

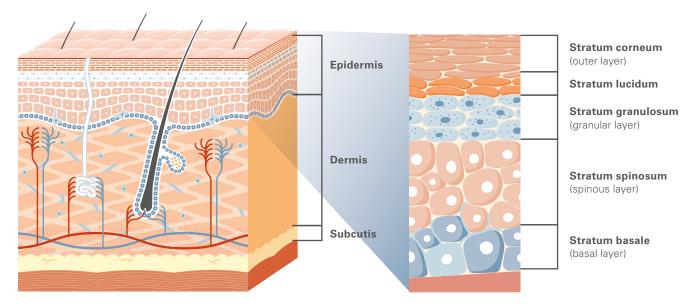


Spotlight Customized Topical Solutions

Skin renewal is a fascinating process that takes place **every 28 days**. During this cycle, old, dead skin cells are shed and replaced by fresh, healthy cells. This natural regeneration is crucial for a radiant and healthy complexion.

With the continuous evolution of **new formulations and solutions in the skincare industry**, it is more important than ever for manufacturers to stay up to date on the latest innovations. As a distributor of topical formulations, we are excited to share the latest news on our partner DuPont's product range in this newsletter, helping you stay informed and make the best choices for your formulations.

Layers of the epidermis



Tailored Silicone-Based Solutions by DuPont



Dupont is driving innovation in drug delivery with a focus on sustainable, high-value formulations. Historically known for its expertise in silicone excipients, the company has broadened its offerings to include **silicone-based customized formulations**.

In addition to their extensive catalog of raw materials, DuPont provides **tailored**, **customer-driven blends** that can be used as either pre-blends or finished formulations.

These solutions range from 100% silicone blends to those mixed with organic components, ensuring adaptability to diverse formulation needs. Duponts capabilities span a wide variety of formulations – for example gels, emulsions, ointments and liquid sprays – designed for use in Medical Device Class I or IIA or Medicinal Products. With a commitment to sustainability and precision, DuPont delivers innovative, flexible, and scalable solutions that meet the evolving demands of the drug delivery market. Customized blends might be of special interest for applications like ostomy, wound care, scar treatment or creams for acne, psoriasis and other atopic dermatitis diseases.

We support customers throughout the entire process, from the initial concept stage to marketing the final product, providing everything from formulation development to lab-scale manufacturing and commercial-scale production for blends.



An Example from Practice - Streamlining Production for Ostomy Care

A leading Contract Development and Manufacturing Organization (CDMO) that specializes in developing topical products for ostomy care was facing challenges in their production process. The company needed to streamline its operations to reduce time spent on incoming inspections and minimize the handling of flammable materials in their production area.

The complexity of their previous formulation system involved multiple raw materials, each requiring detailed inspection, testing, and extensive handling, slowing down production efficiency and increasing safety concerns.



Solution: Switching to a preblend System

To address these issues, the CDMO partnered with Dupont and Biesterfeld to transition to a preblend system. By utilizing a customized preblend formulation, they were able to consolidate multiple ingredients into a single, ready-to-use blend. This simplified their supply chain, reduced the number of materials needed for production, and significantly cut down on the time required for incoming inspections.

Example of a composition of a skin barrier spray

Customized Blend for Ostomy	Functionality
Volatile Silicones in a range of 0,65 - 2 cSt	Carrier with quick to moderate volatility
Silicone Resin	Substantive film former
Dimethicone (PDMS)	Skin protection

Results

1

Reduced Incoming Inspection Times

By working with a single preblend product, the CDMO dramatically shortened their inspection times. The simplified process meant fewer materials to check, test, and verify, leading to faster production starts and overall improved efficiency.

Improved Safety

With fewer raw materials to handle, particularly flammable substances, the production area saw a reduction in safety risks. The CDMO was able to reduce the amount of hazardous materials handled daily, improving safety protocols and employee well-being.

3

Streamlined Production

The preblend allowed for quicker formulation and easier integration into the manufacturing process, minimizing handling and reducing the likelihood of errors.

Cost Savings

With reduced inspection times and less manual handling of materials, the CDMO also realized cost savings in both labor and operational efficiency.

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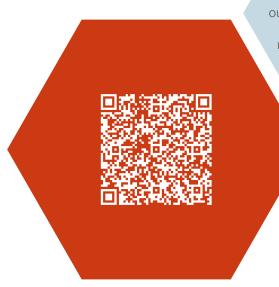
Interested what we can offer for your application?

Contact us at **healthcare@biesterfeld.com** to learn more about customized solutions for a wide range of applications. **Visit our website** for detailed information and application specific brochures, and explore our full portfolio of high-quality excipients and raw materials.

Sign up for our Newsletter!

If you would like to receive our newsletters about product innovations in the pharma and healthcare sector regularly, please scan this QR code and sign up for the recipient list.

You can unsubscribe at any time.







Lab & Innovation Centre

In our Lab and Innovation Centre in Hamburg we have the possibility to support the development of tailored solutions together with our customers. We can serve different example formulations which can be a good starting point for your project. Through the addition of additives from our wide ranging portfolio also existing formulations can be enhanced.

If you have an idea for a project get in touch: **Healthcare@biesterfeld.com**

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Competence in Solutions

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