



COMPENDIUM BY  
CHEMBIZR

## PERSONAL CARE AND COSMETICS

### CANNABIS-BASED INGREDIENTS FOR TOPICAL AND MENTAL WELLBEING

The recent developments in extraction and purification technologies with respect to hemp or cannabis have led to the popularity of a new set of cannabis-based ingredients. While hemp oil has been prominent in the industry for quite some time, other purified, non-hallucinogenic cannabinoids such as cannabidiol (CBD) and cannabigerol (CBG) are now entering the market. These ingredients have been observed to exhibit anti-inflammatory, anti-hyperpigmentation, and anti-microbial effects while providing a relaxing and calming effect. US-based biotechnology firm Demetrix is one of the active companies in this space. It collaborated with Evonik to launch its CBG active ingredient, Arete-G™. Global ingredient giant, BASF, has also launched CBD-based active ingredient, ComfortBD™ in the U.S. market, derived from industrial hemp, grown on farms in the country.



## CIRCULAR PACKAGING: THE TALK OF THE TOWN

One of the biggest challenges of the personal care industry has been the large volumes of packaging waste. The industry has seen major efforts in reducing this waste and moving on to circular solutions such as recycled and refillable packaging. Circular packaging supports reduced plastic waste and use of new/virgin plastic material, which are some critical challenges for the climate. Conglomerates such as P&G and Henkel are now launching products with sustainable recycled plastic or paper packaging.



Henkel has also started to provide re-fillable products for salons under the Authentic Beauty Concept brand. LVMH, the global leader in fragrances collaborated with Origin Materials, Inc. to develop sustainable low-carbon footprint packaging for the perfumes and cosmetics industry. Clariant, Siegwerk, Borealis, and Beiersdorf, each of whom have a significant place in the personal care and cosmetics value chain, collaborated on a strategic initiative named 'Design4Circularity' and developed a fully recyclable packaging solution.

## CARBON CAPTURED AND UPCYCLED INGREDIENTS STEALING THE SUSTAINABILITY SHOW



In line with the sustainability initiatives across the industry, a deep focus has been put on ingredients produced using atmospheric carbon dioxide. LanzaTech has developed innovative ways of carbon capture, by extracting ethanol from atmospheric carbon dioxide, marketed as CarbonSmart™ ethanol. Fragrance manufacturer Coty is making fragrances using this ingredient, while Beiersdorf has launched Nivea Men Climate Care moisturizer. Givaudan launched an upcycled skin care active, made from patchouli leaves residue after essential oil extraction. WASTE2FUNC, a European BBI-JU-funded project, including SMEs and large enterprises such as Croda, Evonik, and Ecover, along with research institutes, and agricultural associations have been granted €6.7 million to build a platform to efficiently collect food waste and upcycle them into bio-surfactants.