Ceci n'est pas Prayon

From zinc extraction to phosphorus chemistry…
Prayon's ingenious journey

PRAYON

Ceci n'est pas Prayon*

And yet...

If the name Prayon doesn't immediately ring a bell, its solutions are all around you. In the food you eat, in the microchips in your phones, in the materials that make up your environment.

For almost two centuries, this Belgian company has been shaping the daily lives of millions of people, without this always being visible. Like surrealism, which invites us to look at the world differently, Prayon is where we least expect it. It is in the invisible that makes the visible possible. Like an unintentional homage to Magritte, its contribution is very real, even if it eludes the untrained eye.

From the outset, Prayon has never ceased to transform matter to better serve the needs of an ever-changing world. This book takes you on a journey through its history, its discoveries and its discreet but essential revolutions. With its main sites in Wallonia and Flanders, it's an industrial and scientific history, profoundly Belgian and resolutely forward-looking.

Welcome to a world where the ordinary hides the extraordinary. Where technological development merges with the obvious. Where, in the end, this is indeed Prayon.

* This is not Prayon

1800 – 1843

When zinc took flight and covered the world

Did you know that the zinc on your roof might have something to do with the history of Prayon?

It all began in the Liège region where, in 1808, a brilliant chemist by the name of Jean-Jacques Dony took on the incredible challenge of transforming raw ore into metallic zinc. An industrial revolution was underway!

But Dony didn't stop there. Inspired by foreign techniques, he invented a revolutionary furnace that improved production, marking the start of an industrial success story that would lay the foundations of Prayon's history.

Zinc pioneers

Following the revolutionary invention of metallic zinc, a veritable industry developped in the Meuse and Vesdre valleys. This industrial development was initially concentrated in three places: Prayon (Trooz), where a small zinc smelter was set up at Blanche Plombière in 1828; Engis, where the Société Métallurgique d'Engis was created in 1828 to exploit the promising local mines; and Stembert (Verviers), where a major zinc mine, known as Nouvelle-Montagne (1829), was developed. This laid the foundations for a booming local industry.

Did you know?
In the 19th century, thanks to its strength and elegance, zinc was so fashionable that it adorned the roofs of Europe's greatest monuments, from Paris to Brussels. The next time you look up from a zinc roof, think of this beautiful story that began over 200 years ago...

1844 – 1881

An ingenious merger to counter the industrial juggernaut

Zinc continued to shine, but fierce competition loomed. While industry giant Vieille-Montagne dominated the market, Société de la Nouvelle-Montagne and Société Métallurgique d'Engis battled for position...

A strategic merger

In 1845, Société de la Nouvelle-Montagne and Société Métallurgique d'Engis merged to become S.A. de la Nouvelle-Montagne, a stronger player. Together, they modernized their sites: a state-of-the-art foundry and a rolling mill that transformed zinc into ready-to-use sheets.

Challenges ahead

Faced with the heavyweight of Vieille-Montagne, S.A. de la Nouvelle-Montagne played the technology card. It adapted and improved its furnaces to boost productivity and limit environmental pollution.

Did you know?
In the 19th century, developments in hygiene and domestic comfort made zinc bathtubs popular. Lightweight and resistant, they made bathing more accessible. Less expensive than cast-iron ones, they gave European households access to a luxury hitherto reserved for the more affluent. Who knows? Maybe one of these iconic bathtubs came from Prayon zinc!

1882 – 1913

Prayon spreads its wings and feeds the earth

At the dawn of the 20th century, the zinc industry continued its incredible expansion. In 1882, S.A. Métallurgique de Prayon was born from the demerger of S.A. de la Nouvelle-Montagne.

Boundaries blurred

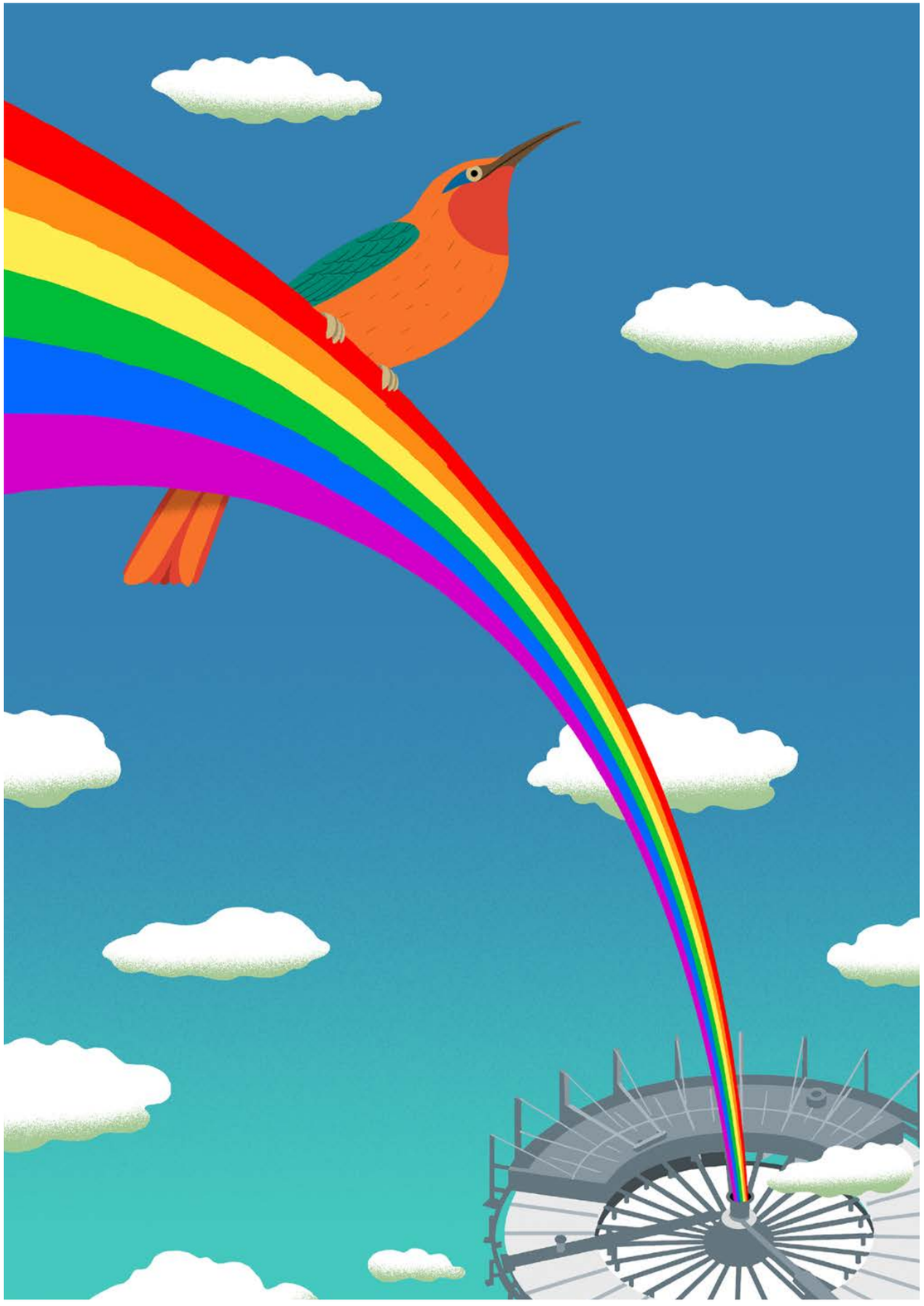
With great ambitions, S.A. Métallurgique de Prayon opened up internationally, importing ores from Europe and even Australia, and investing in mines in Colorado and Mexico.

To remain competitive, the plant adopted a revolutionary technology: Siemens furnaces. More efficient and less polluting, they performed better and reduced nuisance. S.A. Métallurgique de Prayon was transformed with modern facilities, a private rail network and international logistics.

A foot in chemistry

S.A. Métallurgique de Prayon no longer confined itself to zinc. In 1886, it diversified its activities and began producing sulfuric acid, an essential component of phosphate fertilizers, indispensable for crop production. This shift towards chemistry marked a decisive step, placing the company at the crossroads of two worlds: metallurgy and chemistry.

Did you know?
In Engis, S.A. de la Nouvelle-Montagne turned to the valorization of a by-product, sulfur, to produce sulfuric acid as early as 1889, and then fertilizers as early as 1892, thanks to the phosphate deposits discovered in Hesbaye. By transforming natural phosphate into assimilable nutrients, this activity revolutionized modern agriculture, nourishing the soil and boosting yields!



1914 – 1944

From ashes to inventions: the resurrection of industrial fire

The world wars turned industry upside down, but despite requisitions and shortages, S.A. Métallurgique de Prayon and S.A. de la Nouvelle-Montagne proved resilient, keeping their plants in operation.

After 1918, reconstruction was accompanied by the modernization of equipment. In 1928, S.A. Métallurgique de Prayon took part in the creation of a new company: Produits chimiques et métallurgiques du Rupel (Puurs).

The post-war period was more difficult for S.A. de la Nouvelle-Montagne. In 1938, the company was absorbed by S.A. Métallurgique de Prayon, which brought together the Engis factories.

A stroke of genius: the Prayon filter

Around 1943, during the Second World War, despite the shut-down of many furnaces, Prayon developed a revolutionary invention: the Prayon filter. This continuous process for producing phosphoric acid was a veritable technological revolution. After the war, it was exported worldwide.

Did you know?
During the Occupation, S.A. Métallurgique de Prayon grew eight hectares of potatoes to feed its workers and their families, illustrating its resilience in wartime. Even then, Prayon stood by its workers and their families, fully embracing its societal role of solidarity.

1945 – 1981

From crucible to beaker, Prayon changes skin

After the Second World War, S.A. Métallurgique de Prayon focused increasingly on phosphate chemistry. From 1945 onwards, the company modernized its Engis plants and focused on its new flagship products: phosphoric acid and fertilizers.

Meanwhile, the Trooz plant continued to produce zinc, but the technology was becoming obsolete. The company realized that the future laid elsewhere, and relied on chemistry to grow.

Conquering the world

In the 1960s, S.A. Métallurgique de Prayon went international, exporting its technologies to the United States, Japan and beyond. In 1964, to mark this turning point, the company adopted a more modern name: Société de Prayon S.A.

To become even stronger, Société de Prayon S.A. expanded and bought Société des produits chimiques et métallurgiques du Rupel in Puurs in 1973.

Farewell to zinc

The 70s and 80s, marked by economic crises, were not easy times. In 1981, the company went into receivership.

Did you know?
The shutdown of industrial activities in Trooz took place over several years, in order to avoid as many redundancies as possible. The zinc furnaces were phased out in 1968, followed by the roasting facilities in 1975. The company's activities were definitively shut down in 1981 with the shift to chemicals.

1982 — 1999

A dash of expansion, a dose of diversification: Prayon conquers taste

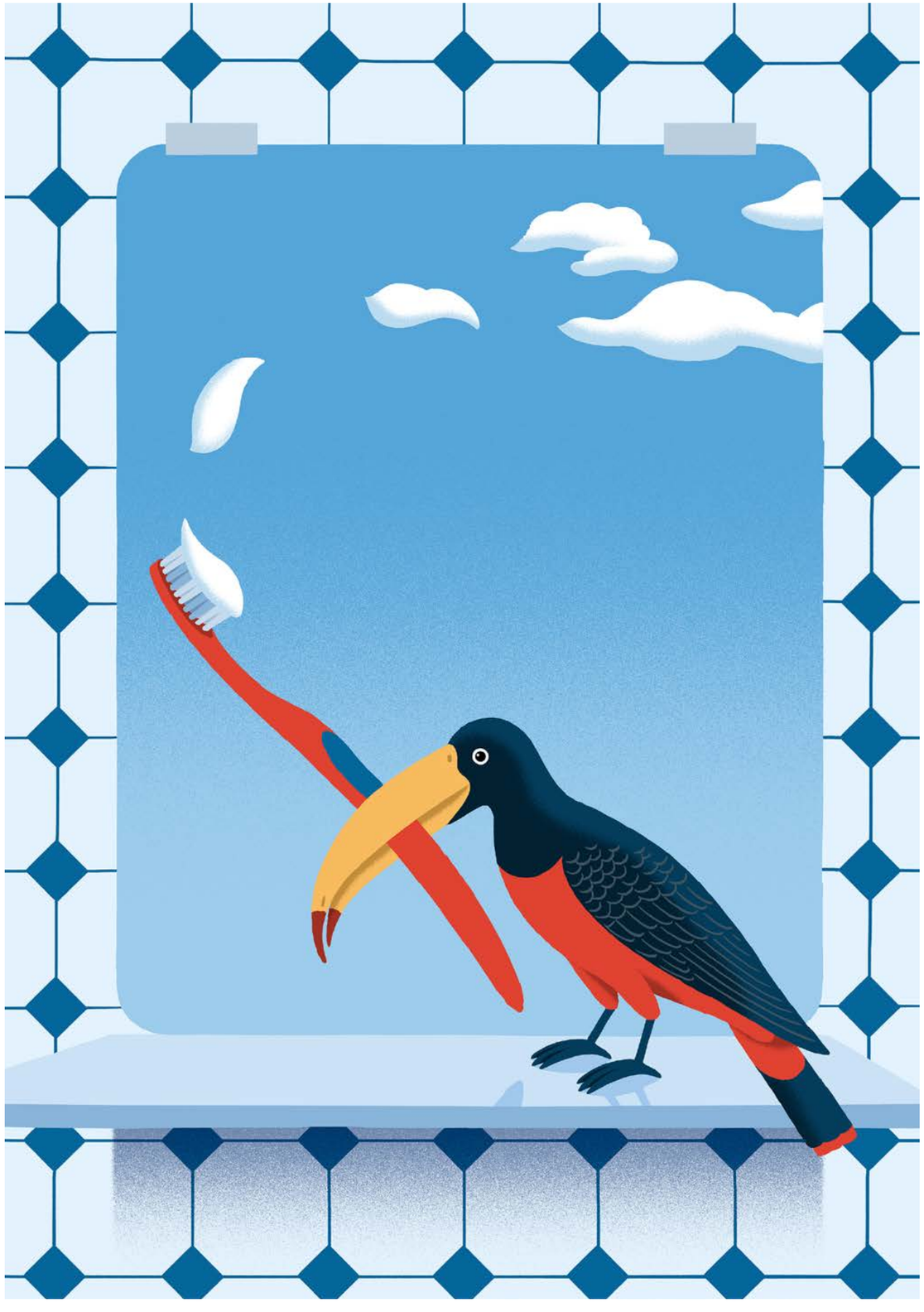
In 1982, Société chimique de Prayon-Rupel S.A. (Prayon for short) was created, with its head office in Engis, to revitalize the Engis and Puurs sites, focusing on phosphorus and inorganic chemistry. This company is 50% owned by the public investment company Wallonie Entreprendre and the Moroccan group OCP.

Diversification and expansion

From 1987 onwards, Prayon continued to diversify into phosphate salts, building a new sodium tripolyphosphate (STPP) production unit and focusing on food applications, such as processed cheese and energy drinks.

In 1992, Prayon took part in the creation of Europhos in Les Roches-de-Condrieu (France) - of which it became full owner in 2003 - and then of Emaphos in 2001 (Morocco). At the dawn of the 2000s, Prayon was already preparing for a new stage: large-scale internationalization.

Did you know?
Prayon is a pioneer of the circular economy in all its production processes. For example, since 1974, the Engis site has been recycling over 80% of its gypsum for the construction and cement industries, thanks to a partnership with Knauf, located on the other side of the Meuse.



2000 – 2025

Prayon takes off for new horizons

In 2000, Prayon acquired the Augusta plant in the United States, marking its entry into the American market. Throughout the 2000s, Prayon continued to invest in its plants, in particular to improve its energy footprint. In 2009, it inaugurated Sulfine, a sulfuric acid production unit in Engis, and in 2019, a cogeneration unit in Puurs. But it didn't stop there!

Continued growth in specialty markets

In 2023, Prayon acquired the Bex site in Switzerland, which specializes in electronic-grade phosphoric acid essential for semiconductor production. In 2024, it became a 100% shareholder in Praytech Maroc. The same year, it strengthened its presence in North America with the acquisition of Natural Enrichment Industries (NEI): two new sites, in Herrin and Sesser, complemented the Augusta plant and reinforced the Group's positioning in calcium phosphate salts.

Investing in the future

In 2025, Prayon continues to develop its existing sites. In Engis, the company is converting an existing facility to produce calcium salts and investing in a new sodium hexametaphosphate (SHMP) production unit. In Bex, it is investing in a new electronic-grade phosphoric acid facility, which is scheduled to start up in 2028.

Did you know?
The phosphate salts produced by Prayon in Augusta and Puurs are used in a product you use every day: toothpaste! Their role is to preserve enamel, gently clean and stabilize texture.
A Prayon smile!

Prayon, patron of the arts

Prayon is not just an industrial adventure, it's also a passion for art. Throughout its history, the company has supported artistic creation and integrated art into its environment.

It all began with Roger Jacob, a Belgian sculptor whose work celebrates human strength and hard work. Thanks to his friendship with former Prayon executive Jean Delruelle, two of his emblematic creations were created at Prayon sites.

In 1961, the Engis plant welcomed *Les tireurs de zinc*, an impressive high-relief immortalizing workers handling molten metal. Then, in 1972, an imposing sculpture in Corten steel was installed at the entrance to the Ehein zinc plant.

Over time, these works have found a new life: the first has joined the Maison de la Métallurgie et de l'Industrie in Liège, while the second has been restored and is now on display in the heart of Liège, at the foot of the footbridge *La Belle Liégeoise* over the Meuse.

Far from being stuck in the past, Prayon's artistic commitment continues today with this book, conceived as a bridge between history and the imaginary, shaped by two contemporary talents: David Merveille, whose illustrations inject a touch of vibrant surrealism, and Marc Dausimont, whose graphic design structures and gives rhythm to these pages. Together, they extend the encounter between industry and art, perpetuating a tradition in which Prayon not only transforms matter, but also inspires creation.

PRAYON

Rue Joseph Wauters, 144
B – 4480 Engis
communication@prayon.com

www.prayon.com