility

Urbanization

Environment

Industry 4.0

Consumer demand



Lightweighting

Durability

Batteries (energy storage)



Insulation

Energy efficiency

Modular construction



Wind, solar, hydrogen

Water treatment

Renewable resources



3D printing

Miniaturization

Smart devices



Personalized designs

Performance

Sustainability



**OUR ENGINE:
INNOVATION**



STRONG R&D EXPERTISE AND COLLABORATIVE RESEARCH STRATEGY

- **1,600** researchers, **60** R&D partnerships
- **15** R&D centers on 3 continents (Europe, Americas and Asia)
- **203** patents filed in 2020,
78 % relating to sustainable development
- **2.8%** of Group sales allocated to R&D
Thanks to our sustainable innovations:
 - + €400 M of our sales by 2024
 - + €1 Bn of our sales by 2030
- **~15%** of sales concern products marketed in the last 5 years
- **1** incubator dedicated to breakthrough innovations

PIONEERING AND SUSTAINABLE SOLUTIONS FOR OUR CUSTOMERS



→ 5 INNOVATION AND RESEARCH PLATFORMS TO ADDRESS MARKET TRENDS AND ENVIRONMENTAL CHALLENGES



New energies

Develop materials for solar power, wind power, and electric batteries



Natural resources management

Solutions to preserve natural resources (biobased or recyclable solutions, circular economy, water management)



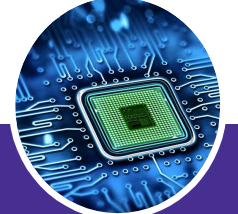
Home efficiency and insulation

Solutions to help reduce energy consumption of buildings



Lightweight materials

Advanced materials for composites and 3D Printing



Consumer electronics

Solutions to bring electronics within everyone's reach



DIVERSIFIED GROWTH MARKETS

	Water management		Paints & inks		Adhesives & sealants		Packaging	
Agriculture & food industry		Automotive, transportation & aerospace		Renewable energy & energy storage		Oil & gas		Cooling & refrigeration
	Health, hygiene & beauty		Building & construction		Electrical & electronics		Sports & leisure	
Pulp & paper		Chemical & plastic industry		Mining & metallurgy		Composites		3D Printing

STRONG SYNERGIC BUSINESS SEGMENTS ADDRESSING THE CHALLENGES OF AN EVER-CHANGING WORLD

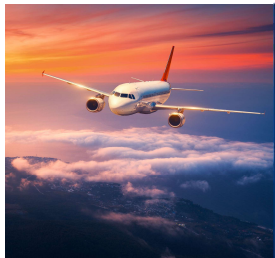
Key trends



Adhesive Solutions



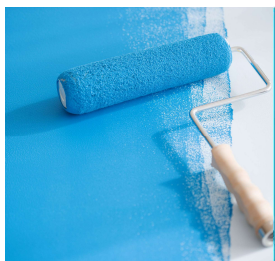
- **Population growth** and urbanization
- **Energy efficiency** and **insulation**
- **Lightweighting and substitution** of mechanical assembly



Advanced Materials



- **Renewable energy solutions** (wind, solar, etc.)
- **Lightweighting for transportation** (reducing energy consumption and CO₂ emissions)
- Access to **drinking water**
- **Recyclable** and **biobased** thermoplastics
- **3D printing**



Coating Solutions



- Shift to **more environmentally friendly** and low-VOC emission **solutions** (e.g. water based, powder, UV-cure, etc.)
- Increasing demand for **high-performance coatings** (greater weather resistance, fast drying, etc.)



A GROUP COMMITTED TO A MORE SUSTAINABLE WORLD

OUR CSR POLICY PLACES INNOVATION AT THE HEART OF AN AMBITIOUS SOCIETAL PROJECT



Deliver sustainable solutions driven by innovation

- Solutions addressing societal challenges
- Innovation at the heart of the activities
- Product stewardship



Manage our activities as a responsible chemical manufacturer

- Safety of people and processes
- Health
- Reduction of environmental footprint



Cultivate open dialog and close relations with our stakeholders

- Ethics
- Human rights
- Employee diversity and development
- Responsible value chain
- Corporate citizen

SUSTAINABLE DEVELOPMENT GOALS



OFFER SUSTAINABLE SOLUTIONS DRIVEN BY INNOVATION



5 INNOVATION AND RESEARCH PLATFORMS

- new energies
- natural resources management
- home efficiency and insulation
- lightweight materials
- solutions for consumer electronics



In 2020, 78% of the patents filed related to sustainable development

CIRCULAR ECONOMY



- 10% of sales in 2020 based on biobased products
- Intensification of partnerships to build circular flows
- Rollout of product Life Cycle Analysis (LCA)

* PSA: Portfolio Sustainability Assessment

** The quota of sales with a significant contribution to the SDGs (ImpACT+) is based on an assessment of 72% of sales to third parties of the Group in 2020, and 44% in 2018 and 2019

ARCHIMEDES program for assessing the sustainability of our portfolio (PSA*)

In 2020

- 72% of 2020 sales assessed
- 50%** of our sales ImpACT+, with significant contribution to SDGs

2030 target

- 65% of our sales ImpACT+



Virtucycle® program

Program for post-industrial and/or post-consumer recycling services involving Arkema and its customers who use our high performance materials (Rilsan® PA11 and Kynar® PVDF)



Partner in Zebra project

Zero waste blade research: manufacture of 1st 100% recyclable wind turbine blade (from Elium® resin)

TAKING ACTION FOR THE CLIMATE AND THE ENVIRONMENT



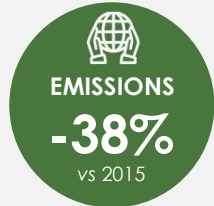
CLIMATE



Climate plan

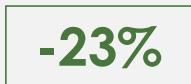
In line with the Paris Agreement, a commitment to keeping global warming to well below 2°C

2030 targets



≤ 2,950 kt equivalent CO₂ absolute greenhouse gas (GHG) emissions*

2020 performance



* Absolute emissions = direct emissions related to production + indirect emissions related to energy purchasing

ENVIRONMENT



Reduce the environmental footprint of the Group's activities

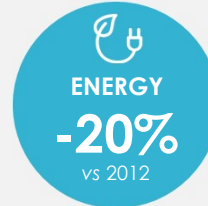
2030 targets



In intensity of volatile organic compound (VOC) emissions

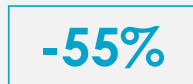
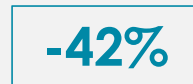


In intensity of chemical oxygen demand (COD)



In intensity of net energy purchases

2020 performance

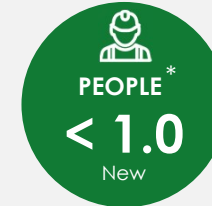


SAFETY



To be among the best in the industry

2025 safety targets



Target: Reduce injury frequency rate



Target: Reduce process event frequency rate

2020 performance



* Number of accidents or process events per million man-hours

SHARED VALUES AND SPECIAL RELATIONS WITH OUR STAKEHOLDERS



COLLABORATE FOR A RESPONSIBLE VALUE CHAIN



→ Supporting our suppliers

Rollout of global initiative **Together for Sustainability***

- Over **1,600** suppliers assessed by end 2020
59% of them had made progress when reassessed
- New strategic indicator:
80% of amount of purchases from relevant suppliers** assessed by 2025 (68% had been assessed by end 2020)

→ Pragati: global program for the sustainable cultivation of castor seeds in India

Castor oil is used in the manufacture of many Arkema products, in particular the Rilsan® 100% biosourced polymers

- By end 2020, + **4,600** farmers from 69 villages had received training
- Ambition by end 2022: + 7,000 farmers



* TFS (Together for Sustainability) aims to develop societal responsibility throughout the chemical industry service chain

** Recurring suppliers accounting for 80% of amount of purchases



CLOSE RELATIONS AND OPEN DIALOG WITH OUR STAKEHOLDERS



→ Diversity and development of employees

DIVERSITY AND GENDER EQUALITY

	2020	2030 target
▪ Quota of women*	23%	30%
▪ Quota of non-French*	41%	50%



ENGAGEMENT

80% of employees actively engaged and confident in the development of the Group

→ Engagement, philanthropy and patronage, and Common Ground® initiatives

PHILANTHROPY AND PATRONAGE

- Financing of **educational and job insertion projects** through sport or culture (Sport dans la Ville, ScienceTeacher program in the US, ChemArt Green Innovation in China, etc.)
- Arkema Fund for Education

COMMUNITY RELATIONS AND LOCAL OUTREACH

- **78%** of industrial sites carried out local actions in 2020 (as many as in 2019)
- ~ 650 **Common Ground®** initiatives in 2020, despite the health crisis

* employees in senior management and executive positions

PERFORMANCE RECOGNIZED FOR SUSTAINABILITY

Member of
Dow Jones Sustainability Indices
 Powered by the S&P Global CSA

2020: **joined DJSI for 1st time**

6th place in the ranking
Dow Jones Sustainability Index World (DJSI)
 Rewards companies with best sustainable development performance

Bronze Class award
Sustainable Yearbook 2021
 Recognizes most successful companies in DJSI ranking



March 2021 : **Arkema joined Paris Bourse new index CAC[®] 40 ESG** listing the top 40 companies that have shown the best environmental, social and governance practice and performance in the CAC[®] Large 60



In 2020, achieved ratings
A- for **Climate change**
B for **Water security**



Arkema among **Top 1%** of the sector's best rated companies since 2015
Sustainability Performance: Advanced



Ranked in Europe 120 and Eurozone 120 indices since 2015



Top decile (global) in June 2020



Renewed every year since joining in 2015




A rating since 2017

SPONSORSHIP: A COMMON EAGERNESS FOR CHALLENGES



ARKEMA

Arkema associates its name with the Women's Football D1 to promote the development of women's football and the place of women in sport and in business



ARKEMA
SAILING

Since 2013, Arkema has been present in the world of sailing, and sponsors Lalou Multi's team on the Ocean Fifty circuit: a technical and human partnership



Headquarters
in
Shanghai



10
Industrial
sites

2
R&D
centers



ARKEMA IN CHINA



2,900+
talents

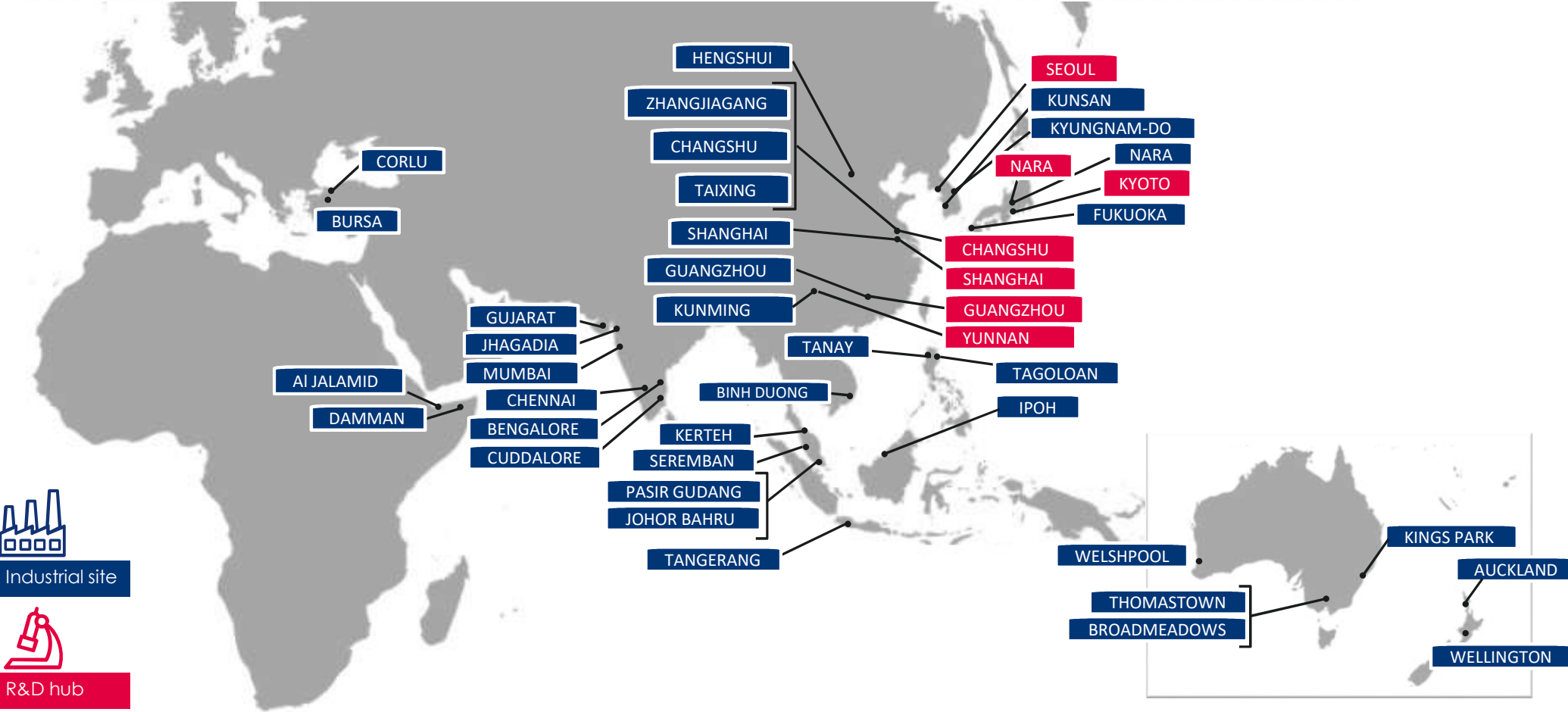


ARKEMA IN CHINA – HISTORY 1984 - 2021

700 M€ industrial investment since the split



ARKEMA ASIA-PACIFIC INDUSTRIAL SITE , R&D CENTER




Industrial site



R&D hub

HEBEI CASDA

- Sebacic acid



TAIXING SUNKE

- Acrylic monomers

CHANGSHU BOSTIK

- Adhesives

ARKEMA SUZHOU

- Specialty polyamides

SHANGHAI

- Hydrogen peroxide
- Fixatti

10 industrial sites

Global largest platform:
Changshu

2 R&D centers



Industrial site



R&D center



Office

GEOGRAPHICAL PRESENCE IN CHINA



Changshu R&D Center

Asia Technical Center
(Bostik)



ARKEMA CHANGSHU

- Specialty polyamides
- Fluoropolymer (PVDF)
- Organic peroxides
- Fluorogases
- Rheology additives
- Coating resins



GUANGZHOU SARTOMER

- Photocure resins

GUANGZHOU BOSTIK

- Adhesives

YUNNAN ArrMaz

- Fertilizer additive

ARKEMA
INDUSTRIAL CHEMISTRY

60

researchers

Most with PhD degree and an important part of their university education in China, Europe or the United States



CHANGSHU R&D CENTER

First R&D center in China
built in 2013,
new extension
in 2018



Application laboratories
dedicated to our markets

A center of excellence for thermoplastics, with injection, extrusion, compounding capacity

A center of excellence for processes, with various large scale equipment

A training center for customers

CHANGSHU PLATFORM



CHANGSHU, ARKEMA'S LARGEST INDUSTRIAL PLATFORM IN THE WORLD



PRODUCTION UNITS

- Fluorogases
- Fluoropolymer PVDF
- Specialty polyamides (PA11)
- Organic peroxides
- Rheology additives (Coatex)
- Coating resins
- R&D center
- Bio-treatment



All **state-of-the-art** world scale unit

In 2019
Start a 30% photocure resin
production capacity
increase in China to meet
the Asian markets

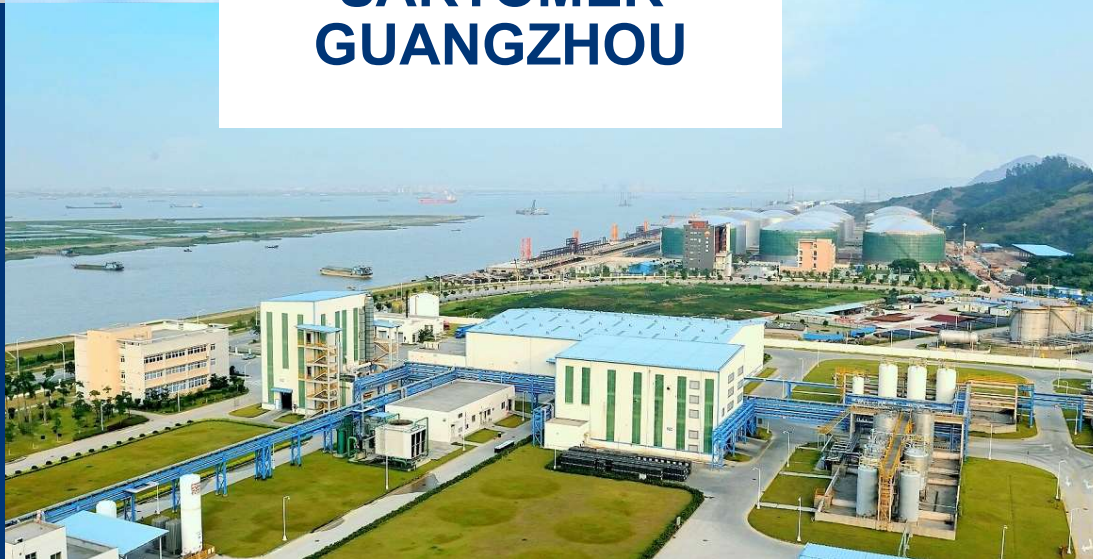
Acquisition of the Lamsbon
business adding
Photoinitiators and cationic
resins to its portfolio

Guangzhou site located on
80,000m² of land allowing
for further expansion



Investing in Nansha to
serve the Asian market:
**Specialty
(Meth)acrylate
monomers,
oligomers,
engineered resins,
photoinitiators and
additives**

SARTOMER GUANGZHOU



Best latest state-of-the-
art technology and
standards



WELCOME TO OUR WORLD OF SMART ADHESIVES

- 
 Bostik is a leading global adhesive specialist in construction, consumer and industrial markets. In Feb. 2015, Arkema had an acquisition with Bostik.
- 
 2 manufacturing sites in China:
Changshu, Guangzhou
 Asia Technical Center: **Shanghai**

OUR SMART ADHESIVES ARE EVERYWHERE...

- 
DURABLE GOODS
 Aerospace, General Transportation, Automotive, Assembly, Engineering Adhesives, Building Components and woodworking
- 
ADVANCED PACKAGING
 Flexible Packaging, Consumer Goods & Paper, Tapes & Labels
- 
DISPOSIBLE HYGIENE
 Baby care, Feminine care, Adult incontinence
- 
CONSUMER & CONSTRUCTION
 Stationery, Handicrafts, Repairs, Home improvement DIY and building construction adhesive products

SUZHOU POLYAMIDES



ACTIVITIES

- World leading position in **Advanced Bio-Circular** PA11 and other flexible long-chain polyamides
- A site with integrated units including DA10 monomer, polymerization, compounding & Powder

PRODUCT APPLICATIONS

- Rilsan®**: Renewable/bio-based PA11 for excellent durability and toughness
- Pebax®**: Excellent lightweight, highly resilient thermoplastic elastomer
- Rilsan® Fine Powders**: Bio-based polyamide powder for powder coatings and 3D printing
- Orgasol®**: Polyamide powder for coating auxiliaries and 3D printing

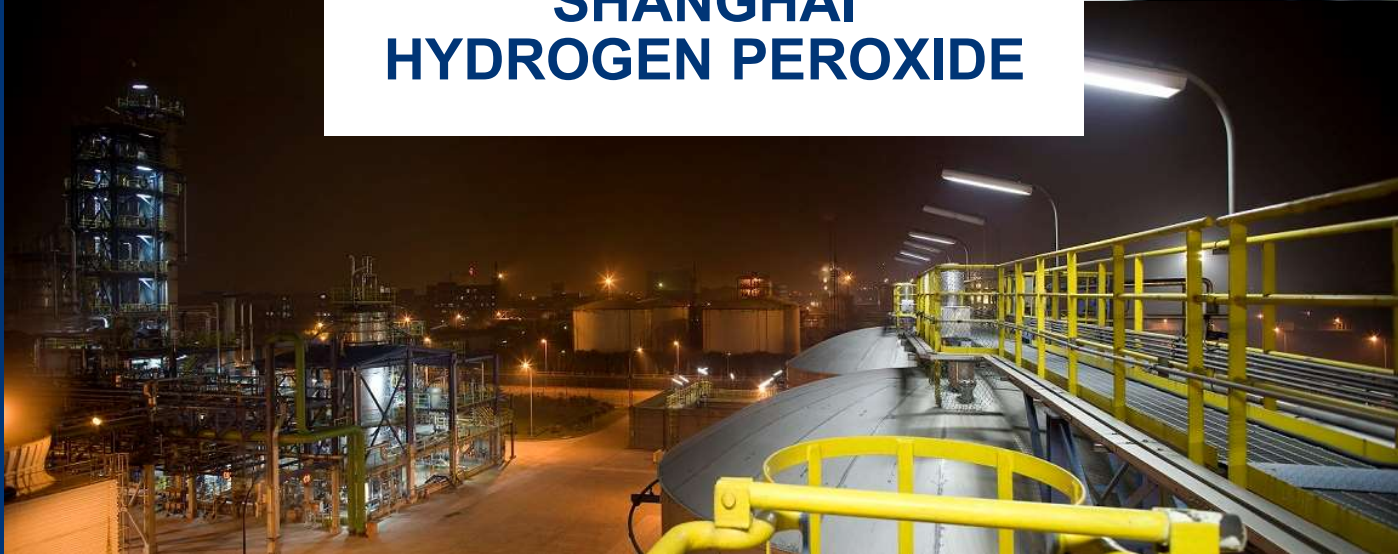
Leading position
in H₂O₂ industry,
World-scale
competitive
production
capacity
(Asia: 77KT)



Patented
manufacturing
and processing
technology,
reliable quality
and service

SHANGHAI HYDROGEN PEROXIDE

Leading provider
of packaging
materials
disinfection
solutions for the
dairy beverage
industry



The quality of
domestic
manufacturers
has improved,
from low
concentration to
high
concentration
market (50%,
60%, 70%)

TAIXING

TAIXING SUNKE SITE

Wholly-owned plant of Arkema since 2019

Modern and competitive site started in 2012, close to 400 well-trained employees

3 acrylic acid lines in operation (480 KT/year acrylic acid), world-scale GAA and BA plants

With Taixing, ARKEMA secures a global supply position, with production of acrylic monomers in each of the region, allowing it to serve its global and regional customers with best quality and service

Sustainable resource

Produce a renewable bio-material from castor oil



Sebacic acid

A di-acid for polymer synthesis, an anti-corrosion inhibitor for various industrial fluids

CASDA BIOMATERIALS Co., Ltd.

Location

Hengshui, Hebei Province. Joined ARKEMA in 2012



Derivative DMS

A plasticizer and an intermediate for UV stabilizers

By-products

2-octanol, glycerin, fatty acid, sodium sulfate

Arkema-ArrMaz



Arkema-ArrMaz is a global leader in the production of specialty chemicals for the mining, fertilizer, phosphate, industrial ammonium nitrate, asphalt, and oil and gas industries.

Since 1967, Arkema-ArrMaz has manufactured chemical process aids and additives formulated to optimize process performance, enhance product quality and improve profitability for our customers. With headquarters in Mulberry, Florida and multiple locations across North and South America, Europe, Asia, Africa and the Middle East, Arkema-ArrMaz serves customers in more than 70 countries across the globe.



Located in Kunming,
Yunnan Province.
acquired by
ARKEMA in 2019

In 2020,
Arkema had an
acquisition with
Fixatti



Fixatti

Markets served

- Apparel and Lingerie
- Building and Technical Applications
- Conveyor belts
- Automotive Interior Trims and Laminates
- Acoustic Felts for Automotive and Building Applications
- Shoes
- Transfer Printing

Product Range

THERMOPLASTICS

- TPU
- coPA
- coPES
- SPECIALTIES
- EVA / PE / PP

THERMOSETTING

- SP 100
- EP 2000
- OLEFINES

LEARN MORE ABOUT MATERIALS & INNOVATIVE SOLUTIONS



VISIT ARKEMA.COM.CN OR FOLLOW ARKEMA WECHAT



VISIT ARKEMA ALIBABA1688 BRAND STATION

ARKEMA
INNOVATIVE CHEMISTRY