

The beauty industry is undergoing a quiet revolution, and biotechnology is at the heart of it. For decades, skincare and personal care have relied heavily on plant extracts, natural oils, and synthetic chemistry. But today, biotechnology is unlocking new ways to create ingredients that are smarter, more sustainable, and more effective.

This shift is not about replacing what already works — it's about **enhancing it**. Biotech enables us to use nature's blueprints in a smarter way: making ingredients more bioavailable, reducing waste, and even creating entirely new molecules that would never have been possible before.

For formulators in South Africa, this isn't a distant trend. Through **Cosmetic Ingredients (Pty) Ltd**, global biotech pioneers are already within reach, offering solutions that allow local brands to compete with the best in the world.



What is Biotech in Cosmetics?

At its core, biotechnology in cosmetics is the use of living organisms — or processes inspired by them — to create ingredients. This can mean:

- **Fermentation:** using microorganisms to break down or transform natural raw materials into potent bioactives.
- **Bioconversion:** turning simple natural substances into more complex, skin-beneficial

compounds.

- **Molecular innovation:** designing new forms of existing molecules (like hyaluronic acid) for better performance.
- **Green chemistry:** combining biotech with eco-conscious methods to reduce environmental impact.

The result is a wave of new cosmetic ingredients that are not only effective but also safer, more sustainable, and often more traceable than traditional options.

Hyaluronic Acid Innovation: Beyond the Basics

Hyaluronic Acid (HA) is one of the most recognisable names in skincare. Loved for its ability to hold up to 1,000 times its weight in water, it has become the go-to hydrating ingredient. But biotech has taken HA far beyond a one-note story.

- **Contipro**, a world leader in hyaluronic science, has elevated HA into an entire **platform of innovation**. Through biotechnology, they produce ultra-pure HA in different molecular weights, allowing formulators to target hydration at multiple skin layers. Low molecular weight HA penetrates deeper, while higher weights sit on the surface to lock in moisture.
- Perhaps the most exciting development is Contipro's **oil-dispersible hyaluronic acid**. Traditionally, HA has only been water-soluble, making it difficult to include in oils or richer textures. While HA still cannot dissolve in oil, Contipro has developed a unique **oil-dispersible system** that suspends HA in a way that performs far better than a simple blend. This breakthrough allows formulators to bring the benefits of HA into entirely new product formats such as luxury oils, serums, and even colour cosmetics.

This is more than a tweak — it's a breakthrough. It opens up **new formulation territories**, giving brands the ability to deliver HA benefits in products where it was previously impossible.



Did You Know?

- Fermentation can increase antioxidant levels in plant extracts by up to **200%**, making them more effective in skincare.
- Hyaluronic Acid comes in **different molecular sizes** — smaller molecules penetrate deeper, while larger ones lock in surface hydration.
- Green biotech allows ingredients to be created **without harvesting rare plants** or overusing natural resources, protecting biodiversity.

This is why biotech is more than a trend — it's the **future of beauty innovation**.

Green Biotech: Where Sustainability Meets Science

Consumers are increasingly conscious of the environmental impact of the products they buy. Biotech offers a way to meet these expectations without compromising on performance.

- **Aldivia** is a pioneer in green chemistry. They create eco-designed oils and patented active ingredients that combine sustainability with function. By using renewable raw materials and innovative chemistry, Aldivia helps formulators reduce environmental impact while offering compelling claims for eco-conscious consumers.
- **Assessa** brings another dimension: marine and botanical biotech. Their ingredients

tap into the power of plants and marine organisms, developed through processes that respect biodiversity and deliver proven, efficacious results. With consumer interest in ocean-inspired and marine actives growing, these innovations provide brands with both performance and storytelling.

Green biotech is where **sustainability meets efficacy** — and it's fast becoming an industry standard rather than a "nice-to-have."

Why This Matters for South African Brands

Global ingredient giants are, of course, investing in biotech. But for local formulators, working through these massive portfolios can feel overwhelming, expensive, and impersonal.

That's where **Cosmetic Ingredients (Pty) Ltd** makes the difference. By focusing on carefully chosen biotech suppliers, we offer:

- **Curated innovation:** no need to sift through thousands of ingredients — we bring only those with proven science and market relevance.
- **Direct expertise:** our suppliers are specialists in biotech, meaning the science runs deep.
- **Local access, global quality:** you get the best of both worlds — world-class biotech ingredients, supported locally in South Africa.
- **Agility:** unlike big competitors, we can respond quickly to the needs of local formulators, offering tailored support and practical solutions.

For South African brands looking to stay ahead, this means faster access to global trends and the ability to compete with international products on both performance and sustainability.

The Future of Beauty is Biotech

From fermented oat actives and microbiome-friendly ingredients to oil-dispersible hyaluronic acid and eco-designed oils, biotechnology is **redefining the future of cosmetics**.

It's no longer niche — it's the new standard for brands that want to combine efficacy, sustainability, and consumer appeal.

At **Cosmetic Ingredients**, we're proud to represent biotech pioneers like **Oat Cosmetics, Aqia, Contipro, Aldivia, and AssessA**, bringing their innovations to South African formulators. Together, they showcase how biotech isn't just a trend — it's the foundation of the next generation of skincare and personal care.

□ **Discover biotech ingredients with our trusted suppliers here:**

<https://cosmetic-ingredients.co.za/our-suppliers/>